



TECHNOBYTES

Kristu Jayanti College of Management and Technology, Bangalore | Department of MCA

Vichaarmanthan

"India has all the potential and unlimited opportunities to make a global impact" said Dr. K. Kasturirangan while addressing the gathering on the Vichaarmanthan at Kristu Jayanti College on 9th February. Vichaarmanthan is a platform for the students of Kristu Jayanti College to interact with the global and Indian visionaries and churn their thoughts to bring the best idea into reality. Padma Vibushan Dr. K. Kasturirangan, member Planning Commission, Government of India, Chairman Jawaharlal Nehru University was the chief guest of the 15th edition of Vichaarmanthan. Rev. Fr. Jose P.J, Principal & Financial Administrator; Rev. Fr. Augustine George, Head of Computer science Department, Prof. Jeo Joy, Prof. Anita, Staff Coordinators, Computer science Department; and Ms. Sadia Fudoos, Student Coordinator of Computer science Department were also



"Indian needs overall development not only in technology but even in the spheres of food, water, education and medicine" said Dr. K. Kasturirangan, while addressing the students at Kristu Jayanti College

present.

Padma Vibushan Dr. K. Kasturirangan enlightened the crowd with his view about what changed our country after independence and how India can develop a new holistic perspective. Our country has remarkable growth of 8% in GDP index. "It shows we have grown a lot. We have grown in investment and there is more scope in our country" said Dr. Kasturirangan. Indian needs overall development not only in technology but even in the spheres of food, water, education and medicine. He discussed the possibility of India in emerging as the world's third largest

economic power by 2025.

Dr. K. Kasturirangan inspired the youth of country to pursue research in scientific field and come out the conventional educational system. He emphasised that overall development in our country can be achieved only by the promotion of science and technology in the field of education, health, energy, water and so on. The science and research create lot of opportunities for the young generation to study about this field and bring development by overcoming the challenges. "Science kindles your imagination. Specialisation helps in nation development and better living conditions. Each career is multidimensional and is not confined into itself" observed Dr. K. Kasturirangan.

Dr. K. Kasturirangan has shared his experience in research and work in ISRO with the students and stimulated their interest in research area. He explained the limitation of conventional education and the unlimited scopes of borderline studies. The emerging borderline studies

provide the convergence of two or more conventional area that is more challenging and exciting. "This is the most interesting era to get into the career of your choice. With the transmission of culture, lifelong learning, the opportunities our country gives and the excitement it provides, sky is the limit" said Dr. K. Kasturirangan.

Rank Holders 2008 - 11 Batch

Students of every batch of MCA have taken the department to greater height by excelling in academics along with all other activities. From the past years, the department has always secured university ranks. The most recent addition to this success story is the achievement of Anuradha rani and Manjula N. of 2008-11 batch secured the 2nd and the 5th rank in the MCA examination conducted by the Bangalore University.



Anuradha Rani



Manjula N



From The Principal's Desk

It is that time of the year when another edition of 'technobytes' is seeing light: time for creative ideas, thoughts, reflections, academic exercises to grapple with the complex issues from the area of computers and

related applications and the up of this new child. May it bring up the sense of human interest stories from the MCA Department. achievement of all who worked for it to see light and let it be a and the spirit with which this feast for the intellect of all who new issue of 'technobytes' is read and enjoy the content of coming out and congratulate the new issue of 'technobytes'. the team behind the dressing

HOD message



Rev. Fr.
Augustine George

21st century is aptly called as the age of information technology. The volume, variety and velocity of digitized information circulating around the world is quite amazing. The challenge of transforming this tremendous amount of information or data into meaningful and productive sources of knowledge can be achieved with the help of technology. Information technology basically deals with developing a framework for collecting, classifying and analyzing data to provide products, services and solutions which would make our lives simple, productive and more meaningful.

Information technology has also played a very important role in providing a level playing field for the people with the power of intellect

and the passion to innovate. Technology has democratized the process of innovation by giving equal importance to ideas from the startups and the stalwarts alike. The obsolescence of technological breakthroughs with terrifying rapidity creates challenges and opportunities at the same time. These changes have created a situation in which people need to be competitive throughout their career by undergoing continuous 'skilling' and companies need to be focusing more on radical innovations rather than incremental innovations.

