

SEASONAL DELIGHTS

RAIN RIPPLES

Vol #1 | Issue #1 | 8 pages

(Aug-Sep) Friday 30th September 2011

A New Beginning!



Welcome to the first issue of "Seasonal Delights" e-Newsletter, which will be produced every two months by the Department of MCA.

We welcome all the first year students who have joined us recently!

College life is not just academics. The key to success is determination and inspiration. We strongly believe "a sound goal with high motivation will lead to success".

"Seasonal Delights"- A platform to turn our Visions to Action.

The publication of the newsletter by the department would highlight its various activities and achievements along with individual talent performed outside the workspace. Be it Technical, Community service, Dramatics, Public Speaking, Photography, Artistic or Literature, the platform Cheer Leads .

Each edition reflects the thoughts and creativity of our students on various aspects. The e-Newsletter has four editions namely Rain Ripples, Spring Splash, Winter Wizard and Summer Spark which will be released by the end of September, November, March and May respectively.

As every season has its own charm, each of our editions has its own significance. We wish to shower our love towards Mother Nature and our feelings of patriotism would pour out with the **Rain Ripple**. The traditions of our various cultures will bloom through the **Spring Splash**. Every sports enthusiast would be frozen with the moments captured by our **Winter Wizard**. Our bright graduates would shine brilliantly with the **Summer Spark**.

Happy Reading!

Resolution 2011 is our first inter college technical fest conducted by Department of MCA on September 30th 2011. It focuses on attracting whopping 250 students from more than 20 colleges all over Bangalore. *Each student represents a pixel to create a brighter image in Resolution 2011.*

The team comprises of faculties and student coordinators, the entire team has put in a great deal of effort in arranging a list of exciting events for the students to participate in. The events include Photography, IT Manager, Coding-Debugging, Web Designing, Quiz, Gaming, Paper Presentation, Project Demo, Dumb Charades and Treasure Hunt.

The excitement surrounding this fest has reached extraordinary heights where students groomed themselves to be a team player, effective designer, event managers and promoters. This fest provided students with a huge platform to showcase their abilities and organizational skills. The entire department is looking forward to this day, a shout out to all our sponsors for making this event reach its goal.

Sponsors: Aptech, Styre, Sai Info Systems.



Glimpses Of Guest Lectures



Android By Dattatreya P



PhP by Mr. Kamal Paul



.net by Mr.Gopinath



Networking by Sheethal

Knowledge Benediction through Summer Schools

Aptitude and Soft skill training were conducted exclusively for final year students of MCA as Summer School which was very interactive and helpful. The knowledge gained by the students over this period of time was a great deal of help for the placements. It provided students with a series of aptitude questionnaires, group discussions, communication skills, puzzle solving, mathematical concepts etc.

Ethical behavior, techniques and ideas of how to handle interviews were taught. Step by step schemes of creating curricular vitae were discussed. It broadened every ones means of thinking and provided various views and tactics of handling problems. The students were highly focused on the tutor as well as the material being taught, hence they were never distracted even for a second.

Students showed gratitude towards their teachers for providing them with such pleasant and delightful experiences so they can move forward with a better understanding and have an impressive approach of getting through to a company.



All seasons are beautiful for the person who carries happiness within

Value addition through RAD workshop

A workshop on "RAD" as part of IBM CoE was held at AV-Hall by Department of MCA between September 15 and September 19, 2011. About 110 Students from MCA, BE and M. Tech departments attended the workshop.

RAD (Rational Application Developer) is an IDE developed by IBM's Rational wing that helps in visually designing, constructing, testing, and deploying web services, portals, and Java Enterprise Edition (JEE) applications. A series of keynote addresses were presented on the first day of the workshop. These included an opening address by HoD, MCA introducing the trainers and the importance of RAD certification. It is an added advantage that our own faculty is well-equipped to conduct the training and those selected for this were Mrs. Arshdeep Kaur and Ms. Pratima V Patil .

Each day of the workshop was devoted to intensive sessions comprising Introduction, Workbench basics, Java Development, Web development, Databases, Running Applications, Packaging & Deployment, Debugging and Testing.

