ABHISHAR VOL 6.0

"Friends , Fun and Dreams"

TEAM PATRON

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From The Editor's Desk...

Since the previous edition of Abhishar, it's a cartwheel straight into Virtual Reality! VR is incessantly refining the present and future of all domains. VR is no more a dream. VR is no more "just a sci-fi theme". Virtual is the new Actual and this is the subject of this year's volume of Abhishar.

Abhishar is not a mere magazine. It is an icon which keeps the memories and ideals of our sedulous friends- Lt. Abhinav Saxena and Lt. Tushar Sharma blooming in our hearts. Their ideals of service and amiability churned in the crucible of selflessness is imbibed in each edition of Abhishar. Taking forward their legacy each year, Abhishar has assisted in channelizing the outlooks and opinions of the IIITM fraternity.

Abhishar v6.0 has been crafted with augmented exuberance. From freshmen to alumni, all have contributed to help us shape this volume in its current form. The "Geeks Corner" section is a place for all the techno-gizmo matter. The secrets to climb up the success ladder are inscribed in the "Career Mantra" segment. The "Lifestyle" slice pens down various phases from the lives of our writers. The nitty-gritties of the life of a IIITM student are etched in the leaves of "IIITM street". The "Abhivyakti" unit embraces literary pieces composed in Hindi. As you flip through the pages, do take a glimpse of our cover story and the write-ups by our featured writers.

Abhishar is fortunate to have an august readership. Colossal efforts have been put in to keep this volume error free but errors have the habit of sneaking in involuntarily. We would be pleased to receive suggestions for improvement.

Hope this edition provides some solace to your insatiable appetite for knowledge.

-Shreya Sinha

Director's Note

I am happy to know that the 6th volume of "Abhishar" is coming out. Volume-by-volume, it is contributing to enhancement of students' creativity. The articles are a testimonial to students' interest in technology, social media, campus life and in general society.

It is a fruitful outcome of tremendous efforts put in by the student team. "Abhishar" has become a vibrant medium to express creative and innovative spirit of the student community of ABV-IIITM. It has now achieved the status of "practice worth emulating" by other institutes!

The annual magazine is a tribute to the memory of Abhinav and Tushar, who were symbols of passion, creativity and energy. On this occasion, I pay my tribute to their incessant quest for creativity.

I seize this opportunity to put on record valuable contributions of AASF, which has become synonymous with P2P learning and interaction forum. Rightly so, this student centric forum has become a matter of pride for the institute.

My hearty congratulations to "Abhishar" team and AASF team and the faculty coordinators.

Prof. S.G.Deshmukh
Director, ABV-IIITM

Registrar's Note

Consistency exhibited by Abhigyan Abhikaushalam Students' Forum in extending their arms out to guide the novices to adapt to the techno-managerial environment is commendable. The peer to peer methodology, promoted by AASF is the most practical approach to comprehensive learning as it helps to create a competitive spirit. Abhishar is a decent endeavor by AASF, which along with commemorating our students, Abhinav and Tushar, also provides a medium to the IIITM fraternity to get their views, opinions penned down and spread to all others.

Pankaj Gupta
Deputy Registrar, ABV-IIITM

Faculty Speaks

" I extend all my warm wishes for the success of Abhishar. It has always been a platform for sharing knowledge and information about the past, present and future activities in our institute campus. To know that the sixth version of Abhishar is being launched is overwhelming and I wish all my warm wishes for the success of the students' magazine."

Dr. Joydip Dhar
Associate Professor, ABV-IIITM

" Abhishar is very close to my heart and reading it or hearing its name makes me emotional. The reason being the memory of my favorite students-Tushar, a very bright student who completed his BTP under my supervision and Abhinav a very attentive student of DLD lectures. I convey my heartfelt wishes for the success of Abhishar V 6.0 and lots of blesings to all my dear students."

Dr. Ritu Tiwari
Associate Professor, ABV-IIITM

"I am delighted to note that the sixth edition of Abhishar is coming out. Obviously, this magazine is instrumental in making students more creative as it provides a platform to share their ideas. I wish my heartiest congratulations to the editorial team and contributors for their dedicated effort to turn this dream into reality."

Dr. Naval Bajpai
Associate Professor, ABV-IIITM

" It gives me immense pleasure to jot about Abhishar. I have been observing a continuous growth in the quality and variety of the contents. The great degree of professionalism shown by the editorial team is commendable. I wish the magazine may see new heights year on year."

Dr. K.K. Pattanaik
Associate Professor, ABV-IIITM

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ABOUT AASF AND EVENTS

Being in an ever changing world with technology galloping at a pace never seen before in history, the forum is laboriously engaged in organizing a variety of formal and informal events every year, which guide the students to adapt better in techno-managerial world. Activities are based on the concept of peer to peer learning.

TECHNICAL SECTION

Windows basics, MS Office Linux and Hardware: Workshops upskilling the basic concepts of integral operating systems.

Photoshop: Knowledge of inducing pleasing effects in images.

Programming Languages: Constitutional knowledge of the essential programming languages including C,C++, JAVA, PYTHON, PHP

Web Desgining week: Aquaintance to basic and advanced web development techniques such as HTML, CSS, PHP,SQL, JAVASCRIPT.

Ethical Hacking and Networking: Information about networking and tips to build impenetrable systems.

AASF-ICPC and PCs-Programming contests conducted on the format of ACM-ICPC to provide a competitive platform.

LITERARY & ORATORY SECTION

JAM: A fun buzz event in which participants have to speak without hesitation, deviation and repetition. They are also challenged by their opponents.

Group Discussion: An event involving a lot of group dynamics to enhance the students' literal charms and issue analysis skills.

Extempore: On the spot speech preparation.

Block and Tackle: An event consisiting of keeping a topic at centre of consideration and discussing its pros and cons.

Composition de l' Image: This event involves formation, narration and enaction of stories entrenched in pictures.

MANAGERIAL SECTION

Case Study hIQ: Managerial concepts to handle stories which present realistic complex and contexually rich situations that often involve dilemma and conflicts.

Case Study Contest: Aimed at improvising the ability of analysing, exploring, innovating and thus rendering applicable solution to a point at issue.

Brand Aid Contest: Event to provide an oppurtinity to blend creativity with originality and endorsing a product by elaborating its attributes and influencing the folks.

Quizzes: Quizzing events to help students remain updated to the recent advancements in the fields of business, IT and sports.

Events &
hIQs

PUBLISH YOUR CHROME EXTENTIONS

Rajesh Kumar
IPG-2010

Chrome has recently surpassed IE + Edge as the most used browser across all the platforms and has more than 53% of the market share as on Aug 2016 (Source - Wikipedia). So chrome developer community is growing and people are coming up with different extensions that makes browsing experience better. If you want to remove annoying ads, want to add some functionality to a page or want to see cute puppies on your new tab, all of that you can do with a chrome extension. This article will help you in creating and deploying a chrome extension. And if you are confident enough that you might attract users to your extension, this article will deal with some ways of monetization as well.

Chrome extensions use the same technologies as normal websites like HTML, CSS and JS. But one thing that powers an extension is the permissions that you can get over web pages along with the JS context that can be used for different things. Let's start by creating an extension that will replace all the occurrence of "WA" or "wrong answer" to "AC" or "accepted" in your webpage.

Basic components of a chrome extension are –

1) Manifest file – It gives all the details of your extension to chrome like the name, version and all the permissions the extension requires.

2) Content Scripts – It's the script file that runs in the context of your web page. It can interact with the content of the web pages that you visit. Basically there are two kinds of script files for a chrome extension.

a. Context only – It has access to your current webpage but it doesn't have access to many of the chrome APIs. It cannot listen to the clicks on the browser action.

b. Background script – It has access to all the Chrome APIs but it cannot access the current webpage.

So a context only script gives the information of the current URL and the background script is used to do the action that we want to perform.

3) Actions – There are two types of action that a chrome extension can have.

a. Browser action –These extensions are permanently displayed to the right of the address bar. These are good if your extension can work on any website, or if the extension is website agnostic.

b. Page action – These extensions are only displayed on certain pages and their icon appears inside the address bar, like RSS feeds subscription.

So for a functional chrome extension we need a manifest file that will give details of extensions, links to icons, script files. A background script will have access to the chrome APIs and will interact with the context script using message passing. So let's start with our extension and name it Purifier. We will create a browser action extension and as we are not having any click functionality on a page we can create our extension with a context script alone. Once a webpage is loaded we will walk through the content of the page and will replace all the values that we want to. So our manifest file will look like.

```
{
    "browser_action": {
        "default_icon": "icon.png",
"default_popup": "popup.html",
"default_title": "When everything is Accepted"
    },
    "content_scripts": [ {
    "js": [ "content.js" ], "matches": [ "*://*/*" ], "run_at": "document_end"
    } ],
    "description": "Fed up of WA, replace them with AC",
    "manifest_version": 2,
    "name": "Purifier",
    "permissions": ["http://*.com/", "tabs" ],
    "version": "1.0"
}
```

This manifest file have the details like the extension icon, popup that will load when we will click on the icon, title, and content script that will modify your current page.

```
walk(document.body);
setTimeout(function () {
    walk(document.body);
}, 1000);
```

```
function walk(node)
{
  var child, next;
  switch ( node.nodeType )
  {
    case 11: // Document
fragment
      child = node.firstChild;
      while ( child )
      {
        next                =
child.nextSibling; walk(child);
child = next;
      }
      break;
    case 3: // Text node
      handleText(node);
      break;
  }
}
function handleText(textNode)
{
  var v = textNode.nodeValue;
  v = v.replace("WA", "AC");
  v    =    v.replace("wrong
answer", "accepted");
  textNode.nodeValue = v;
}
```

This code will run on the page as soon as it gets loaded. The function walk is a standard DOM traversal in HTML. So we will traverse to the text node and will convert all the occurrence of WA or Wrong Answer to AC or Accepted.

Now add a default icon to your folder and also add a default popup html that one will see on clicking the browser action icon and we are done with our first extension code. The directory structure would look like .

```
├── content.js
├── icon.png
├── popup.html
└── manifest.json
```

Now let's start the deployment. To deploy your extension locally open the extensions menu in your chrome browser by opening - chrome://extensions/. Then you will have to check Developer Mode checkbox in top right. After that you can just drag and drop your folder to the extensions menu. And to test the chrome extension just try opening - http://www.spoj.com/status/. You will see too many accepted :D.

Publishing your extension on Chrome webstore

To publish your extension on the google webstore, you need to pay a onetime developer registration fee of 5 USD. Once you pay that amount you can publish upto 20 extensions from your account. Publishing an app from the developer dashboard is quite easy and intuitive. It loads most of the details from the manifest file and you just to need to provide basic information like regions, language, category of your extension etc. There are three available visibility options for publishing the extension i.e

1) Public – Everyone can see the extension

2) Unlisted – Only people with the link can see it.

3) Private - Only trusted testers from your developer dashboard can see it.

So with this you will be able to deploy your extension to the chrome store. You can use chrome extensions not just to ease your work but also to monetize your efforts. Many developers earn through their chrome extensions by different means. Let's discuss few of the ways to monetize a chrome extension. (You need to have a good userbase to be able to monetize your extension. Maybe close to 10K).

Methods to Monetize –

1) Create two versions of your extension – One free one with lesser features, if people love your extension they will pay for the premium access.

2) Many extension developers have ads on their extension which gives them a good amount if people click on them. Sites like adonads, addonjet helps in such monetization.

3) If your extension is pretty helpful to your users and you do not want to flood it with ads, just add a donate button. (Very less likely to work).

4) Affiliating programs are also a good way to monetize. You can have affiliate Id from flipkart, amazon and can just show their ads on your extension.

That's all. Now if you think you want to try out different things with your browser, or you have an idea that might be liked by other users, just start writing your own chrome extension. If you have any issues while making one you can contact me. ✦

Rajesh Kumar (2010 IPG) is presently working in Directi, Mumbai. He is a great programmer. He was coordinator of Infotsav 2013.

EGO IS THE ENEMY

Nanda Ambati
IPG-2010

I borrowed the title of Ryan Holiday's Book. So, if anyone has already read that book please be informed that the first line itself is carrying the reference. No plagiarism encouraged.

Before going further, I just want to let the readers know that I'm neither a failure nor have tasted success in the recent past. And, by the way my writings are in general way sarcastic and poking instead of soothing. So, bear the pain.

Ego is the prime reason as to why we think ourselves to be in a worse situation when we are actually eligible for something better than our peers. But, the deep insight one needs to get clear about is that everybody runs according to their own time. Success or failure will come as and when based upon your own timeline. Perfect example is our very famous social networking sites where there's nothing in common with any of our peers whatsoever close and related you're with that person. Same is the case in real life scenario, so STOP comparing and START working towards your own progress, and if you couldn't concentrate because of the failures you're facing, then you've your own distractors. Run, Hit the Gym, Sleep, Clean your tummy with a glass of _____ (water), Fight with your close friend/family member, Go for a date. I know there are many among you who are friendzoned but for those who are not the last one is also an option.

So, simply speaking, when things are not turning out the way you expect them to be, it means that the society on whole or the destiny is making you to go under the hammer. This is to disrupt one's comfort, to add more pain which makes the subject realise what is important and what's not. Thus, clearing the fog for a better vision. This shall definitely help in rescheduling the way we want to go ahead.

The total description is in a way to let all the new generation aspirants understand to be positive and change their plans accordingly based upon the hurdles they face, the pain they suffer instead of thinking that these problems are delaying their success. The catchy point over here is one's success can never be delayed by the circumstances but can be by the laidback mind-set that sets over them after those pitfalls. On the other hand, success can even be preponed by trying to run that one extra mile on a daily basis after the 11th hour.

The same way, every setback is just a life lesson that needs to be memorised and recapitulated if and when required so as to not repeat the same. And, yes on a concluding note, everyone's life is a road not taken and has to be travelled through all lone. No compromises, no discounts, no vested interests, no conditions apply.

One last line, you're living your life based on your timeline in your timeframe. It's an independent Free Body Diagram (Newton's Laws of Motion).

Nanda Kumar Ambati (2010 IPG) is presently working in Royal Bank of Scotland. He was the coordinator of Infotsav 2013 ⬦

"I am sufficiently proud of my knowing something to be modest about my not knowing all."
-Vladimir Nabokov

"The Ego is a veil between humans and God'."
-Jalaluddin Rumi

DESIGNING YOUR CODE RIGHT

Vishwa Prakash Gayasen
IPG-2009

Let me start by addressing "Why designing elegant code is important?". The client can be anyone, end users, other developers or your own different module. But it should be doing what it should and in the best possible way. Is that too much to ask? If the requirement is NOT to have a bunch of people come to your house in the middle of the night with rocks and torches, you need to design them right.

"getRahul() Naam toh suna hi hoga" [The Naming Convention]

An important one. If you have a method called getUser and it causes some side effect without being explicit about it, that can lead to a lot of problems.

Never, and I mean never, update shared resources without calling it out. If I call getUserById(id), I expect it to just return a user when presented with an identifier and not increment the userAge secretly. Try Immutable data structures, they will make the code problem free. Or if you want, go an extra mile and start the functional way of coding (Read more on functional programming if you like).

The functionality of your method should be synonymous to its name. Don't expect users to read through your code to find hidden behavior that the name doesn't reveal. You'll save yourself a lot of pain down the line. On the other hand, we are also not expecting a method name like getUserIncrementAgeIfUserBelongsToGwalior().

"All code is guilty until proven innocent"

Don't rest assured by testing your own code, we all know we only test happy flows (the ones with known responses). A developer using your module will want to have his own tests in place just to see if the his module is performing as expected. As good developers, it is our responsibility to enable black box testing. There are many techniques to achieve this like mocking, stubbing, instantiation, etc. but the bottom line is that the code consuming your API should be easily testable. You don't know which environment will be used for your code.

"Bhaiya Zara Check mein dikhana" [The Ability to Choose]

Every consumer is unique when it comes to using your Software. They'll all want different things from your code in a different way. Some prefer synchronous data, others are callback guys and the third type are notification listeners. As a software developer you should present your clients with multiple options. This will provide flexibility and ease of integration to existing programs and systems. Added perks - will make your code popular. Win-Win situation!!.

Statutory warning: While a system should be flexible, we should also not give too many options. You wouldn't want your clients to end up in paralysis by analysis, would you?

If there is one part of the design, where you should put most of your head, it is contract definition. We should be thoroughly logical while defining contracts. The contract should be clear of what data is contained in the system and what is not. Also, how does the system respond when it is queried for data which is not present in the system. Does it go to some default data or would it simply error out. Whatever the behavior is, it should be well thought through - "A Concrete Contract"

"Swatantra Code Andolan" [Independent Code]

Try to minimize those includes and imports, it will keep your code light and fast. The attempt should be to keep your module as self contained as possible. More the number of dependencies more the number of problems your code consumers will face when they are integrating. They will run into tons of conflicting class issues and curse you while you are relaxing and thinking my code is functionally complete.

If you need some functionality from any of the dependencies, just import that module or import a parent module with many excludes; Either should do the trick. Also while exporting modules, try to think of uses and segregate the package accordingly. For example, if some developer needs model objects used in your code, you should provide model-only jar, while if another developer needs functionality of your code you can provide a RESTful API. Now if your model jar already has some random Apache module, it will bloat your client's code as well as can cause conflict issues.

Is it really worth it..??
A good design may have plenty of advantages like good program speed, readability, extensibility blah blah blah.. But is it all worth it? It all comes at a great price YOUR TIME. In the same amount of time, you can write functionalities f1,f2 with high quality or f1,f2,f3..,f10 with very low quality. The trick is to strike a balance between design and delivery. You could always make the latter outweigh the former if need be (Deadline induced panic attacks!!!). Keep in mind the average lifecycle of the code before you start investing any time in readability, extensibility or performance.

Imagine this.
Someone asks your system "Dude, tell me about Mr. X"[getUserById(x)]
Your system says
"Baba Ji Ka Thullu" [Null Response]

Now the user has no way to infer what went wrong. This is an example of a very UN-meaningful response. Positive or negative responses should be descriptive enough to let consumers know what happened. It is also important to maintain a list of responses expected from the system. Remember Enums which we thought no one used, Well this is a perfect use-case for Enums. An Enum (we'll call it ErrorCode) of all the possible errors should be exported to the consumer to understand responses with values like ErrorCode.X_NOT_FOUND, ErrorCode.X_DELETED, ErrorCode.X_DATA_FETCH_ ERROR,ErrorCode.NETWORK _TIMEOUT etc. Based on different responses, the consumer can do something about it. Maybe give it a second try or create the entity. It essentially helps debug the problem easier. Responses can also help the user follow a path or a guideline. Messages like "Login to proceed" are always better than "Something went wrong"

Well well.. we all know documentation is boring and it is something we would rather want to forgo. But look at the bright side, no more annoying questions. No more "I can't integrate with your API" and to top it all Consumer Happiness. "Priceless!". A well documented system makes everyone's life easier. There are many ways to do this, depending on technology and stack. Javadocs, swagger or a sample code of how to use it.

Tests of all sorts(Unit, Integration, Smoke, regression etc.) prove that the code is correct, functionally as well as non-functionally(speed/perfor mance). A lot of tests also give you confidence when you are making any changes. If the output changes, under the best circumstances some tests should also fail. This brings awareness of all the functional changes which are happening with the given code change. Especially, in a fast changing code, it is super critical to maintain tests which cover all possible code flows.
Analyse the code to improve it further and make it less error prone. A possible null pointer, high cyclomatic complexity, un-necessary if checks, infinite loops, etc. All these can be found while writing the code(There is a lot which an IDE can do for you) and should be removed before even compilation.

Your next question should be "Why am I writing tests and documentation where none of these help me improve functionality/capability of my code?" The answer is analogical to when you buy a Washing Machine you need a User Manual as well as a warranty card for perfect and worry free usage. Also, a machine sold without these are deemed to be considered local or chinese. While Documentation helps one use the code, tests make

the code issue proof. Docs + Tests are a wonderful value add to a code and beautifies it further.

Too nerdy, eh? Well.. As software engineers all we can do is thrive for the best in the class "software" and not let people say "You!! wrote this?" while they should be saying "You Wrote this!!" I'd certainly wish for the latter. ;)

Vishwa Prakash Gayasen (IPG-2009) works as software development enginer at Flipkart, Bangalore and is a great programmer.