As innovation is an offshoot of the power of human intellect, people should be put at the centre innovation process. As per a study conducted by Harvard Business School people with 'T' shaped

knowledge are more good at innovation. The horizontal line of alphabet 'T' shows a person's generalized knowledge in a number of domains which would give him the inputs to identify the gaps in existing products, services and processes. The vertical line of alphabet 'T' shows in-depth and specialized knowledge in a particular domain which would help a person to focus on research oriented initiatives to develop new applications to bridge the gaps in existing R&D.

An ideal combination of generalized and specialized knowledge requirements to make a person innovative can be worked out by extending the breadth of knowledge in few domains and by diving deep into the knowledge in your core domain. Connecting and communicating with people with similar ideas and interests would expand your horizons of knowledge in the vertical

and horizontal directions.. This networking and knowledge sharing will lead to convergence of ideas which will get translated into concrete research outcomes.

Dept of MCA is entrusted with the responsibility to provide such networking opportunities to the students. This newsletter is such a novel initiative which would help the faculty and students of our department to initiate thought provoking ideas and discussions. It also includes a snapshot of all the important events and initiatives undertaken by the MCA department. The success of this newsletter depends on the extent of your active involvement and contribution to this knowledge sharing process. I take this opportunity to congratulate and thank all the faculty and students who worked tirelessly to make this endeavor a grand success.

MCA Program at a Glance



Prof. Kumar.R
MCA -
Coordinator

The MCA department of Kristu Jayanti College of Management and Technology was established in the year 2004 with the objective of imparting technical education to aspiring youth and also to mould them into professionally competent workforce. At present there are 134 students in the department. As part of enriching the faculty resources, the teachers are encouraged to pursue research in different technical areas. 7 teachers are currently pursuing their Ph.D., in various universities.

To achieve academic excellence several teaching methods have been followed like class room teaching, projects, practical sessions, students seminars, and peer group learning. In order to bridge the knowledge gap between industrial require-

ments and the curriculum guest lectures and seminars are organized on certain relevant topics related to various evolving fields in IT industry. These sessions are conducted on a continuing basis by experts from industry. Intra and Inter-Collegiate Fests are conducted every year as a part of experiential learning. The students participated in various Inter-collegiate IT-fests and won many prizes. Our students secure at least two university ranks every year. Industrial visits are arranged every year.

To promote professionalism among the student's activities like Attitudinal Work shop, Soft Skills, Language Enhancement Programme, Aptitude Enhancement Programme are conducted.

The special features of the department include the successful conduct of National Conference on Current Trends

in Advanced Computing (CTAC) once in a year. The two editions of conferences were sponsored by ISRO. This year the department organizes the International Conference on Current Trends in Advanced Computing (ICCTAC) during 15th-16th February 2013. ICCTAC is a platform for exhibiting recent research and technical developments in the area of Computer Science, which include Green, Grid, Cloud and Heterogeneous Computing. The conference is organized in association with International Journal of Computer Applications (IJCA), sponsored by ISRO, Bangalore. The conference will be published by IJCA. As part of knowledge sharing, peer to peer teaching is

motivated amongst the students. A certificate course in Web Designing is also conducted every year for the UG students. MCA students are the resource persons supported by the faculty members.

Value Added Courses have been incorporated in the regular academic curriculum in order to enable the students imbibe industry updates, employability and global competitiveness. The value added programs like CCNA and J2EE are conducted. The students have been placed in Google, NIIT Technologies, UST Global, Alti Source, WOS Technologies, Wipro, Infosys, Keynote and Cognizant, Fidelity Investments etc.

The department has Industry Institute Interface(III) for organizing seminar, workshops from eminent personalities in IT industry.



Prof. Ambika
Dept. of MCA

F# - Functional Programming Language

A multi-paradigm language not only offers an enormous productivity boost through functional programming, it also develops applications using your existing object-oriented and imperative programming skills. It was initially developed by Don Syme at Microsoft Research developer division. Advantage of Microsoft's such new

language includes access to all the great tools and libraries of the .NET platform. Truths include .NET Accessibility, .NET Assembly, Strongly-typed, type inference and Top-level declarations. It is a variant of Meta Language (ML) and is compatible with Object oriented Abstract Machine Language (OCaml) implementation.

It is strongly typed language that uses type inference and helps in automatic deduction of data types during compilation by the compiler

which is not explicitly declared by the user. F# supports CLI types and objects but extends the type system and categorizes types as immutable types or mutable types.