Lab Sessions were conducted in the MCA IBM CoE Lab which includes RAD installation, how to develop a Java application,

Working with database, packaging and deploy a J2EE application, create a Struts application, create a JSF application, Debug a web application and Test a web application.

When asked to share their experiences in RAD workshop, Mrs. Arshdeep Kaur exclaimed, "*It was a very enriching experience and will be an important part in my professional and personal growth*".

In addition, Ms. Pratima sincerely expressed her gratitude for all those who had helped in making the workshop success.

"The workshop exceeded all expectations. On a technical level, it also reintroduced the things we have forgotten and found them insightful" added students.

Kudos to the Trainers and Coordinators of the Workshop!



Proud To Be An Indian

INDIA is the 7th largest country and the 2nd most populous nation in the world.

INDIA got its name from one of the most ancient civilizations, "THE INDUS RIVER VALLEY CIVILIZATION".

INDIA in the early 1800s contributed more than 32% of world's GDP (gross domestic product)

INDIA is rich in spices and many precious stones that attracted many colonial powers to its shores.

INDIA began its freedom struggle in 1857 and achieved it in 1947. INDIA became a new nation on 15th August 1947 with a population of 60 crores .

Travelers in INDIA will witness the change of language and culture of the people every 400kms. Westerners often wonder how a nation with so many religions and different ethnicities can make such a grand development without any difficulties. INDIA is a very vibrant democracy. It is the biggest democratic country in the world. Its democracy is based on the concept of

"OF THE PEOPLE, BY THE PEOPLE, FOR THE PEOPLE".

INDIA stood apart from the rest of the world when the world was taking sides with the US/USSR during the cold war.

Instead, it pioneered the NON-ALIGNED MOVEMENT to lead the nations that were neutral in this cold war. INDIA was the 1st nation which spoke about disarmament of nuclear weapons.

INDIA never differentiates between other nations, it looks at all nations alike. INDIA never shies away from helping its neighboring countries during any natural disasters.

INDIAN people from any region can stay wherever they like and can practice any religion of their choice.

INDIA is a SECULAR country and doesn't preach any religion. INDIA preaches only language of "LOVE, EQUALITY AND JUSTICE". INDIA is the only secular country in the ASIAN sub-continent. These are the qualities of my MOTHER INDIA which makes me PROUD and HAPPY.

Shashank,M.C.A,3rd sem

If opportunity doesn't knock, Build a Door

In Gratitude

We all have experienced the presence of a great teacher at least once in all our lives. Teachers as they are, are the beacons of light that illuminate the path of our lives. In the words of Margaret Fuller, "If you have knowledge, let others light their candles at it".

We all spend most of our times in schools or colleges than we spend anywhere else. During school and college life we all have at least one teacher who inspires us .

Whenever i think of a teacher who has inspired me the most, my memories go back to my childhood. When i was in class 6, all the subjects were like an unsolvable puzzle. I was not the brightest student in my class and always found trouble in understanding concepts.

I was shy and couldn't share my problems with anyone. However, one of my teachers understood my problem and came to my rescue. She taught me a method of reading wherein I could break a complex concept into smaller ones that could be easily understood.

As simple as it sounds now, it wasn't the same then. Once I started applying this method i got amazing results and immense self-confidence.

The lesson taught by my teacher not only helped me to study and perform well, it also showed me that all confusions and problems in life can be solved just by applying our thoughts.

I understood that every problem in life is simple and all it takes to solve, is just understanding the problem.

The experience that i have shared here is just one among many lessons i have learnt from my teachers . I whole heartedly thank all my teachers who have helped me to become what i am today.

Naveen.P
M.C.A 3rd sem

In Honour of Sir MV

In remembrance of Sir Mokshagundam Visvesvaraya, the most outstanding Engineer of all times.,

The Engineering fraternity of India celebrates "World Engineers Day" every year on the 15th of September. It was this day, 147 years ago, this great contributor to growth and engineering was born.

Sir MV is known to be the greatest engineers of all times, who with his vision and dedication in the field of engineering made some exceptional contributions to India.

He was knighted as a Commander of the Indian Empire by King George V for his myriad contributions to the public good.

He was also appointed as Diwan of the princely state of Mysore for a period of 7 years from 1908, post-retirement.

Owing to his innumerable contributions, he was honored with the highest state award of India, the "Bharat Ratna", in the year 1955.