THE LEFTOVER

Shubham Shukla
IPG-2014

A basket of memories for him to hover,
Drizzled the emotions of being a leftover.

Flurry of emotions flowing through a stream,
A ray of hope lighting up the dreams.
A brisk smile flashing through the face,
And a bit of anticipation of crossing through the maze.

The start of things which now are over,
The spark that kindled thoughts of a leftover.

Cycle on path had a bit of stumble,
The adrenaline rush caused a fumble.
The aura around was a bit tensed,
Tons of problems were now being sensed.

Appeared some hurdles for him to roll over,
Drizzled the emotions of being a leftover.

The doors to his dreams were now being shut,
But he recreated the dreams inside his hut.
The feelings eradicated, the memories fade,
But he kept his lessons the choices he made.

His destiny entitled him to be a rover,
With a smirk on his face moved ahead the leftover.

HOW TO BE HAPPY?

Sakshi Chahal
IPG-2015

"One day life is going to ask you questions. A lot of questions! And it is upto you to make yourselves capable of answering them all! "

1. Have some goals in life

Make yourself remember that you are here in this world for one or some specific reasons (that obviously you need to find out) Life has to be "lived" and not just "passed". So get up, find out those goals and start working for them passionately. These goals can be as small as having a proper diet to as big as becoming World's no. 1 car racing champion, keeping one important fact in mind - "Success is not easy and it is certainly not for the lazy!"

2. Stay Adventurous

Close your eyes for once and imagine as if you are living the last minutes of your life. Absolutely helpless you are, knowing that everything will come to an end after some moments. Now ask yourself a question - Was it really worth it? Did you really made it meaningful?

And most probably you will get some reasons to make out the best of your life at that time.

So, what's the point shutting yourself in those packed rooms, doing nothing adventurous in your life? I don't think it is worthy to just "pass " it, because then you will never be able to say it in the end "Yeah, I have lived it!" .

You love horse riding? You love ice-skating? Or travelling? Or simply cycling? Go for it! Find out the ways how it can be done, save money and move out of your holes buddies. Allow that little, adventurous kid inside you to come out!

3. You are the youngest today

Move out of that small sophistication circle you have built around you, play the game of life, make mistakes, get up and fight back again with more vigour and strength. Never be shy of the people around you. You wanna laugh hard? Why be shy then?

Just keep one thing in your mind- "You are the youngest of yourself at the present moment" and do mean it.

4. Dress up as if you own the world

Now this section, I know will not surely be accepted by every reader, But that is completely okay! It goes to a specific group of people who are especially not strong supporters of a life of renunciation. In order to emphasize your confidence levels, dress up like you own the world. And by this sentence, I never mean you should spend hours on shopping and add up one more thing to lengthen your bills. Stay decent and the best version of yourself! "Your external looks are influenced by your internal states". Your dress speaks a lot about you. So

dressing well is a good habit you should get addicted to.

5. People

Are you really interested in getting advice from others about yourself and then pondering over it for hours? You want to be a people-pleaser?

Then this is a stage of a strong warning. Your case is like a dog trying to catch its tail. Efforts in vain, nothing to get! And you need to get out of this toxic situation.

Yeah, there may be many people (or maybe loads) who will not like you and guess what? There is absolutely nothing you can do about it! No amount of coercion, toadying or pandering to their interests will help.

Actually, what people love is when you draw a line and say "You will not go further". And you really are going to reconcile to this for an attempt to please those who don't even care for you in the first place? NO, my friend, a big "NO" for this thing!

6. Chocolates

And the final and the most interesting one, "Life is like a FERRERO ROCHER, You never know when it is coming but when it comes, do not leave even a bit of it."

Stay silly, Stay weird, Stay crazy, Stay Whatever! Because life is too short to be anything but happy!

LIVE LIFE. ⬡

PAYTM INTERVIEW

Vishal Garg
IPG-2012

I still remember the date, September 22, the day when the interviews for Paytm were scheduled. The coding round had already been conducted 2 days ago where they tested us on three questions to be solved in an hour. The results were yet to be announced. In the morning first the Pre-Placement Talk was organized, after which the results of the first round were announced. Total ten candidates qualified the round, including me. A mixed feeling of nervousness and excitement filled me as it was my first interview.

There were four panels of which mine was the fourth one. The interviewer was super friendly, first he made me comfortable and then asked a number of technical questions based on Data structures, Algorithms, DBMS.

First question was "Given a running sequence of binary digits, determine whether the resulting number is divisible by 13 or not". Second was "For n nodes determine how many binary trees can be made such that each node has utmost one child". Third question was an extension of the previous one in which he asked me to "Write a code to print all such binary trees". Then he asked me some simple DBMS queries. The interview ended with a short discussion on my projects. A long duration of restlessness was there until the results were announced. I was a bit sure that I would be in. My second interview was conducted by the Vice President and the questions were

• Code the Producer Consumer problem.

• How would you efficiently implement a thread safe code in C++?

• How is threading implemented in JAVA?

• How is Hash Table Implemented?

• What is the most efficient way to insert a million entries in a relational database?

• How would you determine whether a binary tree is a Binary Search Tree or not?

These questions were followed by a short discussion on my projects and future plans. It is not necessary that you should answer all the questions, and the interviewer does not even expect you to. Interviewer sometimes judges on how you tackle new problems so do not get nervous when you do not know something. Hope this may help you in some way. An advice from my side would be just be confident and honest during the interview and leave the rest to your destiny. ♠

INTERESTING FACTS

--The average time spent by recruitement managers for analyzing a resume is: 5 to 7 seconds.

--Unprofessional email addresses are the reason for rejection of 76% of resumes.

--When you put a photo on a resume the chances of getting discarded are up to 88%.

--It is worthy to note that only 35% of the candidates are eligible for the jobs they apply to.

--Applicant Tracking Software, the automation software for reading resumes, can eliminate over 75% of the applicants.

--Over 8 million job aspirants have found their job via Twitter.

--Surveys reveil that 70% of the college students would lie in a resume to get a job they wanted.

2003 — Inauguration of IETE Student's Forum on 9th Sept, 2003

Hardware Workshop — 2005

2007 — AASF conceptualised "coalescence of knowledge and skills"

2006 — Renamed as IIITM's Students' Forum

Paper Presentation Contest, 'Abhigyanam' renamed 'Abhigyan' — **2004**

2008 — Logo of AASF designed, Overnight Software Contest

2015 — Android HIQ, Website launch

Pragyanki-magazine of AASF, — **2009**

Composition de'l image, Robotics workshop, Hardware workshop reintroduced — **2014**

Googly, Sports Quiz, Aakriti-the poster making contest — **2011**

AASF-ICPC — **2013**

2012 — Abhishar volume-1 launched, online programming contest for first years

2010 — German language sessions, Android, Flash, JAM

AASF HIGHLIGHTS

PUZZLE ZONE

1. Find the next number in the sequence 1, 2, 6, 21, 88, __?

2. Which are the next 3 letters in this riddle?
o t t f f s s _ _ _

**3. Given five zeroes using any mathematical operation, can you make a total of 120?**

4. How to measure 45 minutes using two candles sticks if each of them independently take 1 hour to burn from one end to other?

5. 8 coins are arranged in east to west direction: HHHH_TTTT where _ is a blank space How do you move them TTTT_HHHH if movement to north and south are not allowed?

6. In which direction is the bus pictured below traveling?
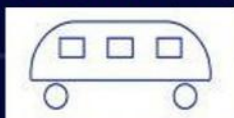
7. Find digits on two cubes such that their digits can together denote days of a month (Eg. 07, 22).

Answers are in this issue...

THE WONDERFUL TRIP

Dhruv Prakash
IPG-2015

Few days in my life have been as hectic and crazy as that day of my life. This was the day of the disastrous Delhi trip undertaken by four guys who were daring enough to run into the desert without water. Without further ado I shall now jump into the events of that day.

It all began with a surprising reunion of friends who had not spoken for months due to reasons I shall not mention here. After a couple of hours of chit chat the idea of going on a day trip to Delhi entered the brains of one of us. I shall name the four of us Max, Papa, Danny (Me) and Mr. Y as I do not want to disclose our real names. Mr. Y was reluctant about going at first but the rest of us finally managed to convince him. The next few hours were spent planning what places we were going to visit, what we will be eating, etc. At around 3:30 AM we were ready to leave and set out for Gwalior station.

We hopped into the general compartment of the first train we saw and the sight that greeted our eyes was horrifying. Every square inch of the compartment including seats, floor and luggage racks were filled with people. It was as if the people had been dumped like a sack of potatoes into the train. There was no place to walk on the floor.

The bodies of sleeping people lay strewn all around like the carcasses of dead people. We used the berths to swing ourselves to the other side of the compartment and finally found ourselves seated near the toilet. I tried to go to sleep but within a few minutes I had to wake up to make way for someone who wanted to use the toilet. This continued for the entire journey. Finally during the last few hours of the journey I was able to find some alternative seating and was able to catch some sleep.

In a few hours we reached Delhi and the four of us were famished. We found a Mc Donald's near the station but only ate a bit as we really wanted to try out the local street food of Delhi. Feeling a bit energized, we made our way to Chandni Chowk which was just walking distance from the station. The restaurants which were apparently supposed to be famed were located on a really narrow by lane. It was impossible to see the sky above as there was a canopy of wires obstructing almost every single bit of sunlight just like the trees in a rainforest. This of course did not mean that the heat was bearable!!

We entered what seemed to be a decent establishment and ordered food. To our surprise the food was nothing great and to be frank overpriced. We satisfied the remaining hunger in us with glasses of Lassi and though we were disappointed

decided to leave it behind and carry on with the rest of the trip.

We headed to the metro station where we managed to get relief from the heat and took a train to see the Lotus Temple. We were all excited but it was all cut short when we reached the lotus temple. To our horror it was closed! So yeah after a terrible journey, an average lunch and lots of walking in the heat this was what we got ! We sat for a few minutes outside the temple and clicked a few selfies and decided to head to the next sightseeing spot.

We reached the metro station and it was probably the terrible mood we were in and the desperate need to have some fun that led to the following incident Mr. Y decided that he wanted to take a photo of himself on the metro platform. He made some sort of pose for the photo and Max got ready to take the click. Now the thing is that while Mr. Y was only posing for a photo, his hand was outstretched towards one end of the track and it looked like he was signaling to something or someone. At this very unfortunate moment the train chugged in. The driver thought that Mr. Y was signaling him to stop and hurriedly braked to a stop, thinking it was an emergency. As soon as the train stopped he hopped out asking Mr. Y if there was any problem. Mr Y mumbled a sorry and some excuse and we four

hurriedly began walking away from the spot.

However we were stopped by some police officers. Mr. Y desperately tried to explain the situation but they were unwilling to listen. They called Mr. Y into a room for questioning and Max also went there to help clear things out. Me and Prince were waiting outside. All this while people were coming and asking me questions about what had happened. Finally after a long wait ,the police let Mr .Y go. We hopped into the train and in all our agony we very conveniently missed the station where we were supposed to get down (Rajiv Chowk) at. Our plan was to get down at Rajiv Chowk, roam around a bit and then go back home.

We stepped down at the next station but to make the matters worse our tokens did not work! We were fools to not realize that we could only get down at the station we were intended to get down at. Again being fools we were unaware of the fact that even if your token did not work you could exit the station for a small fee .We once again took a train back to Rajiv Chowk. Once at Rajiv Chowk for some reason our tokens again did not work! Tired as hell we paid the fee and got out. After this hectic metro marathon we headed to a nearby burger king and ate like famished rats. From here Max and Prince made their way to old Delhi station to catch trains to their respective homes while me and Mr. Y made our way to

Nizamuddin Railway Station to catch the train to Gwalior. We unfortunately were not able to get a direct train to Gwalior and we were too tired to wait for one so we took a train to Agra. Upon reaching Agra we found that the next train to Gwalior was just about to depart and we ran as fast as we could to catch it. Without thinking we entered the sleeper class and only then realized that we did not have a ticket! Somehow we managed to dodge the ticket collector for the rest of the journey and reached Gwalior tired as hell!

That brings me to the end of this tale. Although that day was full of crazy incidents, it definitely has some memories that I will remember for the rest of my life! And as of now we are talking of going on another trip!

बचपन

अंजुला मेहतो
Ph.D

आज फिर सपनों ने मेरे संवरना सीखा,
दिल में दबे अरमानों ने आज फिर मचलना सीखा।
नजरें पड़ी जब उन पुराने खिलौनों पर,
तो बचपन ने आज फिर महकना सीखा।
कितने अच्छे थे बचपन के वो दिन,
तब तो सिर्फ खिलौने टूटा करते थे।
तितलियों के पीछे भागते हम, रंगों को ढूंढा करते थे।
आसमान का चाँद कभी दूर, तो कभी पास हुआ करता था।
माँ की लोरियों में, सात स्वरों का साज हुआ करता था।
कोई रूठता था, तो कोई मनाया करता था।
तब तो हर कोई दोस्त हुआ करता था।
रेत के घरौंदों में सारा संसार समाया करता था।
पर अब कहाँ गये बचपन के वो दिन,
उन दिनों को खोजे मेरा पागल मन।

A TOUR TO VIRTUAL WORLD: AUGMENTED VS. VIRTUAL REALITY

Ankur Singhal
IPG-2014

In the past several decades, the existence of computers has marked some big transformations in our work as well as in our lives. The ongoing revolution in computer interface design is setting new milestones every day and changing the way we think about these machines. Currently, we are living in an era where we could experience our imagination, the things that we want in the future and can walk through it! And all this has been achieved.

The two big words- Augmented Reality and Virtual Reality are such advanced and promising new technologies, cutting edge indeed, and both currently involve dorky hardware. They are gaining momentum and are the subject of fascination to the world's most influential people in technology. The arrival of AR or VR could lead us down to very different paths in entertainment, gaming, communication and industry. And there is a fighting talk between both regarding their future scopes and superiority to one –another. Before going further, let us understand the difference between these two cousins.

Virtual reality (VR) is an artificial, computer-generated simulation or recreation of a real life environment or situation. It immerses the user by making them feel like they are experiencing the simulated reality firsthand,

primarily by stimulating their vision and hearing. VR is typically achieved by wearing a headset like Facebook's Oculus equipped with the technology whereas Augmented reality (AR) is a technology that layers computer - generated enhancements atop an existing reality in order to make it more meaningful through the ability to interact with it. It is developed into apps and used on mobile devices to blend digital components into the real world.

Rather than typing on a keyboard and watching a television monitor, AR lets people use familiar, everyday objects in ordinary ways. The difference is that these objects also provide a link into a computer network. Doctors can examine patients while viewing superimposed medical images, children can program their own LEGO constructions etc.

Both are earning a lot of media attention and are promising tremendous growth. AR technology is quickly becoming mainstream. It is used to display score overlays on telecasted sports games and pop out 3D emails, photos or text messages on mobile devices.

Augmented reality and virtual reality are inverse reflections of one another. Virtual reality offers a digital recreation of a real life setting, while augmented reality delivers virtual elements as an overlay

to the real world. If we consider a film analogy with both of these technologies, then we could say if virtual reality is "The Matrix", then augmented reality is "The Terminator".

The main point of VR is to convince users that they have entered an entirely new reality and the headsets such as Sony's Morpheus, or Facebook's Oculus Rift—block out the surrounding world. In contrast to this, AR does not put out the real world, but uses computers to improve it in various ways.

In "The Terminator", Arnold Schwarzenegger's killer robot sees a constant stream of useful information laid over his view of the world, a bit like the heads-up displays used by fighter pilots. AR, by design, maintains its users' connection with the real world, which means that a headset is not necessary. Heads-up displays are an early example of AR, but there are others also. For instance, VeinViewer is a medical device that projects images of a patient's veins onto his skin, to help doctors aim injections.

We all have already witnessed one of the best applications of AR in gaming industry with the release of Pokémon GO. After the launch of this game, AR received a major boost in attention and a much wider active consumer base. When it was launched, Pokémon GO was applauded for getting

people out of their bedrooms and off their sofas, and walking or cycling in the real world. But the game has also had its fair share of issues including thousands of road accidents and distraction-related deaths. Both the technologies are great examples of experiences and interactions and adding a new dimension of interaction between digital devices and the real world. If we talk about the superiority of one onto another, both are the emerging technologies not the competing options and could be seen as simply different tools to solve different problems. So, is it the future? In this line, we have a say of Mark Zuckerberg that - "We are making a long-term bet that immersive, virtual and augmented reality will become a part of people's life."

And he is very serious and committed to make VR more social and real investments could be seen in platforms such as AltSpaceVR which allow virtual hangouts. ✦

VIRTUAL REALITY IN FILMMAKING

Filmmaking in VR is different not just because of the content or the experience, but also because of the process. The fundamental basis of writing, filming, creating visual effects, and working with sound is shifting to being viewer-centric.

Without ever setting foot on the set or being in a single meeting, every step of the creative process you have to ask what the viewer is doing, seeing, feeling and thinking, and react to that..

There's suddenly no 'behind the camera', the set is all around you, and there's nowhere to put your crew, your lights, your boom operator. Your camera is your viewer. Imagine what that does to, for example, the lighting, or production design.

People say that VR is inherently more exciting than traditional film. But we shouldn't think film and VR are somehow competing for the same attention. It's not either-or, it's both.

VR film Directors have to make sure that the luxury of choice doesn't kill the story. The biggest challenge faced in VR filmmaking is how to future proof the work. If you're shooting a film on a GoPro 3 or 4, and reducing that footage down to 4k because otherwise your hardware can't keep up. But even 4k footage isn't really all that high-res when it's stretched 360 degrees around you.

Although a lot of the equipment such as rigs, light stands and higher quality cameras have been developed filmakers face a lot of trial and error. The only limits lie in the adaptability of your technical and engineering prowess or your threshold for general squeamishness.

THE POWER OF OFFLINE CONNECTIONS IN A DIGITAL WORLD

Sumant Bagade
IPG-2013

No one needs an introduction on how technology, particularly Internet, has changed our lives. This isn't one of those articles about how bad technology is. I love technology and so do you. It's amazing how we are connected with each and every one and can acess the worldwde information at our fingertips. I don't think there's anything wrong with technology, the internet or notifications. But sometimes it's better to start thinking about putting more limitations and cutting down on the time we spend using these devices.

This might come from the odd side. I have myself spent holidays binge watching favourite Television shows, listening music, mindlessly reading articles and much more I can't recall. That's not the point. But it is ridiculous when people plan to meet up and go on a long-drive only to end up chasing and catching Pokémon. When they keep checking their phone for new notifications and think what something might have happened, somewhere; instead of living in the moment. It's unnecessary to get dragged out of any moment that you want to be truly present in. For the next hour, we couldn't stop thinking about what that notification could be, and what could be happening in the world. It's everywhere and that's not an issue with our phone -

that's an issue with our self-control instead.

The social media is a weird place; getting so anxious in sharing the best bits, but leaving out the emotion. Lively masquerading its insight and faking its intimacy. The world itself is just one big hoax. This media we call 'social' it's nothing but when we open our computers and doors we shut. When we step away from this world of overstimulation, we wake up to see a world of confusion. Living like this shouldn't be a norm. Is this what we voted for?

Contrary, we all know why we do this. Because it's hurting to be real. And easy to pretend and fake happiness and spam each other with our burning commentary for social acceptance just because it's easier to be a part of the parade. It's getting harder to believe the truth and to accept the fact that we all are humans. To be calm with our own non-upgraded existence and to be comfortable with our own messy, human selves becomes a revolutionary act. Pretty much, no one on the internet is living the life we think they are. The earlier we realise, the beter thing it is.

I am guilty too of being part of this digital world. It's the same way with screens and devices and being connected. I like it, and I don't want to stop —but

ther's got to be a line because it feels great to take ownership of your time. Of geting away from screen and exploring about some ideas and challenges that take you out of your head and get you into a different lane. It is so tangibly different to feel the difference that 'being there' will make. Instead of burying our heads in the new app or new smartphone in the market, we often forget that some of the most meaningful times are spent in person and learning to co-exist.

