REFRACTUS 2013- Iridescence of Ideas

“All the forces in the world are not so powerful as an idea whose time has come.”
– Victor Hugo

Yogesh Maurya, TE Comps

Humankind has come a long way. Ideas are what brought us here. Ideas will lead us forward. Most revolutions we see around as began as small ideas that everyone else thought were outrageous. But they all had one thing in common, one critical factor – Someone who believed in the idea, and had the courage to see it through.

As aspiring engineers, we are all longing to get that one brilliant idea that will transform our lives, and that of others. In the common interest of sharing good ideas, and nurturing them, the department of Computer Engineering hosted Refractus – an iridescence of ideas.

Refractus was hosted by Dr. Leisa Armstrong, and her group of 5 students from Edith Cowen University, Australia. At 10 AM on a crisp Wednesday morning, an enthusiastic crowd gathered to witness the showcase of ideas at the Fr. Santino Mondini Hall. To set things off, Dr. Leisa Armstrong began by giving a presentation on her project – Smart Agriculture. She highlighted how the use of data collection and analysis to make efficient management decisions in agriculture, helps optimally manage resources. She showcased a Geo Portal created by her students at ECU, and also praised GeoSense, an Indo-Japanese venture that our very own Dr. Amiya Kumar Tripathy was a part of, which studied how variations in climatic conditions affected pests.

After she set the stage, our BE students took over, presenting the following final year projects:
- MediAssistEdge
- Dynamic Load Balancing in Cloud Computing
- Surge Analysis of a Pumping Water Supply main
- Automated Gardening System
- Homeopathic Diagnostic System

To judge these projects and give valuable inputs, we had Dr Satish Devane, the former principal of RAIT College, Ms. Usha Iyer, from IBM and Dr. Leisa Armstrong, ECU. The judges kept the students on their toes, by firing questions at them. The audience too, seemed impressed by the ideas that the BE students have been working on, and bombarded them with questions about their projects.

After the students of DBIT were done, the ECU students told us about themselves, and what they are working on. They also spoke about their experience in India, and about the difference in the way of life, culture and people between India and Australia. Apart from the 5 main project presentations, there were other BE projects showcased in the form of posters, along the edges of the hall.

At the end of the day, Refractus 2014 had succeeded in sending a message to everyone present. “Believe in your ideas. Believe in yourself. And finally, think big.”
Editor’s Message

Dear Readers,

Warm regards to all of you. We’re happy to present the 1st edition of ACM DBIT newsletter for the year 2014, your one-step guide to all that has happened in the very vibrant ACM chapter of DBIT in the past semester.

This issue of the newsletter covers article on Teknack, the annual online fest and also the various workshops organized by ACM-DBIT.

We have been implementing various theories and pedagogies, each offering a better way to assist students in the learning process in multiple facets over the years since its inception. Today there is a need for a close-knit interaction between Academia and the Industry. Over the past several years, ACM DBIT has been providing guidance and expertise to students who aspire for Industry Certifications and Training by conducting workshops and training students under latest technology, the details of which you’ll find in our current and previous newsletters.

Our warm regards ACM- in charge, Mr. Imran Ali Mirza and faculty advisor Dr. Amiya Kumar Tripathy for being the source of inspiration and support.

I’m also thankful to the student community for their active participation in the seminars and workshops and for their overwhelming response which encourages us to serve the students in a better way each time.

I hope you enjoy reading this newsletter and tell us how we can improve our efforts to bring you quality deliverables.

Regards,
Srinidhi Shetty
Publication Head, ACM-DBIT

Chairman Speaks

Over the last ten years, ACM DBIT has metamorphosed itself into a remarkable force symbolizing brilliance, exuberance and excellence. As of today, it gives me great pleasure to be the Assistant Chairperson for the largest student body on the DBIT Campus.

Over the semester, we have organized a series of workshops and seminars to give the students a platform on which they can build their skills and have an edge over the others. These workshops and seminars seek to help our students gain an insight into the booming technological world in which every aspiring engineer must undoubtedly be a part of! Apart from this, there are IV’s for practical industry experience and Teknack, our inter-college online technical festival for learning and entertainment.

This semester, workshops were conducted on Advanced Hacking and Cracking, where over 30 students experienced firsthand, the various methods to exploit and mainly protect themselves and their creations from vulnerabilities. Also, ACM DBIT co-conducted a one day certification workshop in collaboration with ACM Vidyalankar to educate students about FOSS and Linux.