Some of the contributions of Sir MV are:

As an Engineer par excellence:

He designed a Flood Protection System to protect Hyderabad and Vishakapatnam from Sea Erosion.

He was the chief engineer during the construction of Krishna Raja Sagar dam on the Kaveri River. It is still praised by everybody witnessing it.

Many dams built by him in Bombay are functional even today.

Sri Jayachamaraja Polytechnic Institute of Bangalore was built on the recommendation of Sir MV.

The Block System, a system of automated doors that closed in the conditions of overflow, was also invented by him.

Mysore University which is a matter of great pride for the people of Mysore, was established because of his will and convictions.

The work and contribution of each member involved in Resolution'11 is dedicated to Sir M Visvesvaraya.

Radha R Pande
M.C.A 5th sem

Go Green

Ozone Day is celebrated on 16th September every year to generate awareness among the people about cracking of ozone layer.

It is caused due to excess CO₂ in the atmosphere which creates depression in mesosphere giving rise to several disasters happening on our Mother Earth, including global warming.

Ozone layer mainly consists of O₃ (compressed oxygen) and chloro-fluoro carbon is one of the biggest threats, since the excess carbon-dioxide and carbon particles have a tendency to consume free oxygen creating holes in the ozone layer.

This makes our planet highly vulnerable to UV rays (ultra-violet rays) emitted from the Sun, a silent killer that is not visible to our naked eyes but its harmful rays can cause irreparable damage to the atmosphere's eco system.

Ozone layer is a shield that blocks and filters these rays. If it cracks, the UV rays will directly plunder our planet and cause devastating effects on the polar regions.

In order to avoid excess emission of carbon-dioxide released in air, some countries like Brazil have successfully developed vehicles which run by corn oil and vegetable oil not only reducing carbon content but also helping us save precious fuel sources.

The need for Ozone Day is critical for people to know their responsibility to save our planet, Mother Earth, so each of us should be aware of what is happening to the ozone layer and act accordingly and try to prevent ozone layer.

Save ozone, save our Mother Planet and Go Green!

Sandeep.K
M.C.A 3rd sem

Pics Mania



Single 'n Ready





A Primer To Software Testing

Software testing is any activity aimed at evaluating an attribute or capability of a program or system and determining that it meets its required results. Although crucial to software quality and widely deployed by programmers and testers, software testing still remains an art, due to limited understanding of the principles of software. The difficulty in software testing stems from the complexity of software. We can't completely test a program with moderate complexity. Testing is more than just debugging . the purpose of testing can be quality assurance, verification and validation, or reliability testing are two major areas of testing. Software testing is a trade-off between budget, time and quality.

As computers and software are used in critical applications, the outcome of a bug can be severe bugs can cause huge losses. Bugs in critical systems have caused airplane crashes, allowed space shuttle missions to go awry, halted trading on the stock market, and worse. Bugs can kill. Bugs can cause disasters. The so-called year 200(Y2K) bug has given birth to a cottage industry of consultants and programming tools dedicated to making sure the modern

world doesn't come to a screeching halt on the first day of the next century.In a computerized embedded world, the quality and reliability of software is a matter of life and death.

Quality means the conformance to the specified design requirement. Being correct, the minimum requirement of quality, means performing as required under specified circumstances. Debugging, a narrow view of software testing, is performed heavily to find out design defects by the programmer. The imperfection of human nature makes it almost impossible to make a moderately complex program correct the first time. Finding the problems and get them fixed, is the purpose of debugging in programming phase.

Dr.K.Prasada Rao

Professor, Dept. of .M.C.A

Cell Phone Technologies

1G : "First Generation of Wireless Technology"

Features: It is wireless communication technology Known as cellphones based on analog telecommunication standard, introduced in 1980s. It had only voice facility

Technology : It uses digital signaling to connect the radio towers (which listen to the handsets) to the rest of the telephone system. Through 1G, a voice call gets modulated to a higher frequency of about 150MHz and up as it is transmitted between radio towers. This is done using a technique called Frequency-Division Multiple Access (FDMA).

2G : "Second Generation of Wireless Technology"

Features: **2G technologies** enabled the various mobile phone networks to provide the services such as text messages, picture messages and MMS (multimedia messages).