May be, shift to basic goodness and smile when we have low battery. Shut down that display, Take in your surroundings, make the most of today. We have finite existence, a limited number of days. When the end comes close nothing worse than regret. When you look back and recall the time you made, just by giving life attention; how glad you didn't waste it by looking down at some invention. Don't give up on life following the hype. Go out, leave distractions behind. Measuring self-worth by getting likes and comments isn't real. What we need is somebody to know you, call you and fall into. That is real. So may be going out wouldn't hurt and so wouldn't having some honest conversations. This is real life, don't you know. ✦

ABHISHAR AND ME

Shivam Sinha   Thanks to AASF to present Abhishar every year for the students of IIITM, that bring to us the experiences of the students and alumni. The different sections in Abhishar from technical to managerial are full of interesting and important topics. I highly appreciate Team AASF and their spirit.. They have played a very important role in my college life from the first year till now by introducing various technical and managerial concepts that help in building a successful career. (IPG-2014)

Shruti Agarwal   What is AASF? AASF is what a newcomer needs, an environment of learning without fear of failures, where students nurture their desires, which creates intellectual power, an introduction to the problems of professional world, a first step towards career, a kind of forum every college must have. (IPG-2014)

Shreya Sahu   Peer to peer learning is one of the most effective forms of study, and AASF has done a great job in promoting the same in our college. Further with Abhishar, this journey of learning, sharing and gaining has become even more exciting, with the inclusion of funny elements and lighter sections like "IIITM Street". The efforts of team AASF in bringing out this annual issue are highly appreciable. (IPG-2013)

Ritik Verma   AASF, the most active club of our institute, acquainted me with the ever changing IT field and has been the path finder for me since then. It enchanced my oratory, technical and logical abilities and made me what I am today. I have learnt a lot from hIQs and events and will continue to support its initiatives in the future. (IPG-2014)

Anant Upadhyay   All that an intellectual mind entails is a way to express itself, and Abhishar has fulfilled that wish by providing us what is needed. As a student, you get an opportunity to express yourself and read the experiences of seniors, alumni and batchmates. With sections like GeeksCorner, IIITM Street, Career Mantra, Abhishar is a complete package in itself which every IIITian cherises to read. (IPG-2014)

A GUIDE TO LIFE AT IIITM

Amandeep Sachan
IPG-2013

Honestly speaking, writing an article was never my cup of tea. But there are lots of memories and experiences that I have always wanted to share so I am sharing few of them.

Signing In: ABV-IIITM

The first year began on not so high note but all of us were excited about the beginning of college campus life. Hostel life gives us lots of things like movies to watch with friends, late night discussions to attend, playing table-tennis in our BH-2 common room(though I am not good at it). We also did hateful stuff like writing assignments for our seniors, studying some useless subjects just to maintain grade points (I don't know why the hell they exists in our syllabus). After coming here, I observed one huge benefit of being a part of a national institute, meeting talented and crazy people you never would have encountered in your hometown and obviously diversity as well. In hostel life, we don't have parental curfews, have access to unlimited internet, unlimited electricity, feeling of responsibility and being surrounded by likeminded people.

I don't remember the day particularly (Nov-2013) but that day made me feel that IIITM happened for a reason. Anurag Sai sir (in 3rd year at that time) called me. When I reached the place, there were 2 other seniors and they were discussing about some club. Yes, you sensed it right, they were discussing about 'Rotaract Club of Youth'. He asked me to join the club and wanted to know my interest in social welfare activities. I was very impressed with this initiative and agreed to join this club without giving any second thought. That was the beginning of a wonderful journey in my life. Till now I have been part of various events like – Blood donation, cloth donation, events for orphanage kids (drawing, collage making etc.), teaching sessions for slum children, NCFW session, visit to old-age homes and orphanages, interactive sessions for new entrants in our institute, spot-fixing events in Gwalior, awareness rally and various health camps. Being involved in social service always make me feel great and leads towards satisfaction. We are gaining experience, learning team-work, leadership qualities, professionalism and much more in return. This is the way we give back to our society.

Pursuing engineering doesn't mean that you have to continue with it even you don't have any further interest in it. There are millions of streams and options which you can pursue in the real world, don't be limited to what everyone around you is doing. Just follow your passion. Maybe I am not experienced or talented enough to give some career advice to my dear juniors, still I want to share some tips whatever I learned from little experience that you can follow(if you still want to become CS/IT engineer) :-

☐ Things to do in 1st year:

○ Try to learn a basic language like C or C++. Once you properly have understood the concepts of one language, then it would be a cakewalk to learn any other language.

○ Start with some basic questions on coding platforms like Hackerrank(to solve topic-wise problems), codechef , spoj etc.

○ Learn some basic computer skills like using cmd, shortcuts, MS office (if you don't have any computer background), knowing about various hardware etc.

○ Try to participate in every type of contests/quiz organized by AASF. You can also (in my opinion, you should) join one or two clubs to engage in extracurricular and social activities. Believe me these would definitely help you to improve your personality and is important as it is very much necessary part in corporate world.

○ If you are interested in some art or sport then you can practice it too.

Things to do in 2nd year:

o Explore various sub streams of CS/IT engineering like software development, web/android development, competitive coding, computer networking, game development etc. There are lot of things, try all of them and it will help you to know your area of interest. Don't just read, implement it.

o Start learning Linux and get used to terminal commands. Explore excellent courses on edx, coursera and also learn things like git, aws.

o You can utilize your summer vacations by learning your core subjects (Data Structure, Algorithms and Database management system). These are very helpful in any kind of real life development and during placements too. By then, if you have found your interest, in web/android/software/game development etc., then you should find one internship(from internshala, twenty19, angel.co) as it will give you real life development experiences.

Things to do in 3rd year:

o You can explore some more fields like Machine learning, and data science. The biggest Internet companies have generally well-regarded data science teams, they're actually called data scientists. For this, you need to learn python/R/mat lab.

o Now, if you are interested in competitive coding then continue to learn DS, DAA and improve your coding skill by participating in online coding contests. But if you are interested in development then never hesitate to get your hands dirty with the code. Learn cool web technologies like nodejs, angularjs, django, mobile app frameworks. Keep on implementing the ideas.

o During summers, you have to do your B.Tech. Project. Initially, most of us select a topic beyond our capabilities (Isliye,aukaat ka topic hi le :P).I think, after 3rd year you are mature enough to recognize your area of interest and how to follow it.

Apart from academics, I also want to share some tips that would help you a lot in your college and social life:

There is no sense in proving someone that you are good. You keep on doing tasks sincerely and one day they will respect you for your hard work. Always give you best and never quit because it doesn't matter how slowly you go, as long as you don't stop.

As you must have heard "Be the change that you want to see in this world", so if you like to see your surroundings clean then stop littering, save water & electricity and please don't damage institute/public property just for fun.

If internet is not working properly, water facility is not adequate, mess food is not good, canteen wala is overcharging- file the complaint. Don't wait for others, otherwise you are not eligible to play the blame game. Don't be afraid of system, system is made for your convenience, fight for your rights ("Pehle Gandhi-giri karo, phir bhi kaam na bane to bhagat singh ban").

At last, I just want to say that enjoy your college life as much as possible (utilize 5-6 hours well) because these days will never come again and you will remember these days forever. Thanks to AASF for providing me a chance to share my experiences through this platform.

*I am not signing off as I still have two more years to go in this this institute. :)

INTERESTING FACTS

--A teaspoon of neutron star would weigh 6 billion tons.

--Teeth are the only part of human body that cannot heal themselves.

--Human brain takes in 11 million bits of information every second but is aware of only 40.

--The giant squid has a doughnut shaped brain that circles around its esophagus.

--Crows can recognize human face and can hold a grudge against people they don't like.

IIITM STREET

आतंक के साये में आधुनिक जीवन

सौम्या त्रिपाठी
IPG-2014

विधाता की इस विशाल सृष्टि में मानव ही उसकी सर्वश्रेष्ठ कृति है जिसे " Best Creation of the GOD " के नाम से भी जाना जाता है। इस कथन के आधार का पता लगाने की कोशिश में हम पाते है कि अपने स्वार्थों से ऊपर उठकर एक-दूसरे के लिये जीवन समर्पण का नाम ही मनुष्यता है। कविवर गुप्त जी के शब्दों में –''यही तो पशु प्रवृत्ति है कि आप-आप ही चरे, वही मनुष्य है कि जो मनुष्य के लिये मरे।'' इस प्रकार आदिकाल से ही, विधाता द्वारा प्रदत्त इस आलौकिक ज्ञान प्रकाश तले मानव ने अपना उत्कृष्ट जीवन बिताना प्रारंभ किया, जिसे देख देवताओं को भी ईर्ष्या हो उठी। वे भी इस देवदुर्लभ मानव शरीर की प्राप्ति के लिये व्याकुल हो उठे।

परन्तु अब इसे मानव जाति का दुर्भाग्य कहा जाये या किसी देवता का अभिषाप कि आज अभी अपनी अहमन्यता और स्वार्थपरता से विकार ग्रस्त होता हुआ मानव पशुता के कगार पर खड़ा है। यह चर्चित मानव किसी देश-विशेष का नहीं अपितु सम्पूर्ण विश्व का है जो आज अपनी उदर की भूख मिटाने के लिये भले ही अन्न का प्रयोग करते हो, परन्तु अपनी मानसिक भूख मिटाने के लिये मानवता को खाते जा रहे है। इस दुर्लभ व विकट स्थिति को उत्पन्न करने वाले अनेक स्तंभों जैसे जातिवाद, भाषावाद, सम्प्रदायवाद, राष्ट्रवाद इत्यादि में जो एक स्तंभ आरंभ से ही अदिग होकर खड़ा रहा है वह है- ''आतंकवाद''।

आतंकवाद को वास्तव में हम किसी देश-विशेष से जोड़ नहीं सकते। आतंक का अर्थ है- भय, डर (Terror)। इस प्रकार आतंकवाद का सीधा अर्थ है- आम जनता के जहन में विनाशकारी शक्तियों द्वारा भय की उत्पत्ति व समावेश कराना। दंगे में नाम देख दुकान जल जाने का भय, सवेरे घर से निकल शाम में लौट न पाने का भय अस, ट्रेन इत्यादि में यात्रा

करने से भय, भीड़भाड़ वाले या देश के प्रतिष्ठित स्थानों पर भ्रमण के दौरान बेवजह आतंकी हमले और धमाके का शिकार बन जाने का भय। किसी भी प्रकार का आतंकवाद चाहे वह क्षेत्रीय हो, प्रांतीय हो, राष्ट्रीय या अन्तर्राष्ट्रीय हो, देश में असुरक्षा व भय की स्थिति उत्पन्न करता है। इसने आम जीवन को अत्यंत बेरहमी ये अधीनस्थ कर रखा है। यदि भारत की बात की जाये तो ऐसा प्रतीत होता है मानों अंग्रेजी की दास्तां से मुक्त हो अब आतंकवाद के साये में आ गिरे है।

आतंकवाद वास्तव में दूषित व आतंकित भावों व सोच का संगम है। यद्यपि आतंकवाद का संबंध प्रत्यक्षतः किसी देश-विशेष, राज्य या क्षेत्र से नहीं है, परंतु कुछ शत्रुराष्ट्र आतंकवाद की आड़ में अपने राजनीतिक, धार्मिक व आर्थिक उद्देश्यों की समय-समय पर पूर्ति करते आये है। हाल ही में, उरी-कश्मीर (भारत) में आतंकी हमले की चपेट में आकर 18 भारतीय जवान शहीद हो गये, जिससे सम्पूर्ण देश में निराशा परंतु आक्रोश की लहर छा गयी। संशय है कि इसके पीछे पाकिस्तान है। सरकार अपनी ओर से जद्दोजहद कर रही है व सुरक्षा योजनाओं पर बल दे रही है परंतु अब तक कोई अनुकूल समाधान सामने नही आये है।

एक अन्तर्राष्ट्रीय समस्या के रूप में उभरता आतंकवाद एक ऐसा व्यापक शब्द है जो कानून के विरूद्ध हिंसात्मक तरीके से समाज में एक भयानक वातावरण स्थापित करने में सफल हो रहा है। विश्व स्तर पर राजनीतिक दलों द्वारा उद्देश्यों की पूर्ति के लिये अप्रत्यक्ष रूप से आतंकवाद को शरण दी जा रही है जिसने मानवता के हनन में तिनके मात्र भी कसर नहीं छोड़ी है। ''वैश्विक आतंकवाद आंकड़ा सूची'' के अनुसार, 1970 से 2015 तक विश्व भर में 1,50,000 से अधिक आतंकी हमले सामने आये है। एक देश द्वारा दूसरे पर आक्रमण होने

पर समस्या का समाधान दोनों देशों की सरकारों की बातचीत व संधि से हो जाता है परंतु आतंकवाद का हल ढूंढना अत्यंत मुश्किल हो रहा है। इसका उद्देश्य सिर्फ आतंक का विस्तार करना है। भीड़भाड़ वाले इलाकों में बम-विस्फोट एक आम घटना बन गई है। आज आतंकवाद ने जीवन में अनिश्चितता भर दी है। यदि वास्तव में आतंकवाद के कारण की जड़ तक पहुँचा जाये तो ऐसी प्रतीत होता है कि हमारे बीच के लोगों में निराशा व कुंठा की भावना उन्हें आतंकी संगठन में सम्मिलित होने पर विवश करती है। इसे देश का दुर्भाग्य ही कहेंगे कि स्वतन्त्र भारम में भी अधिकांशतः निर्देश जनता पुलिस, कानून व अन्य राजनीतिक दलों के शक्तियों के अनियंत्रित उपयोग का शिकार होती है, जिससे उनमें बदले की भावना, कुंठा व निराशा जैसे दूषित भाव पनपते है और अंततः वे आतंकवाद का रास्ता अपनाते हैं। जहां रक्षक ही भक्षक बन जाये वहां आतंकवाद का विस्तार तेजी से होता है। भ्रष्ट राजनीति आतंकवाद का एक बड़ा कारण है। कई बार आतंकी हमले भ्रष्ट राजनीतिज्ञों के अप्रत्यक्ष नेतृत्व में होते है।

भारत का प्रत्येक नागरिक व सरकार आतंकवाद के विरोधी है, परंतु कुछ देशों का मानना है कि यह सरकारी तंत्र के आतंक का जवाब है। यह माना जाता है कि कुंठित व्यक्ति पूर्ण निराशा की स्थिति में हथियार उठाता है। यूगांडा में ईदी अमीन का शासन इस कथन का स्पष्ट उदाहरण है कि बंदूक की नोक पर किस प्रकार रक्त में परिवर्तन आता है। आतंकवाद का एक मात्र उपचार केवल यह है कि शासनतंत्र अपने दायित्वों का अपक्षपाती होकर निर्वहन करें तथा समाज के प्रत्येक वर्ग को समान अधिकार दिया जाये व उचित संरक्षण प्रदान हो एवं पिछड़े वर्ग को संवैधानिक तौर-तरीकों से सुधारा जाये। प्राचीन समाज आतंकवाद से कोषों दूर था। पिछले कुछ

सालों में आतंकवाद भयानक व विकृत रूप लेकर चर्चा में आया है। आतंकवादियों की मांग भले ही अत्यंत उचित हो परंतु हिंसा के तरीके से उसे मनवाना कदापि सराहनीय नहीं होगा। निदोर्ष व्यक्तियों की जान से खेलना व सार्वजनिक सम्पत्ति का विनाश किसी मूल्य पर न्यायसंगत नहीं है। यही कारण है कि अन्तर्राष्ट्रीय स्तर पर

आतंकवाद के निराकरण के प्रयास हो रहे है। आशा है कि अतिशीघ्र उन प्रयासों के परिणाम अभिलक्षित होंगे तथा सम्पूर्ण विश्व पुनः एक साथ आतंक की गुफा से निकल मानवता के खुले आसमान में सांस लेगा। भारत के लिये जनता यह कहेगी कि इतने प्रयासों के बावजूद यदि कोई आतंकवादी देश की सीमा उल्लंघित कर मातृभूमि को

रक्तसार व रौंधने की हिम्मत करेगा तो –

''दर्द से मूक अधरो पर, प्रगति उत्कर्ष लिख देंगे, काहिलों की उंगलियों पर सृजन संघर्ष लिख देंगे, इस देश की सीमा का उल्लंघन करेगा जो उसे हम रौंधकर छाती पर भारतवर्ष लिख देंगे। ✤

भ्रष्टाचार

आयुषी रस्तोगी
IPG-2016

हाय!हाय! भ्रष्टाचार
बड़ा दुर्बल है यह आचार
सभी पर इसका अत्याचार
हाय!हाय! भ्रष्टाचार
आजकल के लोग बड़े निराले
उनके विवेक पर लगे है ताले
सही गलत है नहीं जानते
बाद में लोगों को ठग जाते।
वैसे तो देशभक्ति इनके दिलों-दिमाग पर छाई है
पर आमजन को लूट पता नहीं क्या खुशी पाई है
''हम भरेंगे भरेंगे देश को अपने खुशियों में''
पर लगता है इन्हें तो अपनी तिजोरियां भरनी रूपयों में।
ठग-ठग कर तुमनें आमजन का खून है बेशक चूस लिया
पर अपने मुल्क के दिल में तुमने क्या अपना स्थान ग्रहण किया?
भ्रष्टाचार के पायेदान पर लंबं नहीं टिक पाओगे
एक दिन करारी चोट खाकर उलटे बल गिर जाओगे।
आजकल तो भ्रष्टाचार एक राक्षस है दिखाई पड़ता
राक्षस होते हुये भी वह दिन में दिखाई पड़ जाता
सबके विवेक पर भारी पड़ लोगों को लुटवाता है
हाय!हाय! भ्रष्टाचार तू मानवता को दुत्कारता है।
''तुम मुझे खून दो मैं तुम्हें आजादी दूंगा''
पर लगता है ये नारा कुछ ऐसा है अब बदला हुआ
''तुम मुझे हाथ का मैल दो, तभी मैं तुम्हारी बात सुनूंगा
वरना तुम्हें अपने पास मैं जरा भी नहीं भटकने दूंगा।
हाय!हाय! भ्रष्टाचार
तू लालच की है बड़ी दुकान
तूने देशभक्ति पर डाला
काली घटा का संकट अपारं

DIVING INTO WEB DEVELOPMENT

Arvind Rachuri
IPG-2015

The Internet has become an indispensable part of our lives today. We use it for almost everything. As a result we visit various websites or use apps that in turn access a remote server. So have you ever wondered how the websites that we visit are made or what are the underlying technologies that it uses or how to actually make one? If you have, then you already dived into the sea of web development. So this article aims at providing a life jacket that won't let you drown in this enormous sea.

Web development is a broad term that is used to refer to the entire process of developing and deploying a website or an app that access the data located at a remote server to serve you the result of the request you just made. By the term app I'm referring to Android, Web as well as iOS apps. So why learn web development? Well maybe because it is one of the easiest skills an amateur programmer or a person who is new in this field can learn. It also has the highest demand in the industry because as I mentioned there is practically no business without access to internet and lastly because it is fun and can be done as a hobby. How do we start gaining expertise in this elementary skill that every programmer must have? Well hang on soon you'll know everything.

To start with we can classify the process of web development into a series of three phases.
1. Frontend Development.
2. Backend Development.
3. Deploying on a server.

Frontend Development: Well this phase of development deals with the creation of the visual elements, more formally the UI that a user sees when he/she visits your website or uses your app. It is here that the development branches into Android, iOS or Web app. So in this article we will be focusing on development of Websites and Web apps. All the websites or web apps we use are essentially made using HTML (Hyper Text Markup Language) which is the skeleton of the page and CSS (Cascading Style Sheets) which are the muscles and outer covering of the page. There are tons of online courses and material available for these two components of frontend development. Some of the most commonly known are w3schools, MOOC's like Coursera, Udemy or online video tutorials by Bucky Roberts on thenewboston.com. Your first step would be to pick up any one of these which you are comfortable with and complete the course. This would give you a basic understanding about how a webpage looks like in the code. But just knowing HTML and CSS won't take you anywhere because the page will lack a very important feature that every webpage must have and that is interaction with the user

and performing some function on events generated by user actions like mouse clicks. Basically the webpage you created is a static page i.e. the content of the page doesn't change with the user actions and thus has a poor User Experience (UX). This aspect or the logical part of the UI is handled by a very popular scripting language known as JavaScript. All the resources for mastering JS are also found with those of HTML and CSS. So, after learning all these 3 skills you have a basic skillset to make an average or below average web page. Shocked? Even I was. The thing is nowadays webpages have many components like maps, images, slideshows, navigation panels etc. All these components can be created using simple HTML, CSS and JS but it is a herculean task to accomplish. Even an average looking menu bar takes about two dozen lines of code. Moreover we are forgetting the fact that websites are now having more and more traffic from mobile browsers this means that our layout has to fit or look good in a small screen of 340px as well as large screens of 1080px, in other words our website has to be responsive. To make our lives easier IT giants like twitter, Google and Facebook have provided us with libraries of pre written code and features that we can directly use in our

application.