The icing on the cake was Teknack 2014, with over 700 participants from across the globe, and prizes worth 95,000, a first for Teknack.

Being responsible and able to play an active part in this dynamic student chapter, is a constant motivation for me and the rest of my team to think smart and think different, with an aim to bring about a positive change in both the DBIT campus and beyond it!

I’d like to sincerely thank our Director Fr. Adolf, Administrator Fr. Edward, and Principal Dr. N.G Joag, Research director and Dean Academics Dr. S. Krishnamoorthy, Head Of Computer Department and Faculty Sponsor of ACM DBIT, Mr. Imran Ali Mirza for their constant support and encouragement.

Last but not the least I want to thank all my friends, as without their support and innovative ideas, ACM would not have been where it is now. Each and every one of you is special to us. Enjoy the newsletter and if you have any ideas or suggestions you are most welcome.

Satej Sawant
Assistant Chair Person,
ACM DBIT

Community News

A half yearly newsletter of the ACM community

Editor : Srinidhi Shetty
Co-Editor : Yogesh Maurya
Design : Amit Sawant
Authors: Nishant S Dhar,
Yogesh Maurya,
Ajit Varghese,
Nikita Chhabhaiya,
Preshit Shetty
As the clock struck the midnight hour on 15th February, 2014, the journey “Around the world” began with just a click. ACM-DBIT has added yet another feather on its cap by triumphantly organizing Teknack’14, the Annual Online Inter College Technical Festival of DBIT which was attended by a plethora of zealous participants not only from Mumbai but also from different parts of the globe. The event was held on 15th and 16th February, 2014.

Teknack’14 has been contrived by global thinking, designing geniuses’, creativity and inventiveness, empowering students to exhibit their latent skills and talents in the field of technical and creative innovation. The events were designed to utilize and enhance the analytical and computing skills of the students to their maximum potential. The distinctive variety in the events ensured that there is something for every participant that not only boosted their confidence their own abilities but also proved to be fun.

Teknack’14 was based on the theme of –“Around the World!” and the working plan for the same started in late September, 2013 where a lot of ideas for the events and their implementation started started being put together. Accordingly various departments like events, technical and publicity were decided and allotted and finalized. Each event for Teknack was from mid December, 2013 the technical work of development of events started in full swing. There was a simultaneous development of posters for the events happening at the same time.

The home page was very ostentatious, where the waves in the background moved continuously and the screen moved according to the mouse position. It also had a different appearance during the day and at night. The website had different pages for the list of events and sponsors. A unique registration code was provided to the participants and they had to register themselves on the website and choose a username and password of their choice. The events included Chain Reaction, Logo Designing, Mug Shots, Acoustica, Camouflage, Virtual Stock Market, Text Adventure and Informals to name a few.

Teknack’14 received an active support and encouragement from its sponsors which included KIC education (Title Sponsor), Spykar clothing (Style Sponsor) and Buckaroo (Associative Sponsor). Teknack’14 primarily focused not only on developing logical thinking but also on social awareness such as “Cyber Safety”. With the help of DBIT NSS group, Teknack’14 had a section which displayed poster portraying awareness against cyber security and bullying.

The flex banners and posters of the Teknack’14 were sent to number of Engineering, Management, Diploma and Junior colleges along with few schools spread all over Mumbai. As it was an online fest, students were given the freedom to participate in Teknack’14 whilst enjoying the convenience of their homes.

All the events witnessed a very large and enthusiastic participation from various colleges and schools around the city including Don Bosco Institute of Technology, St. Andrews College of Arts, Science and Commerce, Vimalakar Polytechnic, St. Dominic Savio High School to name a few.

Teknack concluded triumphantly, with a promise of bringing an even bigger and better version of itself with Teknack 2015!
Twitter Bootstrap

Nikita Chhabhaiya and
Ajit Varghese, BE Comps

Whether you want to design a personal design website, a business website or a responsive e-commerce site, Twitter Bootstrap is there for you. Along with CSS and JavaScript rules, Twitter Bootstrap has an inbuilt responsive powerhouse within it. With many new features added to the third version of Twitter Bootstrap, it has once again proven that it is and will be in the web industry for the long run.