2G technology is more efficient. 2G technology holds sufficient security for both the sender and the receiver. All text messages are digitally encrypted

Technology : **GSM (Global System for Mobile Communications)**, a standard to describe technologies for second generation

(or "2G") digital cellular networks, the GSM standard originally described a digital, circuit switched network optimized for full duplex voice telephony.

3G: "Third Generation of Wireless Technologies"

Features: It provides enhancements over previous wireless technologies, like high-speed transmission, advanced multimedia access and global roaming. 3G is mostly used with mobile phones and handsets as a means to connect the phone to the Internet or other IP networks in order to make voice and video calls, to download and upload data and to surf the net. 3G has the following enhancements over 2.5G and previous networks:

Technology: In this 3G Wide Band Wireless Network is used with which the clarity increases and gives the perfection as like that of a real conversation. The data are sent through the technology called Packet Switching .Voice calls are interpreted through Circuit Switching. 3G technologies make use of TDMA and CDMA.

Mrs. Rachna Sharma

HoD,MCA

Try Not To Become A Man Of Success But A Man Of Value

Nanotechnology Applications

Today the nanotechnology growing in higher speed, some of the application of nanotechnology listed below

Medicine

Researchers are developing customized nanoparticles the size of molecules that can deliver drugs directly to diseased cells in your body. When it's perfected, this method should greatly reduce the damage treatment such as chemotherapy does to a patient's healthy cells.

Electronics

Nanotechnology holds some answers for how we might increase the capabilities of electronics devices while we reduce their weight and power consumption.

Food

Nanotechnology is having an impact on several aspects of food science, from how food is grown to how it is packaged. Companies are developing nanomaterials that will make a difference not only in the taste of food, but also in food safety, and the health benefits that food delivers.

Fuel Cells

Nanotechnology is being used to reduce the cost of catalysts used in fuel cells to produce hydrogen ions from fuel such as methanol and to improve the efficiency of membranes used in fuel cells to separate hydrogen ions from other gases such as oxygen.

Solar Cells

Companies have developed nanotech solar cells that can be manufactured at significantly lower cost than

conventional solar cells.

Batteries

Companies are currently developing batteries using nanomaterials. One such battery will be a good as new after sitting on the shelf for decades. Another battery can be recharged significantly faster than conventional batteries..

Space

Nanotechnology may hold the key to making spaceflight more practical. Advancements in nanomaterials make lightweight spacecraft and a cable for the space elevator possible. By significantly reducing the amount of rocket fuel required, these advances could lower the cost of reaching orbit and traveling in space.

Fuels

Nanotechnology can address the shortage of fossil fuels such as diesel and gasoline by making the production of fuels from low grade raw materials economical, increasing the mileage of engines, and making the production of fuels from normal raw materials more efficient.

Better Air Quality

Nanotechnology can improve the performance of catalysts used to transform vapors escaping from cars or industrial plants into harmless gasses. That's because catalysts made from nanoparticles have a greater surface area to interact with the reacting chemicals than catalysts made from larger particles. The larger surface area allows more chemicals to interact with the catalyst

simultaneously, which makes the catalyst more effective.

Cleaner Water

Nanotechnology is being used to develop solutions to three very different problems in water quality. One challenge is the removal of industrial wastes, such as a cleaning solvent called TCE, from groundwater. Nanoparticles can be used to convert the contaminating chemical through a chemical reaction to make it harmless. Studies have shown that this method can be used successfully to reach contaminates dispersed in underground ponds and at much lower cost than methods which require pumping the water out of the ground for treatment. Check out our Nanotechnology and Water Quality page for details.

Chemical Sensors

Nanotechnology can enable sensors to detect very small amounts of chemical vapors. Various types of detecting elements, such as carbon nanotubes, zinc oxide nanowires or palladium nanoparticles can be used in nanotechnology-based sensors. Because of the small size of nanotubes, nanowires, or nanoparticles, a few gas molecules are sufficient to change the electrical properties of the sensing elements. This allows the detection of a very low concentration of chemical vapors. Check out our Chemical Sensors and Nanotechnology page for details.