The first framework that is very common in the world of CSS is twitter Bootstrap. It has a set of pre-defined CSS class and styles that make stylish and responsive web pages very quickly. It has a great documentation along with examples and can be found on getbootstrap.com.

Now we will focus on some more important frameworks which changed the method of designing websites altogether. The first among them is Google's AngularJS. First introduced in the year 2009 this frontend javascript library helps us use HTML as a templating language (a language used to generate basic templates which can be populated with data dynamically according to the needs of a user) and implement the M.V.C. (Model View Controller) architecture efficiently. It is a very powerful library capable of routing, contacting the server and generating dynamic HTML on the fly. Angular lets you add logic to your UI and can handle data efficiently. The material design concept can also be implemented using the Angular Material library which makes beautiful pages based on the material design standards.

As I mentioned earlier that webpages now are made up of various components which are used again and again so it is only logical to define a custom element or a <TAG />. Angular lets you define custom <TAGS/> known as directives but a major drawback is that they are not portable i.e. if you plan to use the same

component again in another application then you will have to write the code all over again. To overcome this difficulty Facebook introduced a javascript framework known as React JS which lets you define your custom components, add attributes and values to it.

A similar concept but with extended functionality was implemented by google and introduced in the Google I/O 2014 was the Polymer 1.0. Google's polymer lets you define your custom elements which are automatically compatible across all browsers and also let you include inherent styles along with the html template. This is indeed a very useful feature since now you don't have to be worried about your styles failing in Mozilla Firefox or Internet Explorer. Polymer also has a large collection of pre-defined custom elements which can be downloaded using the polymer-cli.

The best resource for mastering these advanced technologies is their documentation itself although you may get significant help from MOOC's like udemy but ultimately it is the documentation which prevents the ship from drowning. The last parts of this section might be very confusing for some readers but I intentionally left it like that because after all you learn the best when it's your initiative so fire up your browser and search about them.

Backend Development: This phase of web development involves purely writing code and is my personal favourite. This field has definitely grown

over the past decade but has not seen so much outburst of technologies as the frontend development has witnessed. Backend development means writing code for the server to respond to the requests made by the user such as a new signup or login or a photo upload and so on. This code entirely resides in the remote server on which our website is hosted and is invisible to the user.

One of the first things that you need to learn to be a backend developer is any one programming language such as Python, JAVA, PHP, JavaScript, Ruby etc. As a beginner it is suggested to learn PHP as it shares it syntax with PERL and C++ and is quite easy to learn. The easiest application that you can make using a PHP backend is a simple login-register portal. A working knowledge of SQL is also necessary as PHP currently does not support the more modern NoSQL databases like MongoDB. SQL (Structured Query Language) is a language that can be used to store data in tables in databases. Data is arranged into various columns or fields. This makes the data retrieval and storage very easy. But as I said before knowing just core PHP isn't enough. Today's server backend code demands a more robust and scalable code that can be extended modified or removed whenever necessary. These features can be obtained by an object oriented programming strategy but modelling and writing the entire code itself takes a lot of time and may even have some critical security

issues which may compromise the data on the server.

Thus the knowledge of modern frameworks has become quite essential. The first framework that a beginner can easily learn is Codeigniter. Codeigniter (CI) is a simple MVC framework written in PHP. It is very easy to use and is very lightweight with minimal footprint. All you have to do is download the entire production code (approx. 2 – 3 MB) from its website and you can start writing your entire backend code by extending various pre-written PHP classes in it. It is an open source project which has a great community of user who actively develop it adding more features daily. If you want to take a look at how it's done then visit https://github.com/bcit/codeigniter.

Another great framework that comes quite handy is the most popular Ruby on Rails. It is the mother of almost all the modern frameworks as all of them have the same work flow as Rails just their syntax is different. Learning Rails might take a significant amount of time as its prerequisite is the knowledge of Ruby which can be a bit weird sometimes. Then there are other frameworks like Laravel in PHP, Flask and Django in Python.

Apart from using these frameworks that are based on the fact that standards must be followed no matter what, we have an option to write our server side code in a more flexible environment and that is fully compatible with the programming standards of the frontend. Yes my friends the environment I'm referring to is Node.js. It is a javascript runtime based on chrome's V8 javascript engine. It provides a major advantage that full stack developers now do not have to worry about their code's compatibility with their front end as both of them are now written in javascript and follow follow the same programming standard and syntax. Node also provides great support for real time databases like Firebase and NoSQL databases like MongoDB. So this makes Node very powerful but also there are some disadvantages associated with it but those are out of scope of this discussion.

All the above mentioned are open source and their source codes can be found on github.com where you can report a bug in the code or get help from the amazing community of developers who developed the framework.

So that was just a small part of the enormous sea of web development. If you plan to dive into it go ahead it'll be a great experience. The knowledge you gain during the course of learning is invaluable. Whenever you get stuck or hit a dead end always the best way out is to Google your problem. Almost 99% of the time you experience a bug that has already been encountered by fellow developers and has been resolved. Always remember to plan your website or the app on paper and have a clear path in mind. This will reduce the development time significantly and will help you resolve the bugs faster. Hope you have a great time mastering the art of Web Development.
Cheers!
Happy Coding 🤖

DID YOU KNOW?

Microsoft had plans for its own version of the Macbook Touch Bar - 15 years ago. Apple unveiled its new Macbook Pro featuring a slick OLED-powered keyboard display called Touch Bar on October 28, 2016. The concept for 'adaptive hardware' as Microsoft dubbed it, was initially born in 1999 with the intent to build responsive action keys that show and hide parts of the keyboard based on context. They experimented with keyboard technology that changed the function keys and actions according to the applications you run. Microsoft's foray into adaptive hardware came to a halt in 2009 with a piece of tech which it called "Adaptive Keyboard". It featured a programmable display top as well as a large display area above the keys.

Microsoft ultimately opted not to move forward with developing products based on the adaptive keyboard technology because they didn't build computers back then. But when they eventually got into putting together computers, they chose to build devices with touch screens instead while Apple took the other path.

We meet a lot of people in our lives, but only some manage to remain in our memories forever.

Late Abhinav Saxena and Late Tushar Sharma were among the most diligent members of AASF. More than their utmost dedication and hard-working attitude, it was their friendly demeanour that made them special. It has been six years since their unfortunate demise but they are still alive in our

MEMORIES...

CAMCULT

Pooja karmakar

MOTION PHOTOPGRAPHY
The flight of birds captured at the spiritually and mythologically important city of Pushkar, Rajasthan.

MACRO PHOTOGRAPHY
It is always the small pieces that make the big picture. A building entrapped in a water droplet on a LAN cable.

Sachin Acharya

PEOPLE PHOTOGRAPHY
A serene and calm assembly of monks at Namdroling Monastry, Bylakuppe, near Mysore.

TRAVEL PHOTOGRAPHY
Kaveri river showing off the bounty of nature at Dubbare Elephant Reserve.

Gaurav Ojha

URBAN PHOTOHRAPHY
Cityscape- Surrealistic night view of Malabar Hill as seen from Marine Drive Mumbai

Abhinav Sanga

ARCHITECTURE PHOTOGRAPHY

The beauty of the temple lies in its complexity. It has the shape of a gigantic chariot, having carved stone wheels, pillars and walls.

Shresth Verma

WILDLIFE PHOTOGRAPHY

Nilgai- 'Nothing is greater than gentleness'. Female nilgai in its great gentleness, posing near a tree, spotted in the wetlands of Bharatpur wildlife sanctuary.

Shubhankar Mohan

BIRD PHOTOGRAPHY

Dove, the harbinger of peace, fawning its elegance and grace.

Gattu Suryateja

STREET PHOTOGRAPHY

Streets can take you anywhere, for wanderlust is a powerful thing.

FLOWER PHOTOGRAPHY

Rose-the symbol of balance, promise and hope of flower contrasted by defense and care of thorns

INTERNET OF THINGS

The agenda here is let to your gadgets talk with each other and make your life easier. Previously you had to control gadgets, now let them share information and control themselves. The information shared, can also stimulate the business processes. IoT services stand on three pillars, namely, 'sensors-the sensory organs to our digital devices', 'connectivity - a necessity to circulate the data in the network' and 'the 'process' - task of taking decisions for the sake of 'people '. But the challenge is these 'smart objects' need to interact over the Internet, query and change their state, taking into account security and privacy issues and not keeping the confidentiality at stake.

VIRTUAL REALITY

We know the world through our perception system, consisting of five senses. The truth is that humans have many more senses, which can be simply stimulated by the state of mind. For example, the sense of balance. VR exploits this fact by presenting your senses with a computer generated virtual environment. And since you present your senses with made up information, your perception of reality also changes, in response to it. You would be presented with an environment that is not really there, but you assume it as real. With the giants like Amazon and google already into it, it definitely is a future tech.

FUTURE TECH
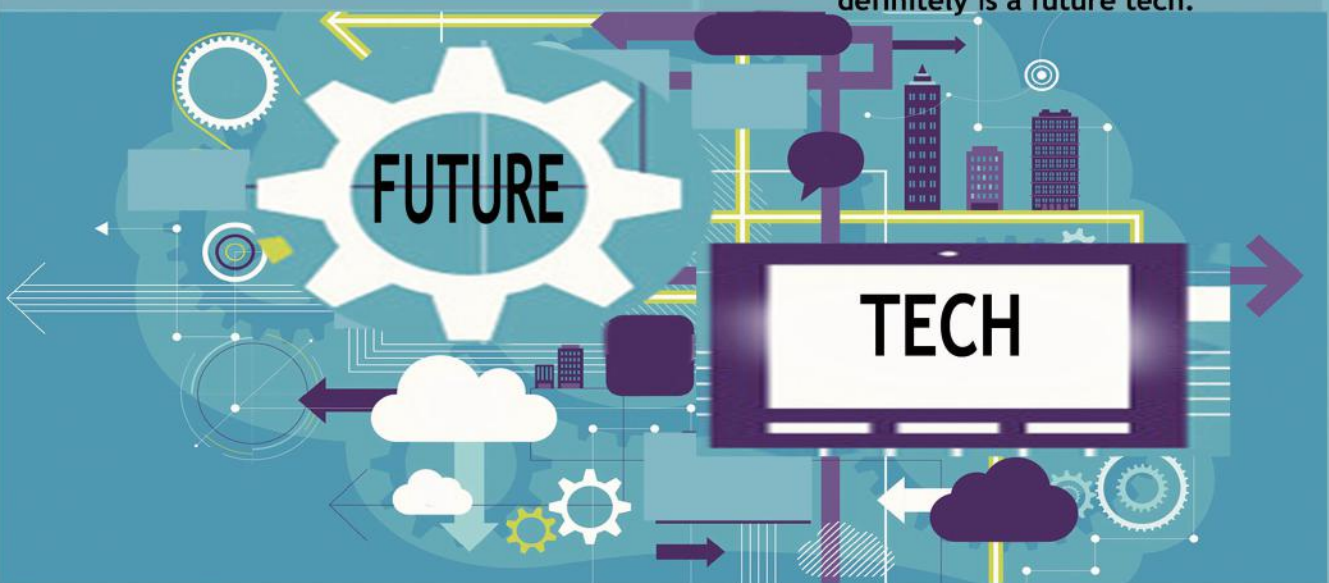
WEB 3.0

WEB 3.0 is simply the more intelligent web. Gallop to the era of "phrases" from that of "keywords". Present your web 3.0 browser with a complex search and it utilizing its features like, extensive connectivity, distributed databases, machine learning, natural language processing, autonomous agents, can present you with a very precise results. For example, you could just type "I want to see a funny movie and then eat at a good Mexican restaurant. What are my options?" Instead of splitting your search into that for a 'funny movie', a restaurant with 'Mexican meals'. The Web 3.0 browser will analyze your response, search the Internet for all possible answers, and then organize the results for you. This "intelligent web" keeps on learning and the responses improve and become more user-specific over the time, as you keep using it.

DEEP LEARNING

For the past three centuries humans have been making machines, it's now turn to make intelligent machines. Let the machines learn while they function and thus even perform better. A combination of classical probability and latest algorithms, deep learning is one of the future techs. An algorithm is deep if the input is passed through several non-linearities before being output. It utilizes the concept of ANN (Artificial Neural Networks), inspired by the biological neural networks. The ANN are presented as systems of interconnected "neurons" which exchange messages between each other, have connection weights and can be tuned with experience, making them capable of learning. Years back, NN were only 2 layers deep, but now it is computationally possible to have NN 10+ layers deep. Most modern learning algorithms are shallow.

YOU HAVE PUZZLED ME A LOT!

Sharad Mishra
IPG-2015

"Are you really there? If you are, then where are you?" This was the question that has constantly perplexed me from my very early childhood. The word is very simple, it's "God", but believe me nothing related to this "God" is simple. I still remember the lesson my mom gave to me, "God helps innocent people". And when I got fever, I started endlessly praying to god to recover soon. But alas! Nothing happened until two days!! With growing ages, intellectual science more mystified the question for me but my intensity to get answer reduced. Because I adjusted with another lesson given by society that when you are in your school, you are required to be very reasonable, logical and examine every statement on the ground of available facts. But when you are in your society, follow the footsteps of your elders without questioning about anything. But rationality leads to curiosity and curiosity compels to search answers.

In 2010, a book entitled "The Grand Design" was launched, written by very renowned physicist Stephen Hawking. The book argues that invoking god is not necessary to explain the origin of universe and that the Big Bang is a consequence of the laws of physics alone. Throughout the book, existence of god is refused. However, though Stephen is a firm atheist till, he says two things. He but still, he says two things. He says, "One can't prove that god doesn't exist, but science makes god unnecessary." Another thing he says, "Earth exists in some of those fortunate universes where laws of nature form life."

So, this is a point of view of one rational scientist. But on the other hand, one more thing I have to share.

A professor in Oxford University, the most influential atheist thinker of 20th century, Antony Flew, wrote two prominent books over atheism and his thoughts were a sturdy support for atheists. But what actually miraculous happened in 2004, was that during a debate Antony Flew declared that now he has accepted the existence of god. And then he wrote a bestseller book named "There is a god". Reason is highly impressive and logical. Before I state his logic, let me tell you a mathematical theorem (theorems have proof), "monkeys at typewriter theorem". Theorem says, a monkey typing a typewriter randomly, would produce all the literary work of Shakespeare provided infinite time.

So, coming back to Antony, he said in the debate that it all happened because of DNA material. The unbelievable complexity of arrangements and the enormous subtlety of the ways they work together, forced me to think. He also said that the likelihood of getting one Shakespeare sonnet (by monkeys at typewriter theorem) by chance is one in a 10e680. So, if a scientifically proved theorem clarifies that getting a simple sonnet by chance has such a rare probability then how can one imagine that the more elaborate feat of origin of life (formation of single DNA with innumerable elements joint at right place with so delicacy) could have been achieved by chance. He says that origin of life clearly points to creative intelligence.

So, here are two opposite sides of a coin, with their substantial logics. And I know, that this debate is never going to end. Though debate might never end, but one single concept makes everything easier. And this line is, "Trust me friend! Just soul matters!!" Yes, I have learnt that never go in a debate regarding his/her existence, just keep your soul always ready to do good and innocent things. This story has influenced me most, Meat is prohibited from being offered to god. But Kannappa, a great Shiva bhakta, offered meat to lord Shiva that too after testing whether it was delicious or not. But lord Shiva accepted it as it was offered with a pure heart and devotion.

So friends! Sometimes I think that if god would be there and would be listening my question to him/her, he/she would be saying that my son "why do you think that much, JUST SOUL MATTERS!!".

UN-"एकता"

शुभम शुक्ला
IPG-2014

बचपन से हमें बताया गया है की हम एक हैं, अनेकता में एकता ही भारत की पहचान है, पर क्या हम वकाई एक हैं? क्या सच में हमारे राजनेता हमें एक सा मानते हैं? क्या वाकई वो हमें एक देखना चाहते हैं? 2011 में जंगड़ना आज भी मझे याद ह। तथ्य जाहिर करने से पहले 15 मिनट तक कहा गया था कि भारत एक है, यहैं की जनता किसी भी धर्म जाती के ऊपर उठ के पहले भारतीय है। लेकिन कुछ देर में ही सरकार की कलई खुल गयी जब उसने हर जाती हर धरना के आंकड़ों को अलग अलग जारी किया गया। वही पल हमें बता गया कि भारत कितना एक है। राजनीतिक पार्टियां, लोकतंत्र के मंदिर का स्तंभ माने जाने वाली पार्टियां आज सिर्फ एक धर्म विशेष या जाति विशेष के लिए राजनीति कर रही हैं, पर फिर भी टीवी किताब में मेरा भारत एक है। कोई दलितों के लिए लड़ रहा है तो कोई महादलितों के लिए। कोई सवर्णों के लिए लड़ रहा है तो कोई ठाकुरों के लिए कोई हिन्दू के लिए लड़ रहा है कोई मुसलमानो के लिए कोई इनसे ये पूछेगा कि ये लड किस्से रहे हैं? सिर्फ आपस में. फिर भी यही राजनेता सभाओं में बिना सोचे कहते हैं कि भारत एक है एक समुदाय जिसने भारत की स्वतंत्रता के लिए अनेक कुर्बानियां दी, आज उसको अल्पसंख्यक का तगमा दे दिया है उस समुदाय के लिए किया गया कोई भी कार्य उन्हें हर चुनाव में सुनाया जाता है जैसे कोई एहसान किया गया हो।

पर कुछ भोले भाले लोग स्वीकार कर लेते हैं और इसके लिए खुद को धन्य मानते हैं। देशवासी अपने ही देश में माइनरिटी और मेजोरिटी का तगमा लिए घूम रहे हैं, फिर भी हमारा देश एक है। जनता तो छोड़िए आज नेताओं ने शब्दों का भी बंटवारा कर दिया है। किसी ने समाजवाद उठा लिया तो किसी ने सेक्युलर से नाता जोड़ लिया कोई पिछले एक वर्ष से असहनशीलता की माला जप रहा है तो कोई सिर्फ कड़ी निंदा कर रहा है। राजनीति में जरा भी रुचि है तो सिर्फ इन शब्दों से ही आप नेता या पार्टी का नाम बता सकते हैं। लेकिन फिर भी हमें गर्व है की हमारा भारत एक है धर्म और जाती के आधार पे तो हम सदियों से बंट रहे हैं पर आज आधुनिक युग में भी हम इंटेलेक्ट के हिसाब से बांटा जा रहा है। कुछ ओवर एडुकेटेड उदारवादी लोग आतंकियों का समर्थन कर रहे हैं। उन्हें अब देशभक्ति जैसे भाव बीते दिन की बात लगने लगी है हर वो शख्स जो उनका विरोध करे उनके लिए जंगली तथा गंवार होता है। पश्चिमी दुनिया से नजिस्म, फासिज्मऺ जैसी शब्दों का अर्थ वो भारती समाज में ढूंढने लगे हैं वही एक तबका ऐसा भी है जो बहुत नामी गिरामी शैक्षिक

संस्थानों में तो नहीं जाता पर उसके लिए हर बात उसकी मिटटी की आन बाण और शान से जुड़ जाती है। देशभक्ति रस में यह गुट इस कदर डूबा हुआ है की इसे देशभक्ति की आड़ मे हो रहे छलावे भी इसे सही लगते हैं। हर अपराध को ढकने के लिए इसके पर कर्त्तव्य, निष्ठां प्रेम की चादर है।

नवयुवक देश की शक्ति है पर अब वो शक्ति भी सोच के हिसाब से बंटने लगी है। लेकिन आज भी हर मंच हर माइक पे मेरा भारत एक है दो राज्य नदी के पानी के लिए लड़ रे हैं, दो राज्य बोली को लेकर एक दूसरे से अलग हुए हैं, पर फिर भी हमारा देश एक है। धर्म, जाती, भाषा, बोली, सोच जीवन के हर पहलु के हिसाब से हमारा देश छोटे छोटे टुकड़ो में बंट चुका है। नेताओं ने हमें कठपुतली बना दिया है जिसे वह अपने ताल पे नचाते हैं। जरूरत हैं इनसे आगे निकलने की। समाज को एकजुट होके इन नेताओ का जवाब देने की। विविधता और अनेकता में अंतर पहचान ने की। 🖊

मुसाफिर

शिवानी मंडेलिया
IPG-2014

चलता है मुसाफिर इक मंजिल की चाह में
जहाँ बसता उसका अस्तित्व उस सपने की राह में
रुकता नहीं एक पल मुसाफिर कहीं रुकने की चाह में
चलता रहता है वो इक अनसुनी आवाज के आव्हान में ।।
उसके भीतर का जोश कहीं खत्म न हो जाएँ
जो जल रहा है उसके भीतर कहीं वो बुझ न जाएँ
राह की रुकावटें कहीं थाम न ले उसे
पग पे फैले कांटे कहीं तोड़ न दे उसे
उसका अस्तित्व कहीं बेमानी न हो जाएँ
सपने उसके कहीं टूट न जाएँ इसलिए...
बस चलता रहता है मुसाफिर इक मंजिल की चाह में
जहाँ बसता उसका अस्तित्व उस सपने की राह में

E-Cell IIITM

Indian government has realized the need of new generation entrepreneurs for development in various fields. In continuation with this, Department of Science and Technology, Government Of India, is very keen on developing Entrepreneurial Development bodies in all major educational institutions in India. In this regard, E-Cell (Entrepreneurship Cell), ABV-IIITM Gwalior stands out as a pioneering organization.