Benefits of Functional Programming
If you find hard to predict the results of changing your code, due to hidden dependencies yourself writing the same patterns over and over again, leaving little time for genuinely different and interesting parts of the problem

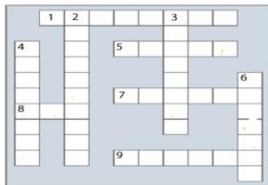
If you find hard to reason about code, worrying about whether each statement will execute in the right order and in the right conditions to express abstractions that hide how the code executes and specify only what you expect
If you struggle with asynchronous control flow
If you find difficult to split tasks into logically independent parts that can be run concurrently on multiple processor cores?
If your code behave differently in the real world while in unit test

appeared in 1996. It was the first language that allowed the combination of object-oriented and functional approaches. Other important Advantages of F# in developing image database
Simple, strongly typed and .NET friendly
It has features for objects, queries, async agents, parallel and units of measure
Highly interoperable and can build .NET components
Has asynchronous and parallelism for image database generation

Asynchronous operation can be performed without the need of explicit callbacks

Functional Languages
LISP, created by John McCarthy in 1958, is based on the lambda calculus theory. It a flexible language pioneered with many programming ideas like data structures, garbage collection and dynamic typing. In the 1970, Robin Milner developed ML which added notion of types and allows us to write "generic" functions in the same way what we do in .NET generics. OCaml, a pragmatic extension to the ML language
The above suggested approach will definitely be very useful in image database generation for Content Based Image Retrieval systems and makes process easier in retrieving.

CROSSWORD & PUZZLE



- A collection of files, tables, forms, reports, etc., held on computer media that have a predictable relationship with each other for indexing, updating, and retrieval purposes
- The human nervous system, as opposed to electronic computer hardware or software

Across
The process of recreating files which have disappeared, or corrupted, from backup copies

- Similar to a 'Fix', a _____ is a temporary arrangement used to overcome software problems or glitches
- A mechanical device used by software developers to prevent unlicensed use of their product
- Short for Robot, - the term describes little programs designed to perform automated tasks on the internet
- An individual whose primary aim in life is to penetrate the security defences of large, sophisticated, computer systems

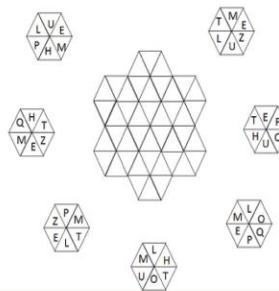
- Down**
- _____ is the transformation of data into another usually unrecognisable form
 - An _____ is a private network which uses the internet protocols and extends beyond an organisation's premises

IT QUIZ TIME

- What is ISRO's equivalent of Google Earth called?
- Which famous company's logo is called Larry the bird?
- Who is the first Indian woman to head a missile project in India?
- Which company is the official IT partner of the London Olympics 2012?
- What is Southwestern Bell Corporation now better known as?
- Which word denotes 1021?
- Drew Houston conceived the idea after repeatedly forgetting his USB Flash drive while he was a student at MIT. What creation did this lead to?
- What is macsyma, a programming language used for?
- Name the game which is being used by scientists to study compaction of granular matter. It is used widely to study the thermodynamics of nano particles.
- Sabeer Bhatia's 'SabseBolo' acquired this company recently?

HEXAGONY

Can you place the hexagons into the grid, so that where any hexagon touches another along a straight line, the contents of both triangles is the same? No rotation of any hexagon is allowed!





Ms. Moksha Lakshmi,
Lecturer, Dept. of CS

PAPER POWERS BATTERY BREAKTHROUGH

Nanotechnology is defined as fabrication of device with atomic or molecular scale precision. Device with minimum feature size less than 100 nanometer (nm) are considered to be product of nanotechnology. A nanometer is one billionth of a meter (10⁻⁹ m) and is the unit of length that is generally most appropriate for describing the size of single molecules. The nanoscale marks the nebulous boundary between the classical and quantum mechanical world thus, realization of nanotechnology promises to bring revolutionary capabilities. Fabrication of Nanomachines nanoelectronics and other nanodevices will undoubtedly solve an enormous amount of the problem faced by mankind today. However imminent breakthroughs in computer science and medicine will be where the real potential of nanotechnology will be first be achieved.