Twitter Bootstrap provides JavaScript components to help you design sliders that can run on any kind of device. Components like Modals, Dropdown, ScrollSpy, Tab, Tooltips, Popovers and Carousels are some of the best things you will like about Twitter Bootstrap.

So why should you use Bootstrap?

1. **Save Time**
   Time is money. With Bootstrap, the first thing you do is cash in on a lot of time. The Bootstrap libraries offer readymade pieces of code that can pump life into a website.

2. **Customizable**
   Who doesn't want to customize their own website? A great aspect of Bootstrap is that you can make it your own. You can sit down and rummage through the whole framework and keep what you need and ditch what you don't.

3. **Factor in the Design**
   The Grid Speaks
   Making a page layout requires a decent grid. Using the platform grid isn’t mandatory, but it does make your job a whole lot easier. On default mode the platform provides a 16 column grid which is 940px wide. LESS is more
   Bootstrap takes some of the most popular CSS3 utilities and brings them to life as a homogenous reaction on all the browsers.

4. **Consistency**
   Since Twitter Bootstrap works with a central set of development code, Bootstrap’s results are uniform across all platforms. You’ll see the same thing on Internet Explorer, Chrome and Firefox.

5. **Integration**
   If you’re working on a site which is already live, but still trying to modify it then Bootstrap can help you. Integration is simple, fast and easy to accomplish and once you’re done, you can play with your design to your heart’s content.

6. **Responsiveness**
   Bootstrap is responsive. If you shift from a laptop to a tablet and from a tablet to a smart-phone, you won’t have to redo your work. In short, single code for all devices.

7. **Future Compatibility**
   Bootstrap comes equipped with many elements that are being considered the future of design itself. For instance both HTML5 and CSS3 are things that are going to be big in the future. Since the framework takes into account the future of design and development, it has the potential to become an extremely helpful tool for web developers in the years to come.

8. **Competitiveness**
   Bootstrap isn’t the only one of its kind. It has been pitted against JQuery UI and the HTML5 Boilerplate, but a more realistic competitor is the Zurb Foundation. Bootstrap 2 has a toolset that the Foundation will have a tough time matching up to.

9. **For the Bosses**
   You don’t need to spend a lot of time learning to use Bootstrap as it has taken all modular approaches and good architecture and pulled them together. From the perspective of an employer, if you give a web developer the Bootstrap framework they won’t need to spend as much time learning as compared to HTML and CSS.

**Conclusion**

After reading all this, if you think Bootstrap can help you simplify your work as a web developer then check out the framework at http://getbootstrap.com/2.3.2/. You can either download a compiled version or get the Bootstrap source which has original CSS and JavaScript docs.
The news of Facebook buying WhatsApp has created a huge buzz in the tech industry. Facebook has reportedly shelled out a whopping $19bn in both cash as well as stocks, raising eyebrows all over the world. The deal has been one of the biggest takeovers ever. While Facebook boasts of 1.2 billion users, the mobile application has reportedly been growing at a rate of 1 million users per day.

Facebook’s 29 year old founder Mark Zuckerberg defended his buy at the Mobile World Congress held at Barcelona, saying WhatsApp is worth much more. The CEO further spoke about Facebook being used on the mobile platform. Apparently 53% of Facebook’s advertising revenue comes from mobile devices. This is probably the reason why the mobile side of the tech industry needed more investment. Word around the block is that Facebook plans to bring voice-calling to WhatsApp. The introduction of WhatsApp has already made a hole in the revenue pool of network providers as there was a considerable decrease in SMS’s sent, voice calling would almost wipe off the image of our network providers. It is not all bad news for providers as mobile users still need to have a data plan. With the promise of no ads, Zuckerberg stated that WhatsApp was purely social and his company has plans to merge with the messaging giant in terms of integration.

WhatsApp CEO and co-founder Jan Koum said they won’t just stop here and that the messaging app plans to have 1 billion users worldwide. “The world is moving to data” he said. “Carriers partner with us to drive usage of data plans. The core of the partnership is data plans. The world is going to data, bits and bytes, zeros and ones. Not just us, all these apps are using data not just for communication, but to watch a movie or tweet news. We are a small part of it.” said the WhatsApp CEO.

Only time can tell if this was a smart move by Facebook while WhatsApp users eagerly await the new changes to be deployed in the near future. The question here is will the “WE DON’T SELL ADS” motto of WhatsApp survive? For now it looks like it is going to stay ad-free.