A number of initiatives are taken by the institute wherein technology transfer is affected. For example, a software package, named, "File Tracking System" has been developed and sold to various clients. Such initiatives have also resulted in winning the Award for Excellence in e-Governance Initiatives by Government of Madhya Pradesh. These initiatives also helped us in promoting the spirit of experimentation, innovation and ultimately, resulting in entrepreneurship. Right from its inception, the institute has been promoting entrepreneurial spirit of the students and nurtures young talent through E-cell and Innovation and Incubation Centre. The institute has collaboration with CIIE (Centre for Innovation, Incubation and Entrepreneurship) at IIM Ahmadabad. The institute takes pride in developing 28 entrepreneurs till date. In a very short span of time since its existence, the institute has witnessed over

many ventures by its students. CEON Solutions, BCube, IT Services, ADAVANTAL Technologies, Redonic Care are to name a few such vibrant units. The faculty and students are encouraged to set up new enterprises.

E-Cell, ABV-IIITM Gwalior established on 17th April 2010 with an initial collaboration of 20 members is a student body formed with an objective of creating, spreading and fostering the spirit of entrepreneurship among budding young minds to start their own ventures and be job creators rather than job seekers. Thus, E-Cell, ABV-IIITM defines the word Entrepreneur as one who provides employment to others but on the other hand, always keeps himself at stake and gains maximum access to the available resources for maximum growth.

The Cell aims at manifesting the latent entrepreneurial spirit of the youth and thus not only motivates the youth to start-up their own enterprise but also makes efforts to provide them with the necessary resources. Through its initiatives, cell will try to bring out students' entrepreneurial skills and provide them with the vital support system that a budding entrepreneur demands.

India is an emerging economy and thus needs the drive and innovation of young entrepreneurs. The Cell must see an entrepreneur not just as a businessman but a leader who be-

in creating a change in the industry and who believes in creating value to the society and to the nation. Its primary responsibility is to educate and provide the required resources & opportunities to its students keeping outsiders as second priority. If we think we are providing our best to our students and are able to give away our services to outsiders then definitely we should move ahead.

Mission- To focus on actively incubating startup ideas by linking the right investors with the right entrepreneurs.

Vision- To stimulate, support and sustain all initiatives and endeavors of students, which will lead to generation of entrepreneurship based on latest trends in Information Technology and Management.

Focus- To create an enabling environment and eco—system to supply the growth of entrepreneurship.

Ideology-
i. To motivate and inspire students to take up the challenge of entrepreneurship.
ii. To equip them with necessary skills and provide all possible assistance.
iii. To promote creative thinking and an entrepreneurial mindset among the students.

THE PROCRASTINATOR'S MECHANISM

Shubham Shukla
IPG-2015

As engineers we all have experienced one of those, nights before an exam, when you know you have studied pretty much nothing. Those are the nights we thank the good nice people who discovered coffee. Coffee and fear, the two things that help us complete a whole semester's content in a single night.

If you can associate this experience or something on these lines with yourself, then like me, you are a procrastinator.

However, there are people who might not have had to go to that extent ever because they make sure beforehand that they don't have to. The opposite of how we are, the world calls them non-procrastinators among other names like successful, smart, enlightened.

But we know that the world is not always right so stop thinking that you are not smart. We have our own way to do things that is hard to understand. I want to explain this mechanism to the "enlightened ones" to help them get a better feel of it.

I have a hypothesis that the brains of procrastinator's are different from that of a healthy sane human being.

Inside the brain of a normal human being is a guy called the rational decision maker. He is in charge of making all our decisions carefully and rationally. He thinks about the stuff we need to do and how to do it, basically the good guy inside the mind.
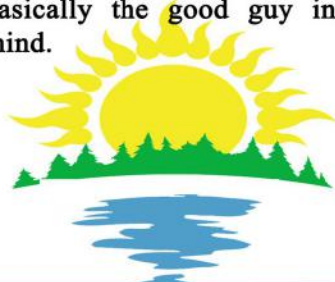
What's different in the mind of procrastinators is that there is also a small primate along with the rational decision maker.

When the rational decision maker takes a decision to do something, like say studying, doing laundry, the monkey does not like that plan, he pushes the rational decision maker aside, takes the driving seat and says ' let's not do this now let's open YouTube, maybe we will find something interesting ' and before we know it we are in a YouTube spiral that starts with David Snyder talking about how to be a better liar and ends with watching videos of bb.k.vines. All of that is gonna take a while so no time to work or study.

So, let's try to understand what just happened. Clearly the monkey is not the guy you want in the driver seat. It lives entirely in the present moment with no memory of the past and no vision for the future. It only cares about stuff that is easy and full of fun. It thinks of us as animals and in the animal world this works fine. If a dog does stuff that's only easy or fun all his life then it's a huge success .But we are living in an advanced civilization and the monkey does not understand what that is and that's why we have the rational decision maker in our minds which gives the ability to do things that no other animal can do. It helps us see the big picture and visualize the future and basically do things that make sense in doing right now.

Sometimes these things can be easy and fun like enjoying our dinner , having fun with friends and family etc. and other times it may make sense to do things that are harder and less fun for the sake of the big picture , that's when we have a conflict. And for a procrastinator this conflict tends to end in a certain way every time, with him spending his time in the easy and fun place that is totally out of the make sense zone.

We will call this place The dark playground. All of you procrastinators are pretty familiar with it. It's when leisure activities are happening when they are not supposed to happen. The fun we have in the dark playground is not actually fun. It is filled with all the beautiful and empowering procrastination feelings like guilt, anxiety, self-hatred and fear.

So, how do we ever end up submitting our summer vacation projects?

Turns out there is a guardian angel that is watching and taking care of us at every step of the way. I call this angel The panic monster. Whenever a deadline gets too close or there is a fear of public embarrassment or some other scary consequence the panic monster wakes up from its sleep. The monkey is terrified of the panic monster.

As soon as it wakes up it starts

starts rampaging inside our brain, freaking everyone out .The monster chases away the monkey and puts the rational decision maker behind the wheel. But this time the monster makes sure the monkey does not show up again until the storm is over. The rational decision maker, under stress due to the monster next to it, starts to work, with double enthusiasm than before.

This is the procrastination mechanism. It's not pretty but it works.

So where does the despair in being a procrastinator stem from. If we achieve the end result why do we end up feeling bad about it.

To answer these questions I started to poke around a bit and found out that there are two types of procrastinations the one in which there is a deadline or some other visible scary consequence and the other type in which there is no deadline .

So if you want to do something that you have to start on your own like if you want to learn competitive coding or development or start something entrepren- eurial, even personal goals like exercising to get healthy, maintaining a routine or finally asking the cute girl you have a crush on, out. You don't know when you will be in a position where there could be consequences of not doing these things earlier. Someone else might ask her out, you might fall sick, we know that life is really good at surprises. And as there is no way to see these things coming, the panic monster does not feel the need to wake up. The monkey keeps driving and that's how the procrastination mechanism fails. We end up stranded in the dark playground forever and ever. All that's left to do later is regret.

This regret turns into the source of our long term unhappiness, frustration, it makes us feel like a spectator in our own lives. It steals from us the control of what happens in our lives. That's where all the good procrastinator feelings come from. Remember The dark playground is not really a fun place.

All of us are procrastinating about something or the other. Not all of you are a mess, some of you might have a healthy relationship with deadlines, but remember the monkey's sneakiest trick is when the deadlines aren't there. And it's our job to get out of the playground and realize what we are procrastinating upon and start working on it today.

Well maybe not 'today'. Today maybe after dinner or after minors are over ,sometime in the near future, first let's see what shows up if we google ourselves. ♦

IPG-MBA : THE ROAD LESS TRAVELLED
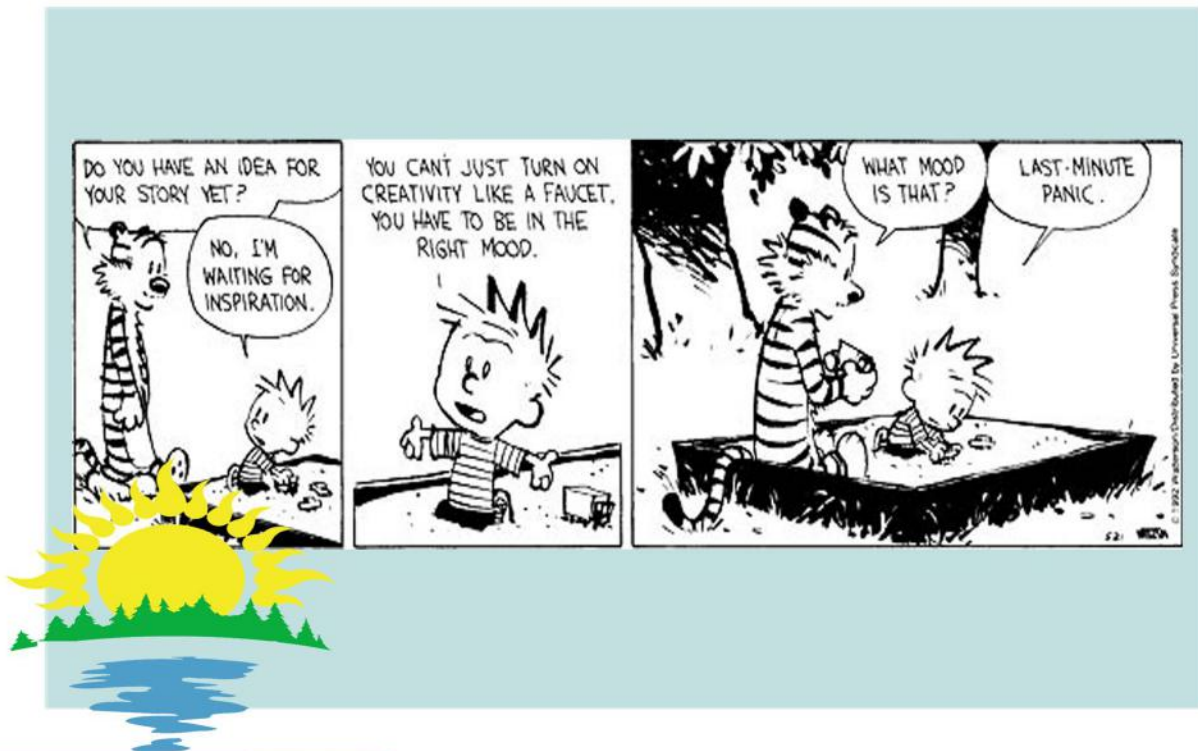
Arun Pant
IPG-2012

Disclaimer: The article contains views and experiences of the author. It does not emphasize effectiveness of one course over another.

Out of 121 people who joined IPG course in 2012, only 21 will pass out with an MBA degree in 2017. I think, there are many reasons why students find M.Tech option more lucrative than MBA. Foremost, is the pocket money of ₹ 12,500 per month that lures students, given the very little effort required to clear cutoff in GATE. Second, IPG-M Tech makes chances of grabbing a higher pay package significantly more. Currently the IT market doesn't look that good, but 2 years back, the average package in IPG-M Tech was good. Apart from the average, the top packages offered in IPG-M Tech are quiet heavy and attract a good amount of attention. Third, I think most people like to continue in their stream rather than going for something new, especially when they have invested 3 years into it.

However, my case was different. After 3 years of engineering, studies had become a burden to me. Every semester would start with a hope of learning something exciting and useful, but would end up in a futile struggle to clear exam. Although, I would score fine at the end, exam days were stressful and haunting.. I still remember the awful day of WCT major exam. Then I heard that clearing exams is easy in MBA. I thought, even if I might not learn anything significant in MBA, it will definitely be a good exam clearing experience. I decided to trade ₹ 12,500 pocket money for comfortable nights during exams. After all, placements didn't bother me, so the decision was quiet simple.

Today, I think it was quiet worthwhile to trade perks of M.Tech for MBA. The attitude of faculty in MBA is quiet different from M Tech. Indeed as I had heard, they tend to conduct simpler exams. It is not that, subjects in MBA are not challenging enough to cause problems during exams. Rather, I think MBA faculty are gentle on students. The size of our batch is quiet small (21 IPG + 7 PG MBA) which makes it easy to personally interact and approach them for anything. Smaller batch also means organizing things is easy. The entire batch gets to know each other reasonably well. There is a difference between MBA and M Tech approach to learning. While atmosphere in M Tech is hot with coding contests, MBA people rarely compete with each other on Finance, Marketing or Economic skills in competitions or otherwise. The attitude is rather cool, with class interested in spontaneous group discussions on any topic under the sun whenever the time permits. The career goals of MBA students are as diverse as they can get. People around me are aspiring for Public Administration, Actuaries, HR, Banking, Finance, Marketing, and further studies while a few like me still remain clueless.

I think, MBA has provided me good learning opportunity. One of the most interesting subject that I have come across is Macroeconomics. Although not formally a subject in the course, it has links to wide range of topics in MBA. Macroeconomic concepts are fascinating, in that they give us a view of how an enormous economic engine of the world is understood and managed. Other interesting areas are Business Strategy and Organizational Behavior. For those interested in quantitative modeling and mathematics, Econometrics will prove to be quiet satisfying and challenging as well. There is enormous potential for applying technical skills such as programming and mathematical modeling to business. Today's business and society at large are highly IT enabled. It is in the domain of managers to analyze how IT can be used to the utmost benefit of society and organization.

I think, MBA can prove to be a good learning experience for those with background in Information Technology. If you can find some time to log out of CodeChef, and wonder a little about society and business then go for it. ✦

ACCIDENTAL ERA
TIME MENDS EVERYTHING
... DOES IT???

Rohit Kumar
IPG-2016

Is this world just a mere reflection of time, shaping it as it liked or was it architected against its will? Were all those brilliant ideas only a spark?? Were all the formulas hidden somewhere in the exact same way as they are today, or does a small unnoticeable error somewhere in the course of history govern all the laws today?

I am just a thinker and possibilities never fail to amaze me. I don't know which scenarios led to the evolution of this highly accurate DNA of ours but we are familiar with many of the inventions and breakthroughs responsible for today's growth.

Grant me some permissions, as I am going to architect an Accidental Era by changing some of the thoughts of those thinkers and people who marked milestones. Let's see how some of the events were meant to be as specific as a change will make a different impact and develop some different sets of future innovations in my simulated world. First let us review the rate of Technological Timeline to understand what could be the

consequences if I corrupt a thought. John Napier started the timeline in 1617 by inventing logarithm and invented a basic mechanical device using rods and bones for performing mathematical calculations. 50 years later Gottfried Leibniz wrote BINARY values. Around 150 years later, in 1804 finally an engineer Joseph Jacquard used binary terminology to design a loom (to weave cloths) using punch cards to match a set of commands. Holes in his cards correspond to binary open/close. Next, the famous year 1823 saw the emergence of first mechanical computer the "Difference Engine" by Charles Babbage. With this year the rate of development increased as in 1834 Babbage designed the analytical engine and the first computer program was also written.

The following years led to advancement in implementing the same theories in a better way. Let's fast forward 100 years to 1962 in which the first computer graphics game 'Space war' was compiled. From then the timeline became so crowded, as to tell everything will

form another. We all know the further events like founding of Microsoft, IBM, Apple, Google and the rest. Let's focus on our motive.

Removed- George Boole: Fusion of binary numbers to algebra vanished.

Changed- John Von Newman architecture of computer and idea of stored programs.

Restricted- ARPAnet to expand

Fails- Google debut........ Origin fades

Havoc! Doesn't it seem? Limiting binary to arithmetic, restricting ARPAnet to become Internet, no stored programs, no MAPS, no Android, no favourite search bars.What could have emerged, an even better way to use binary not limited to algebra but to interpret electrical impulses of brain. A different architecture to mould data along with its controlling instructions. Yahoo would have been the most powerful search engine or maybe favourite.

Evolution always branches its nodes so that one way or the other the best comes forward.

This world is not as it looks, each established thought can be disrupted if our young mind wants to. So I leave it to the readers to think if the ideology of BINARY fades then how this world would have been.

ACCIDENTAL INVENTIONS

Radioactivity	Super Glue	Ice-cream cone
Dynamite	Velcro	Teflon
Anasthetia	X-Ray	Vulcanised rubber
Penicillin	Pacemaker	Saccharin
Stainless Steel	Microwave	Potato Chips

LEARNING FROM LIFE

Yesoda Bhargava
IPG-2009

Each day life teaches you something, though that something may not be everything but it is definitely not too trivial to forget.

What is Research?

I am not a world renowned researcher or a professor at some reputed research institution, nor I am funded by any research laboratory around the world (though I would like all three to be true) to carry out my own small yet informing expeditions, yet I feel a responsibility to share how I have learnt what research is over the course of time.

I will be talking in the context relevant to the readers, the IPG ilk.

Research does not have to be a canker in the 5 year course which occurs twice, once after third year and second in the final year. It is meant to invigorate students, make them question what they mostly assume to be doctrines, definitely not to scare students behind the curtains of novelty or some billion lines-of-code. Research at college, is an opportunity, the first step towards creating something that one likes, a venture into understanding their own confusions and then working to find answers. Basically it is a novel opportunity to learn and understand for a prolonged period of time which morphs into a learning incomparable from the one garnered, if at all, from appearing in the exams.

.And thus, my first point is that research does not have to be an "I-hope-this-finishes-soon" dread. It must be brought to the notice of students, that deep work for a prolonged time is an opportunity, a vacation and not a vocation, and hence students must look forward to research with pizzazz. The onus obviously lies on the team, the sentiment in the prevailing team ought to be bigger than, "I did more" or "I will do more to gain more grades", or "He is not doing anything". All these debilitating thoughts, for first, defeat the purpose of research and for second, are not conducive to create the ambience for solidarity in the team, which is important for work to progress. It is a general perception among students that their work has to be out-of-the-box, novel or something which has not been done or even conceived before or maybe they are coerced to believe and act in that direction; nothing could be further from the truth. Academic community mainly focuses (ought to) on child's own learning, how she/he is doing or making something from scratch; the premise of existence of a solution is redundant for he did not make that solution. For example, it is learning when a student without using MATLAB writes a program to train and verify the data set. (I encourage students to try it) Accomplishment of this seemingly small, yet challanging

problem will make a student confident to take on tougher problems. Professors definitely have a big responsibility in molding future Bose's, Subbaraos, Kalam's. (Read the Kalam's story when his professor tested his mettle).