NanoScience is an interdisciplinary field that seeks to bring about mature nanotechnology. One such boon of Nanotechnology is Paper Battery. A paper Battery is a battery engineered to use a paper-thin sheet of cellulose infused with aligned carbon nanotubes. A paper battery act as both a high-energy battery and super capacitor, combining two components that are separate in traditional electronics. This combination allows the battery to provide both long-term, steady power production and burst of energy. Non-toxic flexible paper batteries have the potential to power the next generation of electronics, medical device and hybrid vehicles, allowing for radical new designs and medical technology. Paper batteries may be folded, cut or otherwise shaped for different applications without any loss of integrity or efficiency. Cutting one in half halves its energy production. Stacking them multiplies power output. Early prototypes of the device are able to produce 2.5 volts of electricity from a sample the size of a postage

stamp.

The devices are formed by combining cellulose with an infusion of aligned carbon nanotubes that are each approximately one millionth of a centime-



ter thick. The carbon is what gives the batteries their black color. These tiny filaments act like the electrodes found in a traditional battery, conducting electricity when the paper comes into contact with an ionic liquid solution. Ionic liquids contain no water, which means that there is nothing to freeze or evaporate in extreme environmental conditions. As a result, paper batteries can function between -75 and 150 degrees Celsius.

The battery contains carbon nanotubes, each about one millionth of a centimeter thick, which act as an electrode. The nanotubes are embedded in a sheet of paper soaked in ionic liquid electrolytes, which conduct the electricity. The flexible battery can function even if it is rolled up, folded or cut.

Construction and Structure

Construction

Paper Battery consist of

- Cathode: Carbon Nanotubes (CNT)
- Anode: Lithium metal (Li+)
- Electrolyte: All electrolytes (incl. bio electrolytes like blood, sweat and urine)
- Separator: Paper (Cellulose)

Structure

The process of construction can be understood in the following steps:

- Firstly, a common Xerox paper of desired shape and size is taken.
- Next, by conformal coating using a simple Mayer rod method, the specially formulated ink with suitable substrates (known as CNT ink) is spread over the paper sample.
- The strong capillary force in paper enables high contacting surface

area between the paper and nanotubes after the solvent is absorbed and dried out in an oven. A thin lithium film is laminated over the exposed cellulose surface which completes our paper

battery. This paper battery is then connected to the aluminum current collectors which connect it to the external load.

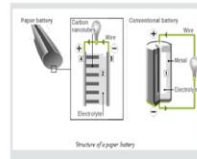
The working of a paper battery is similar to an electrochemical battery except with the structural differences.

The paper battery is designed to use a paper-thin sheet of cellulose (which is the major constituent of regular paper, among other things) infused with aligned carbon nanotubes. The nanotubes act as electrodes, allowing the storage devices to conduct electricity. The battery will currently provide a low, steady power output, as well as a super capacitor's quick burst of energy. While a conventional battery contains a number of separate components, the paper battery integrates all of the battery components in a single structure, making it more energy efficient and lighter.

Widespread commercial deployment of paper batteries will rely on the development of more inexpensive manufacturing techniques for carbon nanotubes. As a result of the potentially transformative applications in electronics, aerospace, hybrid vehicles and medical science, however, numerous companies and organizations are pursuing the development of paper batteries. In addition to the developments announced in 2007 at RPI and MIT, researchers in Singapore announced that they had developed a paper battery powered by ionic solutions in 2005. NEC has also invested in R & D into paper batteries for potential applications in its electronic devices.

Specialized paper batteries could act as power sources for any number of devices implanted in humans and animals, including

RFID tags, cosmetics, drug-delivery systems and pacemakers. A capacitor introduced into an organism could be implanted fully dry and then be gradually exposed to bodily fluids over time to generate voltage. Paper batteries are also biodegradable, a need only partially addressed by current e-cycling and other electronics disposal methods increasingly advocated for by the green computing movement.



Puzzle - Fictional links

Each question below as a pair of anagrams that, arranged, spell out the names of the two fictional characters who have something in common. Work out who they all are?