Pravara K.V
M.C.A 3rd sem

GIT and GIT HUB

GIT is a version control software(System). If you are thinking about developing a software in a Collaborative environment which involves more than one person/ developer who are spread across different remote locations.

There are various other version control system for instance sun-eclipse for Eclipse IDE, tortoise Svn etc. but many developers prefer GIT because the fact is that it's a "Open source".

Setting up GIT is really simple particularly if you are using any Linux distribution like open to Ubuntu, Debian, Red hat etc.

The concept of GIT involves the following:

A developer initially develops a prototype of a software and pushes into a storage repository using GIT.

Any other developer (s) who wishes to contribute to this particular software pushes all the source files and directories to his remote machine and starts developing his business logic and code, and thereafter he pushes it to the storage repository.

In order, to start working on GIT, you need to initiate an empty GIT repository in your local machine of all your source files and directo-

ries using the command 'add'.

Once you have initiated an empty repository and you have started your modifications, you need to PUSH to the GIT server repository with a 'CUSTOM MESSAGE'. This is called as 'COMMIT'. You use the 'commit' command to commit your changes so that even the other developers in a different location will understand what changes have been made by the other developer (s).

Branching is another feature of GIT which creates a separate branch, which does not affect your actual 'ORIGIN: MASTER'. It's up to the developer later on whether to "MERGE" this particular branch with the actual.

GITHUB

GITHUB helps you store all yours GIT initiated files on the world wide web (www.github.com) : <http://www.github.com>. Remember: if you are a free member in GITHUB, everyone who is a GITHUB user can view all the source code of the software that you are developing , thus facilitating open-source.



Swaroop S.M
M.C.A 3rd sem

YES.

Australian scientists invented a new breed of Robots at University of Queensland, named "Lingodroids". These robots are programmed to use and share language. These bots can coin words to describe the places they have been to, place they want to go and also how to reach there. "When they need a new word, they invent one" says Janet Wiles, a cognitive scientist who leads interdisciplinary team on this project.

Then how do they communicate?

These robots visualize the environment using a 360° camera, a Laser range finders and Sonar. The microphone acts as ears to them and speakers acts as their voice box. They produce a tone similar to that of a touch-tone phone, to share the words. Wiles coded beep of sounds that correspond to a letter. Robots made use of these letters to find their own words.

For example, Wiles made these Robots to play a game in which they paired the letter into non-sensical combinations of

words. Once a robot came to a situation of inventing a new word for the place where it is. So it created a new tones that corresponded to the word "jaya" to name the place and shared it with its partner. Hence these Robots slowly started to build a new language for their travels and eventually started to learn and understand the places.

Wiles says, even though it looks very simple to store the new words in these robots, it is very sophisticated process for them. They make use of very complex algorithms. Ultimately, she hopes to teach these robots to chat up with humans, paving the way to Robotic caregivers, companions and butlers.

Now I am getting a feeling to have one of these robots as my pets :..

How about you?

ArunKolhapur
M.C.A 3rd sem

[Reference:discovermagazine.com]

Every Artist Was First An amateur

Importance of Open Source Web Development

Open Source Web Development is used by most of the companies today to ease the task of web development. It encompasses the usage of web applications and easy to distribute codes that are developed by the web developers belonging to open source community. Some of the open source web development platforms available in the market are OSCommerce, Joomla, Word Press, X-Cart, Magento and so on and so forth. The kind of open source web development that should be brought to use depends entirely on the nature of a website and the technology that fits the website perfectly. The indispensable aspect of using open source is its free availability. The website owners are facilitated to customize web applications and carry out changes in other online processes as per their requirements.

How it can be a great solution for companies?

To be more specific, Open source web development is also called as Content Management System. It is one of the most significant ways of keeping a good track of all the content given on the website. Making amendments and further saving the same for future reference is what that CMS is used for. The content that open source

web development stores can be stored in desired form and format that is, images, text, videos, music or documents. The best part of using CMS is that anyone can update a website who has access to the OS web development. Highly organized websites facilitate users to make desired changes without their being having appropriate knowledge about the web.

Most of the web developers can code their own password protected content management systems. They can either name it as Admin panel or pages to effectively manage the overall website. While others make use of Open Source Web Development for making tailor-made content management system that suits the website needs. And these days, the CMS that is used extensively and are high in demand is Joomla.