Research, like love is a skill learnt and perfected over time. And there is a variety of beautiful research happening all over the world, in all hues exploring the use of information technology in sectors like health and education to name a few. Just because we are students of Information technology, does not mean we are limited to data structures, Neural networks, Machine learning, Deep learning, Image processing (excuse me for not putting MBA research topics, owing to my extremely diminutive knowledge in that domain). Times have changed. As someone has said very eloquently, "do not think out-of-the box, think like there is no box".

Research does not have to be a drudgery, it can be an enjoyment. But more than that it ought to be in a domain which you can relate to and contribute, for that connectedness will chart the course smoothly without making it a burden.

One of the flawed conceptions is also that a highly technical, esoteric and abstruse work is a commendable research, that's not the case. We got to find our own definitions of a formidable

research for some it may be meaning, for some it may be developing, for some it may be hypothesizing and then proving. I still am learning what research is.

I have a mentor in Bengaluru, her name is Dr. Thelma Narayan, she is epidermiologist and I end this article with the words that I heard from her and they still reverberate strongly in my mind.

We do not study or do research to publish, we do research so that it is useful for someone else in future. When I heard it from her, I knew very well that I was in right hands. ✦

Yesoda Bhargava (IPG-2009) is a senior software engineer at Samsung Research Institute, Bengaluru.

माँ बेटी का अटूट रिश्ता

महिमा गुप्ता
IPG-2015

माँ बेटी का रिश्ता यह अटूट है,
उसके आँचल में सारी छूट है।
जन्म से ही बँधी ये डोर है,
इसका न कोई ओर है, न कोई छोर है
किसी का न इस रिश्ते पर जोर है,
सब रिश्तो में मजबूत उसकी डोर है।
वैसे तो बेटी पिता को ही सबसे ज़्यादा चाहती,
पर माँ को ही अपनी हर बात बताती।
जब माँ रूठ जाती तो उसे मनाती,
कभी खुद हँसती, कभी उसे हँसाती।
मेरी हर परेशानी जाने वो कैसे समझ जाती,
कभी दुआ करती तो कभी दवा बताती।
रात में जब मुझे नींद न आती,
अपनी नींद त्याग मुझे सुलाती।
कभी डर लगता तो अपनी गोद में बिठा लेती,
किस्से कहानियाँ सुनाकर वो ध्यान बटा देती।
जब परीक्षा की रात है आती,
पास बैठकर वो सब याद कराती।
न जाने कितनी बार पापा की डाँट से बचाती,
कभी अपने पीछे छिपा लेती, तो कभी खुद आगे आ जाती।
संसार की सब बुराइयों से अवगत कराती,
और उनसे लड़ने के सौ तरीके बताती।
वैसे तो न जाने मैं उनसे कितनी बार लड़ जाती,
कभी उनको दुखी करती, तो कभी रुला जाती।
पर इसके बाद न मुझे भूख लगती,न नींद आती,
मेरी पूरी ताकत बस उन्हें हँसाने में लग जाती।
रूठते-मनाते यह जीवन आगे बढ़ता जाता,
और बेटी के ब्याह का दिन आ जाता।
माँ का दिल तो बस इसी कशमकश में बैठा जाता,
कि कैसा वर बेटी के नसीब में आता।
बिना कुछ सोचे अपनी पूरी जमा पूंजी बस उसको दे देती,
जाने हर माँ इतना कुछ कैसे कर लेती।
वो एक माँ ही तो है,जिसका न कोई तोड़ है,
और जिसके बिना मुश्किल हर मोड़ है।

CAREER MANTRA

AASF BROUGHT OUT THE VOICE IN ME

Jayant Niranjan Mundhra
IPG-2014

There I was standing in front of my batch in Alam Sir's class. The date was 27th August, 2014 as far as my memory goes. He had asked us to speak on any topic for two minutes straight. I had prepared a speech on "dealing with anxiety". I took a deep breath and spoke non-stop with bare minimal of breaths to keep me going.

I could not comprehend what was happening. I could feel something strange, but I was too busy and engaged in thinking of the words that I was uttering. And, then once I was done, I finally observed. I was shaking, and my shirt was all drenched with sweat. This was the first time I was speaking in front of such a large number of people.

That evening I took a resolution. The resolution was to change this scenario by the end of my first year. What I wanted was to ensure that post my first year I should not be accompanied by all that sweat and shaking. I was damn serious about it, but I did not know how to make it happen.

Post the successful commencement of Windows basics hIQ, AASF was to organize a Group Discussion Contest. It was upon taking cognizance of that event when it struck my mind. What else could be better than challenging me at every step to push my boundaries in the domain of public speaking?

So, I went to the event. And, I gave my best shot. I passed the initial round to reach the final round. But then something happened. Among the participants was my friend Shubham Shukla. I won't mind calling him "The Wordsmith". He swayed away through the round like it was a child's play.

Though I managed the second spot, I was left stumbled and awe-struck. I could not fathom how to be as good as Shukla. I was a greenhorn in the art of public speaking but was tenacious. So, I began by trying to observe him and also a few others like Keshav Laad Sir, Anjali Nayak Ma'am, Gaurav Ojha Sir and Ashish Krishna Sir.

I would attend all the events conducted in the College where any of these masterful speakers would be involved in any way. I closely observed how they moved on the stage and how they moved their hands. How did they handle the on-spot criticism? How did they manage to maintain that eye contact with every person in the audience? I would look at them with widened pupils and try to observe the minuscule and trivial details that made them stand apart from others in our Institute.

Later, when I would be in my room but my roommate, Shubham Goel would not be there, I would walk around the room using it as my dummy stage.

That is where I would try various gestures and foot movements to cover the entire stage. And, also the onerous task of maintaining eye contact. That was the toughest thing for me to learn.

I would practice each detail that I could glean from these people and try to master on them on various events organised by AASF. Abhigyan Abhikaushalam Students' Forum was my boot camp for getting better at this art of public speaking.

One after another I participated in each literary event that was organized by AASF in that Academic Year. I tested and challenged myself over and over again. And at the end of every event, the benign judges provided sundry valuable inputs on our performances. Those inputs further helped me to tweak up my speaking.

From that first participation in the Group Discussion, there came JAM. Case study contest. Then Brand-Aid. And much more such events between them. And, with each one of those events I grew and evolved. There came a day when I suddenly stopped shaking. Then there came a day when I was smiling as I was speaking. My confidence grew so much that I began to interact with the audience fluently. My

sweat began to disappear.

I profusely remember a special moment. Post the culmination of Brand-Aid Contest, my super senior and judge for the event, Amit Samdarshi Sir posted on my Facebook wall, "Aaj tu bhot badhiya bola launde." That was the first time when a senior had appreciated my efforts and I was in the seventh heaven.

Soon I began to walk around the stage freely as it was a part of my room. With incrementing events, there came a day when I could finally maintain a direct contact with almost everyone around the hall. My capacity and ability to articulate and elucidate my thoughts expanded and I began to get cozy with the art of public speaking.

Then finally came the AASF Prize Distribution Ceremony. I was asked by my dear friend and AASF member, Jaroli to prepare to share my experience germane to AASF with one and all. I don't know what pushed it out of me, but I said, "What's there to prepare. I'll take care of it." That was a big feat for me. Until that day I never realized that I had evolved so much during my first year that I could dare to speak on-spot in front of honorable Director Sir, various faculty members and a packed up seminar hall.

When my time came, I went there and spoke my heart out. I thanked AASF with all my gratitude and shared my experience. And, I ended saying, I don't sweat or shake anymore while speaking the way I used to. And, it's all because of AASF.

I remember that during the post event refreshments, Director Sir patted on my back. As I turned back, I was a bit transfixed. He said, "You spoke well, carry on the improvement." That was my heyday. It was my sunshine moment. I didn't care for the prize money I had won. The exhorting and appreciation that I accured from the highest authority in the Institute were my prized possession for the evening.

AASF's literary events gave me a routine testing platform to measure my growth and my dexterity. It gave me the power and helped me find the energy in my inner voice. AASF brought out the buried voice in me and nurtured it event by event.

I have repeatedly thanked AASF for the same, and I will always continue to do so. Maybe I would have achieved that comfort at public speaking anyways. But, without AASF it would have been a much strenuous pursuit for me.

I am aware that some people here say that the literary events conducted by AASF are of bare use. Some say that AASF is a selected bunch of people who prove to be helpful to only a handful of people. My answer to all those people who have such qualms or conjectures would be "Read my story and think again."

AASF helped me bring out my voice, and they helped me the most in my evolution in the art of elocution. It brought out the best in me! ✤

WHAT TO DO TO CHOOSE THE CORRECT B-SCHOOL

Ashish Jha
IPG-2001

Pursuing MBA is a dream many students see right after completing their undergraduate program. Many head to B-schools immediately, some after gaining a couple of years of industry experience. However, it always remains a difficult choice when it comes to selecting a good MBA school and program. Some of us try our hands at CAT and other Indian competitive exams, while few try GMAT and GRE to compete for schools abroad. Whatever may be the choice, it is almost certain that a fresh engineering graduate has a very little idea about correct way to approach their career in business administration. Career counseling agencies and MBA coaching centers make the situation worse by providing incorrect and conflicting information. Most of the education fairs organized by universities abroad focus more on selling their program than providing unbiased information.

When to go for an MBA

Most of the prestigious schools abroad and in India prefer taking students who have some work experience. It also makes sense to spend a couple of years obtaining necessary organization skills on the ground, and thereafter enhance them with a suitable degree. Before knowing the direction of your career or your own choice, you may not be able to decide in which stream you want to do an MBA. A few choices for an IT professional could be MBA in MIS or MBA-systems or MS-MBA degree or MBA in IT. There are numerous options available in most of the B-schools abroad. You need to develop your own taste in order to choose a correct program for yourself.

In case you are sure to go for an MBA within a few years of job, plan to work for an NGO for at least one year before applying. All good B-schools abroad give a lot of weight to your application if you have worked for a social cause.

Selecting a B-school

First thing first, use all your time to clear the necessary entrance exam or other necessary tests. Once you have your score, you have options to choose from. In case, you have offers from several B-schools abroad, you may make decision based on factors such as school ranking, reputation, job options, fee and other expenses. You need to do a little research on the actual reputation of the school, as most of the popular rankings available online are either biased or not suitable for each candidate. If possible, get hold of a current or past student of the school and try to get the inside information.

In case of two schools with similar ranking, see which one is situated in a big city and which one in a smaller one. . Some of the urban campuses have additional benefits such as easier access to big companies for placement, better industry interaction while studying, good internship opportunities, and better transportation facilities for commute. On the other hand, living expenses in an urban campuses are a little more than that in a rural or remote campus.

Choose your program keeping in mind the industry trend. Also keep in mind that when you graduate in two years, the trend might change. You need to be accustomed to change yourself from time to time in order to fit into correct industry and role. For example, if you want to do an MBA in Human Resources, Organizational Behavior or Marketing, better go for Indian B-schools instead. These jobs need more skills of adapting the local culture and language. Many Indian students find it difficult to adapt to foreign culture and accent, hence they are not a good choice for the companies for HR or sales jobs. Foreign degree leverage will be more for MBA in systems, Finance, strategy, International Trade, MIS, and IT.

Beware of Immigration policies

You must research about visa policy of the country you decide to go for study. Each country has different student and post graduation work visa policy. They also keep amending the policies from

time to time. Get hold of a good consultant if you need, but be careful as some of them are inexperienced and often get their clients into trouble. Also remember that the post graduation visa tenure may affect your placement. Companies looking for candidates may prefer a person who has unrestricted visa to work (such as a local resident) than Indians who have relatively shorter work visa.

Funding your study

Normally, MBA programs are highly expensive. Any good B-school in US will easily charge from $40,000 to $75,000 per year as tuition fee. Apart from paying the tution fee, one also has to bear the living, food, study material, memberships and travel expenses. Fortunately, in recent times many scholarships have come up to help Indian students willing to study abroad. Many such scholarships cover tuition fee, however some of them have strings attached; such as you have to return to India after graduation. Carefully read such conditions before accepting them. You need to research about these scholarships as soon as you have a confirmed admission. Complete necessary paperwork beforehand to avoid rejection or delays.

In order to cut costs on living, you need to know about average living costs. You may choose to stay outside campus in shared accommodations, as usually university dorms are expensive and not easily available. Attaining a higher degree or going abroad for study is dream for many. A careful planning and correct knowledge can lead you to a good school and a better program. ✶

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मुझे बस थोड़ा सा चलना है

धीरज बरेलिया

IPG-2015

कुछ बढ़ा हूँ आगे थोड़ा सा, अभी और थोड़ा सा बढ़ना है,
मेरी मंजिल है बस वो ही, मुझे और थोड़ा सा चलना है,
घर मिला जा रास्ता मंजिल का, मुझे खुद रास्ते में ढलना है।
मेरी मंजिल है बस वो ही, मुझे और थोड़ा सा चलना है।

कुछ साथ बनेंगे इस पथ पर, जो अपना हाथ बढ़ायेंगे,
कुछ खुद होंगे एक मददगार, कुछ मुझसे मदद जुटायेंगे,
छोटे-बड़े की बात छोड़, हमें हाथ मिलाकर चलना है।
मेरी मंजिल है बस वो ही, मुझे और थोड़ा सा चलना है।

एक शुरूआत सी हुई है, कुछ शुरूआत सी होनी है,
है सोई हुई आँखें मेरी, उनकी नींदें मुझे खोनी है,
अबतक पला हूँ भाग्य से, आगे मेहनत से पलना है।
मेरी मंजिल है बस वो ही, मुझे और थोड़ा सा चलना है।

जो होगा वो देखेंगे, क्यूं फिक्र करूं मैं उसे कल की,
छोड़ ध्यान मैं उस पल का, बस आस गहूँ मैं परिमल की,
फैलाते हुये किरण उजाले की, मेरी मंजिल है बस वो

CAREER MANTRA

BEING QUORIOUS

Rishabh Jain
IPG-2015

Many times it would have happened that you are trying to search some stuff on Google and a link to a question with a well framed answer comes out, Welcome to Quora!! Most of the people might have heard about Quora. Just in case you haven't, "Quora is a continually improving collection of questions and answers created, edited, and organized by everyone who uses it." Basically, it's a site for people to ask and answer questions on just about anything and is totally curated by the people who use it. Isn't it the same thing as Yahoo Answers?? But there must be a reason why this startup has got a billion dollar valuation and is one of the hottest commodities in Silicon Valley. The reason can be traced down to its foundation. Adam D' Angelo and Charlie Cheever, two former early employees of facebook, cofounded it in 2009. Adam D' Angelo left the job of CTO at Facebook for his startup. This man has got high topcoder ratings, is multiple time medal winner at different world events. He also developed Synapse Media Player along with Zuckerberg in his high school. He is also the current CEO of Quora. What makes it different from other Q&A websites is its ideology & wonderfully written algorithm. Quora focuses on making questions canonical and reusable, whereas other sites focus on getting answers for users who have asked questions. On Quora, the person who adds the question is deemphasized and other users can edit the text of the question to make it better. Quora stands out with its contributors – the people answering questions on the site.

The trend started with programmers in Silicon Valley asking each other job-related questions. And is currently broadened to include other topics/aspects of life -- food, restaurants, physical fitness, programming culture, etc. Interesting answers are written which display the writer's wit, intelligence, perspective, and writing ability.

One question that may be popping up in your head is that how the best answers are promoted while wrong or less useful answers are kept below or removed. Somebody won't be doing this manually. Google always does the same, nobody questions it!!

Quora is crowd sourced knowledge galvanized by up-voting, so the strongest and best answers could rise to the top. Remember that these are the best answers written by some of the world's best minds and the voters are similarly well educated. The ones that do not deliver high quality answers find their answers not rising to the top. There is an algorithm developed (and I presume it is always developing) which affects distribution. A writer has to work hard to consistently deliver excellent quality as determined by upvotes. There is more traffic from India than any other country on Quora. A Lot of people have found praise and fame through Quora. Technology is the biggest domain of Quora, it is full of knowledge and advices. Experts mentor us here, often guide us when we need help. We guide others when they need help. Reading Quora Feed opens you towards the vastness of the world. Quora helps you widen your vision. When you are sharing your opinions and knowledge with others, it helps you to expand your thoughts. The process is constructive and enables us to look at a situation with a broader angle. And finally, you have the freedom to express yourself and that's something really awesome. ⬥

QUICK FACTS ABOUT QUORA

1. Mark Zuckerberg acquired Nextstop after Quora users suggested him to do so. He himself asked this question on quora.
2. Ever since its launch, Quora has been funded but not monetized. However, it has announced an experimental monetization through ads.

TEAM
AASF

Friends Fun & Dreams

Abhishar is a good friend of students. He listens to their thoughts and experiences. Abhishar tries to chalk out easy solutions for student's problems. They feel motivated on talking to him to showcase their hidden talents. Personally, I feel he carries with him a very positive air and is capable of spreading happiness around. And I will try and make all the possible efforts to help him with this splendid companionship with you.

I would like to express my gratitude to Mr. Shubham Shukla and Mr Anil Kumar of IPG-2015 for their valuable efforts in realising Abhishar and his friends in "Friends Fun & Dreams". We couldn't have done it without them.