E.g.: 'PERT THY ROAR' (5, 6) and 'FAG LAND' (7)

ANS: 'Harry Potter' and 'Gandalf'

Questions:

- 1: 'Paper Net' (5, 3) and 'A Catkin Hoop' (7, 4)
- 2: 'Foul Web' (7) and 'Turk Rang Hi' (4, 6)
- 3: 'Hi Doornob' (5, 4) and 'Horrid deltoid tingle' (6, 3, 6, 4)
- 4: 'Sad Job Men' (5, 4) and 'Sew Apron Suit' (6, 6)
- 5: 'adjoin Insane' (7, 5) and 'Calf or Rat' (4, 5)
- 6: 'Sir Wilt Veto' (6, 5) and 'Go Score' (7)
- 7: 'Nose Morphism' and 'Usee Lucky Memo' (6, 5)
- 8: 'More Shell Shock' (8, 6) and 'Primal Memo' (4, 6)



By Rahul Krishnan
MCA i Sem

DEVIL MAY CRY

The Devil May Cry game series has acquired a huge fan base since it was first introduced in 2001, and it is considered a classic among hack n' slash fans. So when a reboot of the series was announced it was met with both great excitement and doubt. This time around the DMC game is developed by Ninja Theory, the team behind Heavenly Sword and Enslaved: Odyssey to the West. Perhaps the most controversial issue was not the game itself but the new style of Dante - the game's main character - which many believed that did not fit the character. Being a big fan of the franchise I have to admit that I also was not convinced, but on the other hand you cannot really judge a game until you play it, and in the end the new DMC, no matter the changes, is still a worthy part of the Devil May Cry franchise.

Although there are quite a few differences from the older games DMC still maintains a similar style when it comes to the story. This Dante is much younger, follows a rather "carefree" lifestyle, and doesn't seem to be giving much of a damn about anything. Where in the previous games Dante was half-demon and half-human this time around his origin story has been slightly changed, making him a son of

god, a demon-angel hybrid, which grants him the power to see and also harm demons. In this modernized version of the story demons have crossed from their world called Limbo to the human world; they live in disguise among people and they have managed to get total control over the media, which consequently allows them to also have control over the majority of the human population.

Of course not all humans have become the mindless soldier of the demons; an organization by the name of 'The Oder' has been formed trying to break their control over people. In general, the story plays on the demons using the media in order to hypnotize the masses and keep them in hand, which is an interesting assumption and is executed quite well. The plot may be rather different than the one of the original series but there are little references scattered all over the game showing that the people in



Ninja Theory not only did their homework but are also quite familiar with the Devil May Cry core story.

The first thing one will notice while playing the game - besides the Dante's new hairstyle - is the urban/contemporary scenery which replaces the gothic locations of the previous versions.

The various levels are different and cleverly designed and for sure atmosphere is the one of the strongest aspects of DMC. It is obvious that a lot of work was put in creating the game, the graphics are superb and the cut scenes blend quite smoothly with the game play.

If there is one part of DMC that truly remains faithful to the previous Devil May Cry games that's the combat system. Although it has been significantly refurbished, it basically uses the same fighting mechanisms. Dante uses his trademark Rebellion sword as a melee weapon and his Ebony and Ivory firearms, but there are also a few other weapons to be acquired throughout the game. Being a nephilim, Dante also possesses both angelic and demonic powers which are always available and can be activated by pressing and holding the corresponding button for each. His angelic powers tend to be quicker but less damaging when it comes to attacks where his demonic powers are slower but stronger. These powers also allow Dante to perform several grabbing and pulling moves, and quickly reach certain areas while moving around, but they also come in handy when creating

special fighting combos. In fact, some enemies can only be weakened by using an angelic or demonic attack.

In the end the comparison between DMC and the previous Devil May Cry games is inevitable, but it is also a bit unfair, as the title more than holds its own, even as an individual game. Dante may not be exactly how we remember him but he still manages to become likeable and eventually also grow as a character. The story is interesting and is set up quite well and the game play is refurbished and rather addictive. In one point of view, DMC is an excellent game that hack n' slash and action enthusiasts will surely enjoy.

Placement Details

Sl.NO.	Student Name	Name of the Company	Sl.NO.	Student Name	Name of the Company
01.	Anila C	Keynote, Bangalore	16.	Rajila Mohan	Caters innovative Solutions
02.	Cyril varkey	Fidelity India (pvt) Ltd	17.	Ramila Mohan	Caters Innovative Solutions
03.	Jenin Joseph	Fidelity India (pvt) Ltd	18.	Sithara. M.K.	DVS Technologies Pvt Ltd
04.	Sherin Rappai	Fidelity India (pvt) Ltd	19.	Nithin H.K	KPMG
05.	Dilip Jacob	Fidelity India (pvt) Ltd	20.	Allen Thomas	Vibrant Communications
06.	Abin k Baby	Alti source	21.	PriyaTandon	Unisys
07.	Ravi Kishore M	Alti source	22.	Shinto V Varghese	UST Global
08.	Preethi Das	Alti source	23.	DeepaElizebeth Joseph	UST Global
09.	AnuKurian	Alti Source	24.	Thapan Chand A	UST Global
10.	Santosh K U	Alti Source	25.	Rani Maria Joseph	NIIT Technologies
11.	Tijo Mathew	Vibrant Technologies	26.	MuhammedFazil C	NIIT Technologies
12.	Nickey Joseph	Vibrant Communications	27.	Mohammed Shamir Haris	NIIT Technologies
13.	Andikat J Dennis	JC Connexion	28.	Jewel Roy	NIIT Technologies
14.	Rahul Rajeev	M.H.AshlayaCo.WLL	29.	MahetaDhawal	Web Technologies.
15.	Loy Coloco	Keynote Systems			