How does WhatsApp earn money?

WhatsApp makes most of its revenue from iOS. The app is sold for $0.99 on the apple App store. Each month around 45 million users buy the app from the App Store making $45 million monthly. Platforms like Android and Blackberry however have a (long) free trial.
Community Reviews

**Advanced Ethical Hacking**
Conducted by: Piyush Kumar Lodaya and Ajinkya Powale

A workshop where students were shown how vulnerable web-based systems can be and how one must take precautions to keep their systems safe.

Reviews:
“it was nice...should have gone a little slow...but yet a good effort.”
- Flavia Ratto

---

**Adobe InDesign**
Conducted by: Yogesh Maurya and Nishant S Dhar

Adobe InDesign is a desktop publishing software application produced by Adobe Systems. It can be used to create works such as posters, flyers, brochures, magazines, newspapers and books.

Reviews:
“Very good and informative”
- Amit Sawant

---

**OpenSource/Linux**
Conducted by: Rahul Divekar

This aim of this workshop was to create awareness about open source technologies and operating systems such as Ubuntu. This workshop was held in collaboration with the ACM chapter of Vidyalankar Institute of Technology (VIT) and was held on their campus.

Reviews:
“Found it to be extremely useful.. thnx”
- Rahul Kumar

---

**OpenCart**
Conducted by: Nikhil Sharma

A free open source e-commerce portal. OpenCart is an online shopping cart on PHP-based online e-commerce solution.

Reviews:
“Very interesting topic and very interesting workshop”
- Jessie

---

Community Calendar

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Conductor</th>
</tr>
</thead>
<tbody>
<tr>
<td>23rd January 2014</td>
<td>Advanced Ethical Hacking</td>
<td>By Piyush Kumar Lodaya and Ajinkya Powale</td>
</tr>
<tr>
<td>28th January 2014</td>
<td>Adobe InDesign</td>
<td>By Yogesh Maurya and Nishant S Dhar</td>
</tr>
<tr>
<td>11th March 2014</td>
<td>OpenCart</td>
<td>By Nikhil Sharma</td>
</tr>
<tr>
<td>12th March 2014</td>
<td>Adobe Premier Pro</td>
<td>By Yogesh Maurya and Nishant S Dhar</td>
</tr>
<tr>
<td>15th March 2014</td>
<td>OpenSource/Linux</td>
<td>By Rahul Divekar</td>
</tr>
</tbody>
</table>
The second half of the year started with quite a bang with the online Inter-collegiate festival of Teknack. ACM-DBIT came up with this unique idea of taking college festivals to peoples’ laptops a few years ago and this year they took it to yet another level with multi-player games such as Chain Reaction and Virtual Stock Market going live. Also amongst these, were other games like camouflage, Online Treasure Hunt and a few others. The uniqueness of this festival comes with the fact that all of these games are coded by the students of Don Bosco Institute of Technology. This is what makes it a fun and a learning experience – close enough to working on a live project viewed by thousands. Through this festival, ACM conducted several workshops for the developers who would then be working on the project. The topics covered under this were HTML, CSS, PHP-MySQL, Coding standards, etc.

Besides having a tight schedule with the major event of Teknack, ACM did not take a foot back at conducting workshops for the masses. The following workshops were conducted this semester:

This semester began with the very interesting workshop on Advanced Ethical hacking by Piyush Kumar Lodaya and Ajinkya Powale, a workshop to show how vulnerable web based systems can be and how one must take precautions to keep their systems safe which was followed by Adobe Indesign workshop by Yogesh Maurya and Nishant S Dhar. Next on list was OpenCart – An opensource e-commerce portal. Opensource/Linux was conducted by Rahul Divekar. The aim of this workshop was to create awareness about open-source technologies and operating systems such as Ubuntu. This workshop was held in collaboration with the ACM chapter of Vidyalankar Institute of Technology (VIT) and was held on their campus.

As we make way for the new ACM core team for next year, we wind up this successful innings of the core team of ACM-DBIT 2013-2014 with a bang. With lot of events and many more happening stuff to be encountered in the year to come, we await welcoming all the new ACM members under the ACM-DBIT family.

Success of Teknack 2014 (Contd..)
An Insight of Events....
Community News
Computer Departmental Library,
Second Floor, Old Building,
Don Bosco Institute of Technology,
Kurla West, Mumbai-400 070.