INDIAN PARENTS: OVER PARENTING
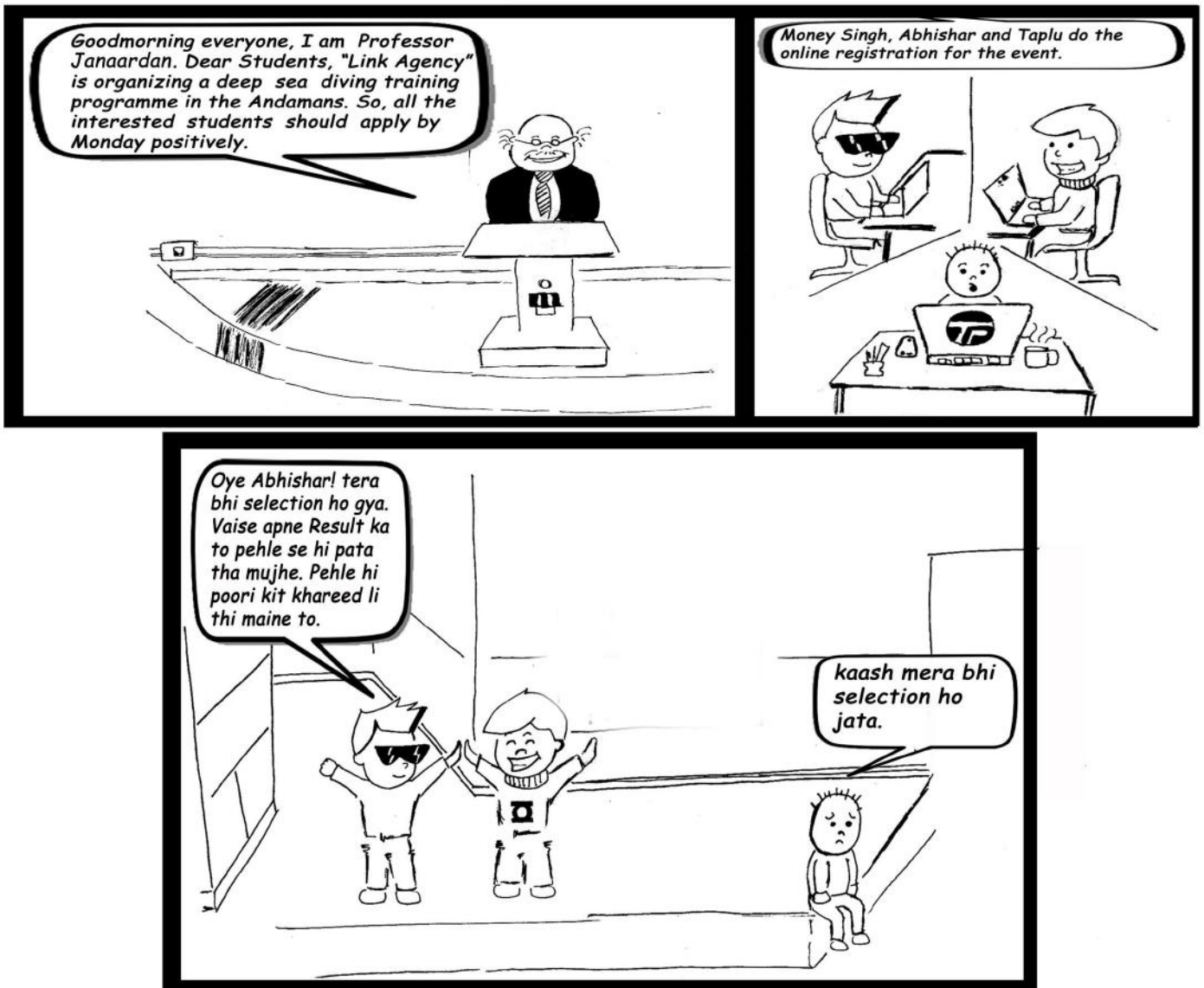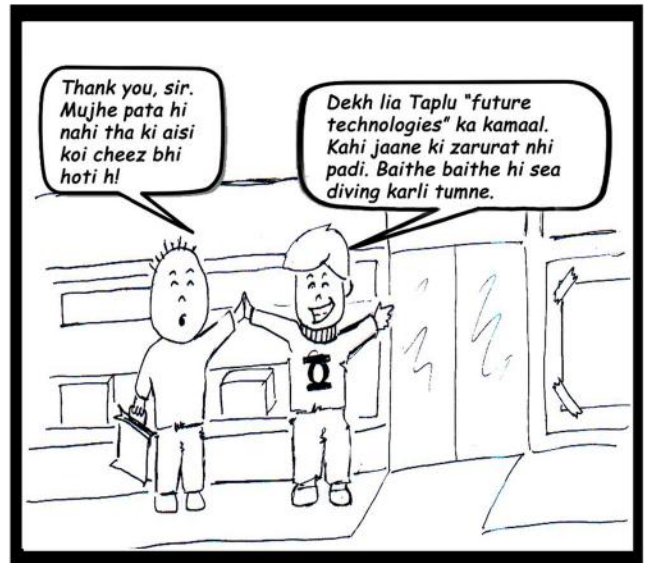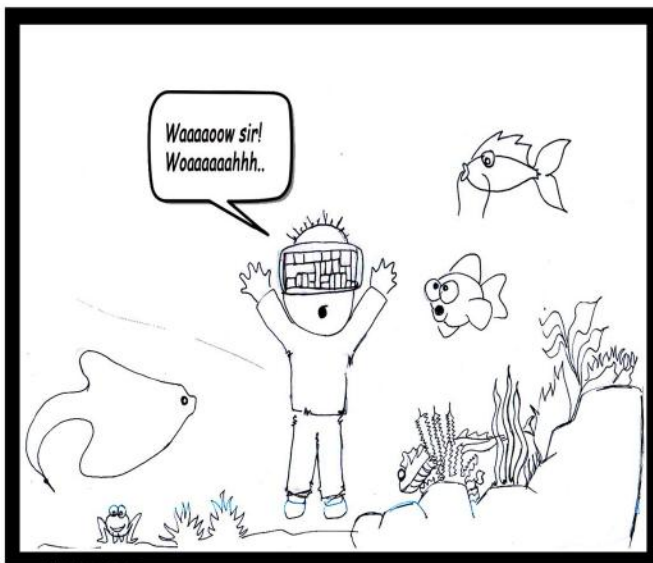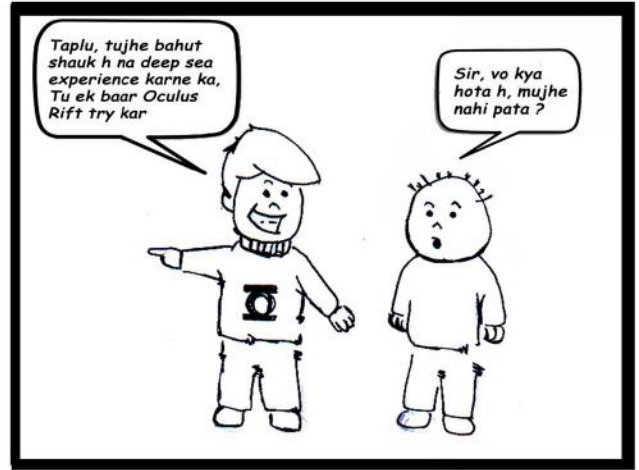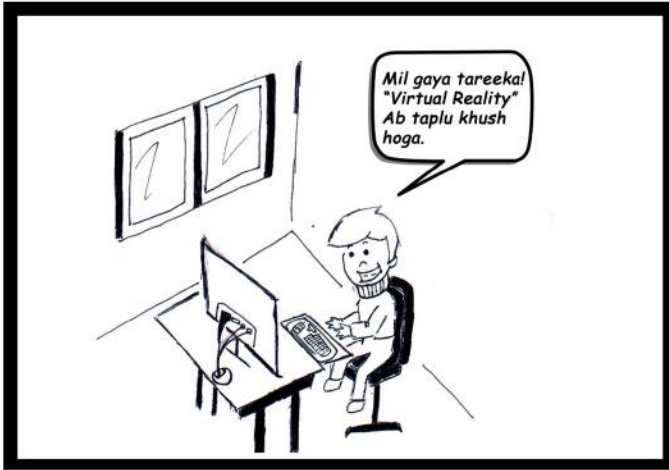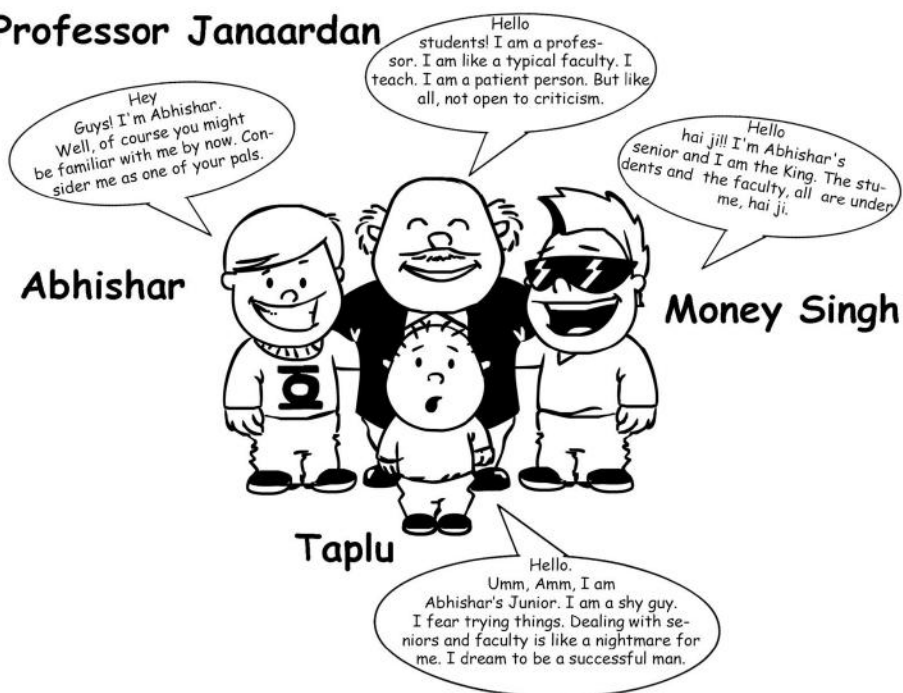
Tariq Khan
IPG-2013

Disciplining Mistakes and How to Avoid Making Them With Your Kids When disciplining your children, there are many ways to do this incorrectly. Sometimes the rules set by parents are not useful. On the other hand, some people are too strict. They expect to be obeyed without incident. It takes a lot of patience and it's not easy to do. Rules should be for guidance purposes only. Kids need to learn to differentiate right from wrong along the way. Parents should avoid following disciplining mistakes to make sure they're properly raise their kids.

There is a big difference between discipline anda disrespect or humiliation. You are more likely to hurt your kids' self esteem than you are to get them to behave better in the future when you force your kids to feel ashamed. For example, especially when you're in public, do not insult your children or yell at them.

Labeling your child as lazy, dumb or inconsiderate is also something you shouldn't do. This is not going to motivate the child to change; it is only going to reinforce the idea that he or she will, in some way, be lacking. If the child is doing something you don't like, explain what's wrong with the behavior. The goal is to get better behavior, not to shame or cause feelings of inferiority.

What Type of Parenting Style Do You Have?
Anytime discipline comes in the picture, you need to be on the same page as everyone else. As a parent, you have probably experienced your child asking for something. If you say no, they might ask the other parent. Say for instance a parent tells a child they cannot have a snack. If the other parent says yes, this is bad communication. In situations like this, children figure out that they don't have to follow the rules as long as they know which parent to appeal to.

Communication is very important, especially between parents, to avoid these situations. Perhaps someone else watches your child occasionally. This person should know exactly what you expect. Don't let your children play one parent against the other.

Parents can sometimes be overly critical of their kids. If you are a perfectionist, yourself, and you put pressure on your child to excel at everything, this is something you are probably guilty of doing. This is beyond discipline and is more about a parent who is hoping to experience a feeling of success through his son or daughter. It's a good thing to want your kids to do well in school and in their other activities but forcing them to do so can't be justified.

When you're too much focused on perfection, -however, your children will eventually start to dislike the things in which they are involved. Encourage your children to work hard and do their best but,at the same time, accept that they are going to have different strengths, abilities and interests in different areas. Discipline involves deciding whatis best for your kids, and sticking with it.

A style parenting called authoritative parenting is used by parents all over the world and is considered a great way to raise your children. Instead of being very strict with your kids, the rules are more like guidelines that should be adhered to. Every parent will make mistakes. Parents are not perfect, they are human beings. By not allowing the mistakes to become habitual, you are doing the best that you can.

Common surnames around the world

USA: Smith	Mexico: Rodriguez
UK: Brown	China: Wang
Australia: Smith	Japan: Sato
Korea: Kim	Vietnam: Nguyen
Russia: Smirnov	France: Martin
Germany: Muller	Spain: Garcia
India: Singh	

SECRET OF LIFE IN YOUR CODE

Juhi Tiwari
IPG-2016

Debug your past, code a beautiful present, stack overflow your future aspirations.

Want a successful life, but you don't have any idea where to get started? Stop searching on the net or listening Sharmaji's advice. Go grab your laptop and open the most recent code you have written. You will find all the answers between those curly braces that define the scope of your actual potential. Don't believe me? Read on.

I spent a minute at my own code by accident, thinking, "What the hell is this guy doing?"

That's true! what you think is a problem for you today could be the reason for your tomorrow's laughter. Every time you take up a new project it's obvious that the new classes showing up, the new algorithms appearing would make you think as if it would never finish. But just believe in yourself that five years later down the line you would be amazed how far you have already gone. You will laugh at your frustrations afterwards.

My software never has bugs, it just develops random features.

Hey! Don't be sad if your code doesn't work normal at any instance. At least it's showing you something- a typo, a bad copy-paste or a fault in assessment. decide and do cycles. But then it is your responsibility. The same goes with life. There is no fault in the compiler, documentation or your horoscope, it is you who are responsible for everything that happens. But that doesn't mean it ends there. Every fault points to your folly and your potential to rectify it.

My eyes, my brain seek out escape routes wherever I am sent.

Coffee ready, laptop ready, mind is on full swing, fingers are running through keyboard like a fish through water, mind is becoming philosophical and you have a loop that you think is just perfect. But oh no! It turns out that the loop is an infinite one. Even when you think you have things perfectly planned, they can go wrong. The idea of the escape route is to know your worst case scenario, how you are going to avoid that situation or make the best of it. In this case it's a good idea to introduce a very basic loop count and then add a secondary condition where the loop must end if it exceeds a certain ridiculous number of loops which it should never really reach if everything is working okay. So be ready with your escape routes!

Lack of documentation is becoming a problem for acceptance.

Months later when you decide to reuse a code or modify it for another purpose, it can mean a whole world of difference between struggling through trying to remember what the heck you were doing with each line of code, or quickly getting back up to speed with the whole intent behind your logic without any documentation. Your daily life too, can become a blur of days passing by if you trust only your memory to remember important events. Maintain a journal, document things properly and be organized.

The truth is, a programmer is not just confined to a system with a bunch of geeky sentences but when it comes to organization planning, pointing our strategies or conserving resources, a programmer has figured it all out. Make sure you are not just coding but you are actually inside it, make it your passion and you will be amazed at the fact that how you succeed in your daily life as well.

Happy coding!!! ✦

PUZZLEZONE (ANSWERS)

1. 445
2. e n t [initial letters of 1 to 10]
3. (0! + 0! + 0! + 0!)! = 120
4. 0 minutes – Light stick 1 on both sides and stick 2 on one side.
   30 minutes – Stick 1 will be burnt out. Light the other end of stick 2.
   45 minutes – Stick 2 will be burnt out.
5. Flip them
6. Right
7. 124560

LITTLE THINGS... SAVOUR THEM.

Manish Das Mohapatra
IPG-2014

Robin Sharma once said, 'We live in an age when we have forgotten what life is all about. We can easily put a person on moon, but we have trouble walking across the street to meet a new neighbor. We can fire a missile across the world with pinpoint accuracy, but we have trouble keeping a date with our children to go to library. We have e-mail, fax machines and digital phones, so that we can stay connected and yet we live in a time where human beings have never been less connected. We have lost touch with our purpose. We have lost sight of the things that matter the most."

Everyone is trying to accomplish something big, not realizing that life is made up of little things.

Sometimes, little things make a big difference.

We're often bombarded with messages that admonish us: "Think big," "Go for the gold," "Climb the ladder of success." And do all this NOW! Yet when we follow this advice, we're more apt to feel exhausted, inadequate or both.

Why should this be so? What's wrong with "thinking big?"

Nothing is inherently wrong with it. But when you believe that "Big" is better than "Small," that "Stretching to the limit" is better than "Taking it easy," that "Be the best you can be "

trumps "appreciating who you are", Then you're simply not being fair to yourself. Not everybody is meant to make it "big." Not everybody wants to be multitasking all day long. Not everybody wants to have "crazy busy" be their new normal. Not everybody wants to devote their energy to go for the gold.

If this article is resonating with you, it's time to make a shift in how you allocate your attention. Begin with enjoying the little things in life.

Why? What's so great about the little things in life?

They are what we will remember and appreciate when we reflect on days gone by. A little thing may be a fun evening with friends. It may be the joy of learning something new. It may be listening to the giggles of kids. It may be the warm feeling you get when you've done a simple kindness for a friend or a stranger. It may be noticing nature bloom and blossom or diving deep into a musical world of your own. A little thing might also be as little as a smile greeting, which is so sparse in this apathetic and indifferent world.

If you neglect to enjoy these little things, what are you left with? It's the daily struggles, the disappointments and the disasters that plop on our doorsteps when we least expect it. The pain and agony of losing something or someone.

Appreciate that life is made up of moments. We tend to think

of life as the passage of days, weeks, years and decades. But, in essence, life is made up of moments. As you reflect on your day, what moments stand out for you? Is it the stress of trying to do it all? Is it the stuff that didn't get done? Is it the disappointment in yourself for what you forgot to do or failed to do, or a gloomy feeling about how far you are from the top? If it is, then its time you change your priorities because chances are high that you are not leading a "Life".

If you look back at your past, then what are the things that bring a smile to you?

Is it the all the worries and disappointments that you went through?

Is it the stress that used to consume your life?

No, right?

So enjoy the little things in life, because one day you will look back and realize they were the big things.

What you have to decide is how you want your life to be. If your forever was ending tomorrow, would this be how you'd want to have spent it? Listen, the truth is, nothing is guaranteed. You know that, more than anybody. So don't be afraid. Be alive. You were given life; it is your duty to find something beautiful within life, no matter how slight.

One can spend too much of one's life locked in stuffy rooms seeking out obscure truths, searching, researching,

proving insignificant lies, until one is too old to enjoy life.

When you are good at despising little things, you are likely to throw away the tiny match stick that has the potential of putting the entire forest on fire! Little things do carry heavy potentials!

And remember, as the favourite quote of my favourite movie goes "Every man dies, but not every man really lives"- Braveheart (1995) ☗

A DEADLY WALK

Shraddha Sachan
IPG-2015

Her soul shined like a moon
Her heart was a boon
She was angelic inside out
She rained others life, but hers was drought.

"You are so ugly", she was always told
In spite of all the affliction, yet she remained bold
She dressed herself beautifully for the 'evening'
That 'white' colored gown had a hidden meaning.

She smiled at her brother, but by his reply she was amused
Was she a puppet who was dumped in the dustbin after use?
"I cannot take you out with my friends" said her brother
"Why am I so hideous?" she asked her mother.

The mother said "My girl is the most beautiful"
But to demean her the society remained dutiful
That pain took her back into the past
She once again remembered that life taking blast.

"Why did HE do that to me" she asked with shame
'CHEMISTRY' replied "HE played with acids and you were the game"
No one loved her, the world is so impulsive
When she was the victim, they made her the culprit!

STEPPING INTO FOUNDING MY STARTUP

Rachana I. Bagde
IPG-2013

Startups are common in today's world. But if we compare with a few years back, one can see that the frequency of formation of startups has gone up steeply. This startup wave-every very third person setting up his/her own company, seemed absurd to me. My feeling towards such so-called entrepreneurs could have been expressed as 'What are they doing with their life?', 'Are they serious?', 'Are they going to be next Ambani or Birla?'. I firmly believed that they are taking the wrong path and that their future is in danger.

These were my exact thoughts some 15 or 20 days before I got an idea with a potential to grow into a business venture. An idea is where everything begins from, but to grow the 2 dimensional plan into a working 3 dimensional model is where the real challenge lies. My experience proves this-it was when I tried to materialize the idea I had, that I realized how much courage and mental strength it takes to initiate something this big by yourself. And this strength comes when you believe in your own potential and idea. I knew only one thing, I have an amazing product and I want this to reach the masses. Other than that, I had neither any background nor any clue as far as the business world is concerned.

It was a normal project idea which started with trying to achieve the concept of controlling virtual environment through hand gestures that ignited a spark in me. Once it was implemented, I could see the huge potential it held, for it was first of its kind in the market. But to grow it into a full-fledged product, there were miles more to go. I tried discussing or putting forward my idea on public platforms for entrepreneurs like TheRodinhoods. And that is what made me realize that my vision is not out of the world, I could see a ray of hope.

The quest for a perfect investor was the initial step. To find someone who will trust me, an undergraduate student, trying to make my first footprints in the world of business by introducing a completely new idea, was a great challenge. As every journey has its own ups and downs, I too faced many troubles.

When I first started pitching my business plan to the investors, there were many questions I couldn't answer, sometimes because I was unaware of even the smallest terms they used. Eventually I started learning the professional language. These are tiny things that moulded me into a better, confident individual. At every meeting with investors, they would tell me that they will call me back or will mail me but they never did. It was quite discouraging

at times, but I wasn't willing to stop. And after talking to almost 10 investors, finally the 11th investor loved the concept and moreover showed his immense belief in me and agreed to invest and fund my venture. And this is how 'G for Gestures' was born.

'G for Gestures' is an integration of gesture recognition and virtual reality where we believe in changing the way we see the world through our hand gestures. After much hard work and relentless work hours, the product was launched along with the website www.gforgestures.com. I only wanted to give birth to this product. For me being an entrepreneur is like being a parent to a newly born. You'll learn to be one as the child grows. My product is only at a starting stage, but I can see its potential and abilities. There are many people who have played an important role, people who have motivated and appreciated me and have thus paved path for any confident step I take. Although the journey is difficult, there are many precious and priceless moments one comes across. One of such amazing moments was when Alok Kejriwal, a well-known personality in Indian business encouraged me at my initial steps towards this journey.