Joomla As A CMS

Though there is a wide range of CMS available in the market, but the one that is preferred by most of the web developers is Joomla. Joomla is brought to use for posting blogs in a most simplified and convenient way when compared to using Wordpress, Blogger or other platforms. The most important benefit is that it is available for free

for all websites and today many powerful websites and applications run with the help of this Open Source technology. The most popular CMS softwares such as [Drupal](#), Joomla and Mambo have extended modules. This is the reason they are used in Open Source web development in India.

It is with the help of CMS that owners can make quick and easy modifications in the applications or text as and when required. The easy to operate feature allows hired web developers or owners to save time and reduce company costs massively. If a company has a CMS at disposal, then the need of hiring a web developers reduces to a big extent as all the things and updates can be done without much effort and cost.

Kabir Bedi is a professionally experienced web consultant at Lexolution IT Services. Handling a team of professional web designers and developers, he has helped company in successfully delivering comprehensive open source webdesign solutions to global clients.

Sandeep.K
M.C.A –3rd sem

Forth Coming Events

- Academic Inauguration for batch 2011
- Traditional Day
- Fresher's day
- Noble Poets Day

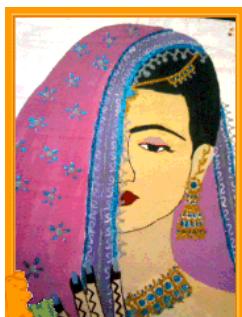
Guest Lectures

- Logic Building, Mind Mapping
- Cloud Computing
- Advanced Shell Programming

Art Gallery



Sketched by Bindhu K. [V sem]



Painted by Nabanita [III sem]



Snapped by Tiju Thomas [III sem]

रिमझिम रिमझिम वर्षा आयी

रिमझिम-रिमझिम वर्षा आयी
भींग रहे हैं पेड़ो के तन,
भींग रहे हैं आंगन ऊपरन,
हरयाली सबके मन भाई,
रिमझिम-रिमझिम वर्षा आयी /

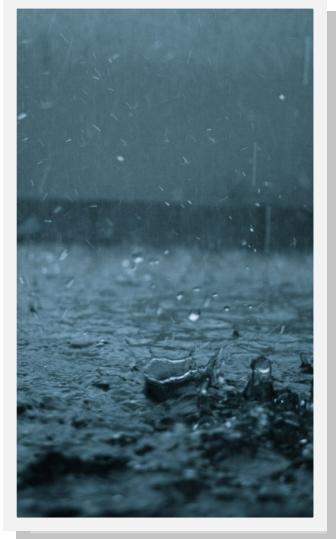
मेढ़क टर-टर चिल्लाते,
झिंगुर मस्ती में हैं गाते,
आमो की बहार ले आयी,
रिमझिम-रिमझिम वर्षा आयी

आसमान मे विजली कड़की,
डर से सहमे लड़का-लड़की,
बंदरजी की शामत आयी,
रिमझिम-रिमझिम वर्षा आयी /

कहीं चमन है कहीं धूप है,
ईन्द्रधनुष कितना अरूप है,
धरती ने है प्यास बुझाई,
रिमझिम-रिमझिम वर्षा आयी

बच्चे, बुढ़े और जवान मे दर्शाती
देशभक्ति,
मानो जैसे हो कोई दिव्यशक्ति,
मन मे उल्लाश, उमंग और प्यार लाई
रिमझिम-रिमझिम वर्षा आयी /

KUMAR PIYUSH
MCA - 3rd sem



The editorial team, are extremely grateful for your warm words of encouragement. We seek the participation of every member of the Department. We will be approaching you in the near future, to make the newsletter more interactive and informative.

We invite Suggestions and contributions from students, alumni and faculties of MCA.

Editorial Team

Staff : Mrs.Gomathi Ramkumar

Student : Tiju Thomas, Naveen P (III Sem)

Betsy Varughese, Radha R Pande (V Sem)

E-mail : seasonaldelights.mca@gmail.com

Review : Mrs.Rachna Sharma,HoD
Mr.Sudipto Das,Sr.Lecturer



Department Of M.C.A

132 AECS Layout, IT park Road,Bengaluru 560 037
Ph: 28524477,2852446