I would also like to add about the support and encouragement from our institute. Though the population is less, our institute, both faculty and students do show support by appreciating even the little work done by any of us and that surely helps in taking some tough decisions ahead. IIITM is a good place to follow something you wish to, using your knowledge and come up with a new direction of chasing your dreams. I would also like to congratulate AASF. They are doing amazing work and I wish them all the best. ♦

STARTUP INDIA

Startup India Campaign is based on an action plan aimed at promoting bank financing for start-up ventures to boost entrepreneurship and encourage start ups with jobs creation. It is focused on to restrict role of States in policy domain and to get rid of "license raj" and hindrances like in land permissions, foreign investment proposal, environmental clearances. A startup is an entity that is headquartered in India which was opened less than five years ago and has an annual turnover less than ₹25 crore. The Standup India initiative is also aimed at promoting entrepreneurship among SCs/STs, women communities.

Some key points to be noted in this campaign are :
1. Single Window Clearance even with the help of a mobile application.
2. 10,000 crore fund of funds.
3. 80% reduction in patent registration fee.
4. Modified and more friendly Bankruptcy Code to ensure 90-day exit window.
5. Freedom from mystifying inspections for 3 years.
6. Freedom from Capital Gain Tax for 3 years.
7. Freedom from tax in profits for 3 years.
8. Self-certification compliance.
9. Starting with 5 lakh schools to target 10 lakh children for innovation programme.
10. new schemes to provide IPR protection to start-ups and new firms.
11. Stand India across the world as a start-up hub.

The campaign brought about investments from companies around the globe. SoftBank, which is headquartered in Japan, has invested US$2 billion into Indian startups. The Japanese firm had pledged the total investments at US$10 billion. Google declared to launch a startup, based on the highest votes in which the top three startups will be allowed to join the next Google Launchpad Week, and the final winner could win an amount of US$100,000 in Google cloud credits. Oracle on 12 February 2016 announced to set up nine incubation centres in Bengaluru, Chennai, Gurgaon, Hyderabad, Mumbai, Noida, Pune, Trivandrum and Vijayawada. The Ministry of Human Resource Development and the Department of Science and Technology have agreed to partner in an initiative to set up over 75 such startup support hubs in the National Institutes of Technology (NITs), the Indian Institutes of Information Technology (IIITs), the Indian Institutes of Science Education and Research (IISERs) and National Institutes of Pharmaceutical Education and Research (NIPERs).

CAREER MANTRA

A D I E U

Life is like a novel. Many chapters read and forgotten. But there is one I wont forget. It's the chapter "I met you people and we became friends".
Okay now this is something copied and bit exaggerated too :P , But one thing is for sure that these 5 years wouldn't have been the same without you guys.
    – Aakash Khandelwal

The first day of college is like your first kiss. It will start before you even realize and by the time it ends you will have no idea what happened.So, try and enjoy every bit of it to the fullest. Good Luck.
    – Naveen Sangtani

The fun we had and the memories we created are never going to fade.
Late night bakar sessions (especially during minors),
the group studies and sharing every moment of sorrow and
joy among ourselves will cherish our memories of college life.
Don't let a single moment here go in vain. Do anything- bakar,
study, code, participate in fests or have a PMC time, but create
memories to cherish for the rest of your lives.
Wishing u all wonderful years to rise and shine.
–Vaishali Kulshrestha

The past four years in this place follow me relentlessly wherever I go. First thing that flickers through my mind when I think about hostel is the late night chats, long gossip sessions, jokes that makes us roll on the floor laugh. "Trying to Study" in a group with hot cups of coffee and Lays packets that gets empty as soon as it is opened, occasional jokes to overcome sleep, with the "jam of the day" playing. The wonderful bunch of people who make you feel worthwhile, who add bright colours to the white canvas of your lives, who hold your hand when you need support, be it in studies or just life at its worst, are the ones that I will hold on to forever.
    –Anshika Singh

It's very difficult to describe the time we spent together. So I am not even trying. Some things are better experienced than expressed …
–Arun Pant

AASF brought the four of us together and I cannot be more obliged to my stars. It was one awesome ride with these people. Each one of us being poles apart initially made me think how the hell am I gonna fit in. But as they say, everything happens for a reason. In short, we had a blast. I owe them a big time and so do they :P So, what I want to say is live your life here to the fullest because you may not get another chance like this ever again!!!
-Rohit Retnakaran

Just like you never forget the tune when a song fades out and stops playing,we will never forget the priceless memories of the awesome moments we have created. The knowledge we have gained over here :P the management quality we have groomed right from being volunteers in CORNA to being the ones who recreated INFOTSAV, will be remembered forever in our hearts. Passing the deed of making videos to our juniors, lets hope, creates much more drama than the ones created by us(CH....GUY)
Always S******S :P
- Shubham Agarwal

The journey in IIITM has been beautiful and blissful. When I look at myself a few years back, it's difficult for me to believe that it's the same me which I am now. I would like to summarize my learnings in few points :-> Never forget your roots:Be yourself. You are good as your own self and this belief can bring out the best in you.->Participate in extra-curricular: Don't miss any opportunities ofself-development..->Study:Start coding, try online courses, and online coding sites. Attend lectures regularly and yes, CGPA does matter. It's never too early to build your resume.->Friends and networking: Reach out to the faculty and be in their good books. Learn to trust,learn to forgive.-->Enjoy: So enjoy each and every moment of your college life because it's never going to come back. Be optimistic, be patient, believe in the 'Law of Attraction'. Wish you good luck!!
-Aditi Tayal

You now stand at the threshold of a dream life. It is in your hands where you would be at the end of this 5 year journey. These years would build the foundation for your future self. I would like to share some of the things that have shaped my life till now-
You are always a learner- You are always a student, never a master. Learn something from everything that comes in your way. Read as much as you can, Travel- College life is full of opportunities.Visit as many places as you can. Travel for fun, to learn and experience new things. Life is not a simple walk in the park. Sometimes you would feel confused and frustrated about your college life. But remember it is the culmination of these things that shape you to be a better person in your life. I wish you all a great journey ahead. I would love to quote one of my favorite quotes-
"Babumushoi, zindagi badi honi chahiye .. lambi nahin."
-Shrikant Jituri

THE COMMON TALE OF BEING UNCOMMON

Irita Mishra
IPG-2013

If there is one thing that I've learnt after studying for three and a half years in an engineering college, it is that almost all the people are too free and too gossipy. It might have something to do with the common assumption that engineers are Jacks of all trade but Masters of none, but maybe also with the fact that engineering is deemed too easy for 'brilliant' Indian minds. I, for one, cannot say the same. Despite being a topper all my life and being pegged as the next big thing in school, I was flabbergasted when I arrived in college. Part of me wanted to relieve the pressure of always studying to be the best and the rest of me wanted to have a proper 'college life' as has been so thoroughly misguided by our movies and teen novels. I couldn't perform because I couldn't cram. I had trouble understanding things that were not explained to me in classes. And when you cannot reach the grapes hanging too high above your head, you start calling them sour. As for me, I didn't call them sour. I called them bitter.

I started repenting that I chose engineering over law or design, the fields whose entrance exams I had cracked with a better rank than JEE Mains, that too without preparation. I did one stupid thing after another, mistakes that I ended up reproaching myself for. People would tell me that life is too short to waste in regretting the decisions we took in folly or ignorance. But I ended up depressing myself over all that I did, to me and to others influenced by my decisions.

I was in such gloomy mood one day when I happened to come across a guy called Varun Agarwal who had delivered a lecture, "From failing in engineering to co-founding a million-dollar company" over YouTube, a site I hardly opened otherwise. That led me to binge-watch a series of other cool talks and lectures, and I finally ended up listening to guest lectures conducted in Ivy League Universities, closely.

By the end of my session, I was so inspired to see myself in one of the topmost colleges in the world that I deleted all the TV Series heaped up in my laptop and got to work. I started staying up during the day, and stopped myself from becoming a night owl and an insomniac. I still did not give a damn about subjects being taught but I did started researching about the kind of life I would get upon graduating from this college. That is when I realized that the prospects were not too high and mighty. A decent package, a stereotypical life as a software engineer and a robotic schedule from 9-to-9 were in store for me. And I did not like that at all.

Such a job profile and life didn't reek of passion, it smelled of monotony. And after a while, I saw everyone either getting fed up or shamelessly boring. After all, what we really want is a great standard of living with frequent vacations to exotic places (whose names we cannot pronounce), chauffeur-driven luxury cars, a penthouse among celebrities' homes, a plush air-conditioned office with a beautiful secretary and many other such creature comforts.

Nothing is too impossible to achieve and so I geared myself up for the task of being a star for my own self. I stopped hanging out with people who did nothing else but create havoc in other people's lives by bringing them down and started focusing on my potential. I started watching movies that inspired me to become a gem so rare that people would fight to keep me. I went out and met people distinguished in their respective fields, just to grasp the procedure to success. I opened my mind to let new ideas come in and reclaimed my old hobby of reading. It was so liberating to let go of what others asked me to do or the way that they thought about me. I was thriving again, untroubled by the world, soaring high and making my own trails, untethered by anyone. Trapped no more, I took brave and intelligent decisions, one of them being-opting for MBA instead of M.Tech with a goal to do further studies.

I am still in the process of learning before I prove myself but if there is even one person out there who feels as trapped as I did, I'd be happy to suggest a few things.

- Never let anyone get into your head. Be the master of your own mind and the director of your own heart.
- Love yourself, no matter how much people ridicule you, pull you down or find you 'uncool' (or even when they say nothing).
- Do not just frolic around and waste time. All that accounts as time you did not spend on 'yourself'.
- Become the best version of yourself that can possibly exist. More than anything else, it will give you inner peace.
- Root out those people from your life who make you miserable. There will be tons of others who would value you for who you are.
- Never let go of your hobbies because they define who you are apart from entertaining you.
- Be ready to face criticism because that just means that your efforts aren't getting wasted.
- Never let praise lead you into the quagmire of comfort and complacency you cannot come out from.
- Day dreaming is good for health but only if you actually make curd instead of crying over spilt milk later.

Most of us already know what I have been harpering about since the start of this article but very few actualize all that I said. People also feel that unless they get actual proof from a person who is preaching in front of them, they won't believe the person. I might have made your day or wasted your time but I believe that by the time Abhishar Vol 7.0 is out, I'd be able to show the fruits of my labor.

I'd like to finish by urging everyone to stay awesome, make your parents proud and above all, never underestimate your talent or give up on yourself. Cheers! :D ⚘

BOOKS-THAT IS WHAT THEY DO !!

Tripti Anand
MBA-2016

I love every part of them
Their feelings
Exploring ways and places
Loving the characters ,going with them
The unexpected ways
Travelling to a complete new place
Taking us on their path
Always hiding
An untold story inside them
Ancient to new
Live and twisted
An entangled secret
Engraved in writer's passion
And revealed
All in a moment
And then
Much awaited peace !!

I CAME, I SAW, I CONQUERED.

Ritik Verma
IPG-2014

Coming to ABV-IIITM,Gwalior was definitely not the dream of my life, but who knew what was lying ahead for me. I was always scared of how I am going to compete with such talented minds and toppers of JEE Main. In first year I did coding but not much as I was always busy with hIQs, fests, classes and dance(enjoy your 1st year as much as you can). Then in 2nd year I did a hell lot of coding on SPOJ which definitely did not help me much. I was stuck in the race of getting more points on SPOJ (don't go for that). I began to think what in the world am I doing. Apart from increasing my typing speed and solving random questions, there has to be a systematic way. So whatever I have done till now, to be one of the best coders of my batch, I have summarised below. This will help you a lot.

->Read Let us C, learn about variables, data types, operators, keywords, conditional statements, loops, functions, arrays and break, continue and return. Try to solve questions given in the exercises.

->Learn about time complexity. (Big-Oh 'O' notation, space and time both). Running time based on size of input is the most important factor during Coding.

->Start doing some basic questions on Spoj which are solved by more than 10K users, then 5k. Solve at least 50 to 75 questions and improve your speed.

Never code directly, use pen and paper and analyse .

->Gogle your doubts.Looking at the codes of someone better makes you better and helps you improvise and optimize your approach and way of coding.

->Always participate in programming contests organised by AASF and on Codechef and other sites. This will help you to know your level.

->Now move on to HackerEarth and HackerRank. Start practicing each topic you find comfortable in practice section.

->Read Algorithms from "GeeksforGeeks"(best site ever) and look at their implementation and code of others. This will help you to code better and optimize it .

->Lean about C++ STL, one of the best tool in programming- Map, Set, Vector, Stack, Queue, List etc. and their associated fucntions and iterators.

->Most of the questions where coders get stuck is DP, graph and trees. So look at youtube videos, read blogs and try to understand the concept rather than directly starting to code. Also parallely take part in contests. This will help you gain real time experience and analyse your level.

Must know basic algorithms –
1)Number Thoery->
Sieve of Erastosthenes and its modifications and optimization primarily test. Modular arithmetic, precomputation of result for solving questions with large numbers of queries. Chinese remainder theorem, Euclidean algorithm. Fermat's Theorem, Euler Totient Function.

->Practise greedy approach and sorting. Try to make your own sorting- compare function when you have to sort more than one parameters.

->String Algorithms-Anagram checking, Palindrome, Substring, KMP search, Manacher Algorihm.

->Binary Search, its modifications and applications.

->Application of stacks and queues with C++ STL.

->Trees- BST and Segment Trees (for solving query related questions) Mo's Algorithms.

->DP-Knapsack, Coin Subset, Rod Cutting, LIS, LCS, n^{th} Staricase and Game Theory etc. practice recursion before DP.

->Graph-matrix and adjacency list: BFS,DFS(master both of these as soon as possible :P), Bipartite Graph, Shortest path (Djikstra,Floyd,Bellman-Ford) minimum spanning trees, Cycle detection, topological sort etc.

Ask your seniors for good resources and blogs for each topic and practice each topic thouroughly. Regularly ask your doubts from your seniors , google it, quora it, geeksforgeeks it and then code it. Never get disheartened, you all have the potential. So keep coding. ♣

A NEW PERCEPTION OF INFORMATION TECHNOLOGY

Sai Vivek Kanaparthy
IPG-2011

Information Technology (IT) from the recent past, has become an important and crucial part of every business rather every individual. From multinationals to small businesses having a single computer, Information Technology has an important role. The reason for the omnipresent use of computer technology can be determined by looking at how it is being used in the real world. Communication, Data Management, Customer Relation Management are some of the most important functioning areas for any organization. Information Technology is the pioneer in providing such services and helping organizations to grow faster and healthier.

The digital revolution is sweeping the world. It is estimated that for every 10 per cent digital penetration in the country, the GDP will go up by about 0.5-0.6 per cent. The 1991 economic reforms in India have driven the states to achieve better results through governance. States like Karnataka, Andhra Pradesh and Tamil Nadu have tremendously progressed banking on the reforms introduced by the then Central Government. Cities like Hyderabad stand examples to how Information Technology can transform economies and improve governance.

There is a paradigm shift in the way IT is now perceived by the world including the governments. They now use Internet of Things (IoT) -enabled actions to change the way data is used and processed in actionable form enabling real-time governance. Industry 4.0 as IoT is often termed as, can bring a real revolution, empowering millions, for effective and real-time governance, intended to bring about revolutionary changes. It will make the administration function with more responsibility and efficacy.

The newer areas of IoT, big data, cloud computing will be pivotal in enabling the digital single market, through new products and services. They will be the three most important drivers of our digital economy. New generations of networks, IoT and cloud computing are also vectors of industrial strategy.

The world is now facing an eyebrow-raising talent shortfall in areas such as cyber security. The heavy demand from employers for people capable of fighting off today's waves of cyber-attacks is pulling talent out of the ranks of professionals who would otherwise be educating the next generation, and doing the critical research to advance the state of the art. Especially given the rapid and continuous evolution of threats, it's critical that academic cybersecurity programs share best practices and curriculum updates.

The field of cyber security is constantly expanding, with more domains to secure and more ways to attack. Intrusions are harder to detect; attackers are stealthier and more evasive. Academic programs should not just emphasize cryptography but cover areas like cyber-physical attacks, and real-time security data analysis.

With the IT industry moving up the value chain, it is the new sectors of analytics, data science, product design and cyber security that require a highly-skilled workforce. Technical knowledge and specialised skills, which fresh engineering graduates often lack, are now more in demand from a talent acquisition perspective. Also, the Directors and Chancellors of elite colleges should exercise greater supervision and concentrate on the quality of teaching and research. Without any original research, either by the faculty or the students, the Universities tend to lose their character and are merely reduced to the level of a small college.

We should create a new ecosystem that cuts across vertical areas, in convergence between the physical and digital words. The educational institutions of the nation need an urgent revamp. While the syllabus itself is flawed in its theoretical approach, the assessment, across

engineering schools in the country, is another major factor rendering fresh graduates unemployable as far as high-skilled jobs are concerned. There is a clear need to create an interface between the academia and industry. Encouraging job oriented changes in the curriculum and concentrating on skill development are deemed as necessary in this growing world. Institutions need to be in line with the changing value proposition in the industry and prepare students accordingly. ⬥

Sai Vivek Kanaparthy (IPG-2011) is currently pursuing M.S. in Computer Sc. from The University of Texas at Dallas.

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Comic sketch creator in realising Abhishar and his friends in "Friends, Fun and Dreams" in the current edition of Abhishar.

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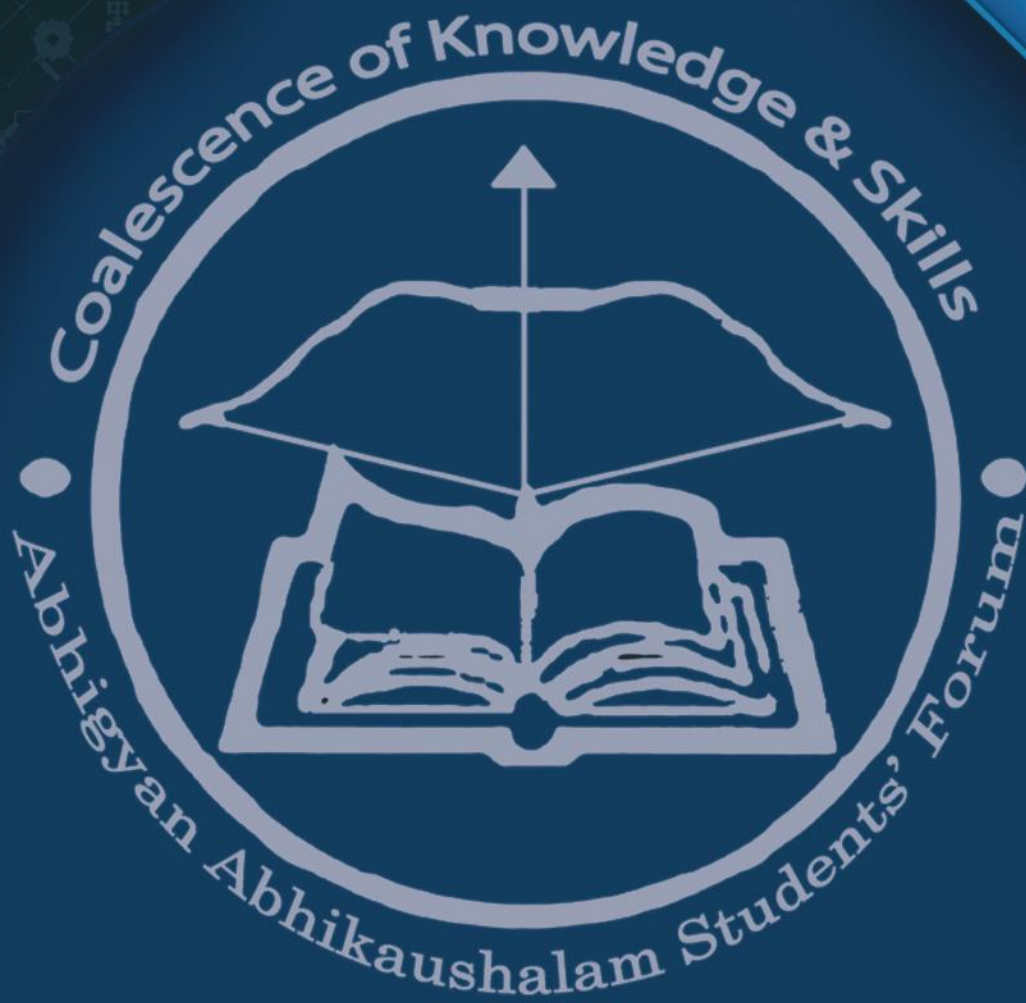
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