STUDENTS ACHIEVEMENTS AND ACTIVITIES

Achievements in Department level inter-collegiate fest



The students of MCA have always excelled in all the fests that they have attended. They also make it a point to make us proud by bagging the overall championship in the fests that they attend. Even this time they have made us proud by winning the Overall Championship in the inter collegiate fests organized various colleges. They won the overall championship in the fest conducted by Don Bosco College, Kerala in the month of November and Surana College, Bangalore in the month of December.

Manoeuvre –2012 intra collegiate IT Fest



Manoeuvre 2012, the intra collegiate IT fest was conducted on 16th Nov 2012. The fest was organized by the final year students, and the 1st and 2nd year students participated in the various events of MANOEUVRE 2012. The staff coordinator was Mrs.S.Suja and the student coordinators selected were Ms. Kiran Singh & Mr. Diliph Jacob from the final year MCA. The fest enhanced the students to improve their technical & interpersonal skills. The Chief Guest of the day was Shri. Gopa Nair, Senior Consultant, Oracle, India.

TRIP



Fun Filled Moments
Students of 3rd sem MCA enjoyed the two days of their tour to Coorg on the 10th and 11th of November 2012.
Students of 5th sem MCA enjoyed the tour to Kerala from 23rd November 2012 to 27th November 2012.

Life Skill Training



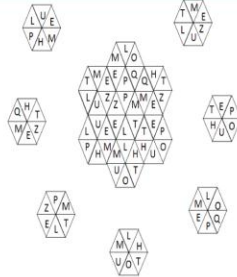
To enhance the development of basic life skills, personal competence, and skills related to resistance to social influences that promote substance use, a Life Skill training programme was conducted for the 1 year MCA students during 08.10.12 – 12.10.12. The program consists of three major components i.e, general self-management skills, social skills, and information and skills specifically related to drug use. Skills were taught using training techniques such as instruction, demonstration, feedback, reinforcement, and practice.

Department Activities

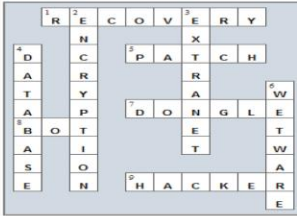


Department of MCA of Kristu Jayanti College conducted a seminar on Software Project Automated Tools for MCA students on the 8th Of December 2012. Mr. Magesh Kuppan is a freelancer gave presentation about Software Project Automated Tools. He has a 15 years experience in S/W development and training including 12 years in application development experience in .net was good and appropriate person to explain Software Project Automated Tools for students. The topics that were covered are: things involved in S/W development, testing tools, testing framework, implementation, updation and DVCS, VCS, BDD.
Department of MCA of Kristu Jayanti College conducted an interaction section on current trends in DB & IT for MCA students on the 15th December 2012. Mr. L Venkatesan, lead DBA from united health group of Plymouth USA, gave presentation about current trends in DB & IT. He has a 17 years of experience in different industries on oracle and SQ server, OLTP and OLAP environment. He explained about operation and application of DBA, oracle, performance tuning, backup and installation and disaster requirement.

PUZZLE AND CROSS WORD ANSWERS



Prepared by,
Alvi & Dona
I Sem MCA



Prepared by,
Arshitha & Shruthi
I Sem MCA

QUIZ ANSWERS

1. Bhuvan
2. Twitter
3. Tessa Thomas
4. Atos Origin
5. AT & T
6. Zettabyte
7. Dropbox
8. Algebra
9. Tetris



QUIZ
Prepared by,
Fr. Nijo
Antony

THE WONDER THAT IS WINDOWS 8



For starters Windows 8 is the latest avatar of the windows 7 operating system. In other words it's the latest entrant into the family of Microsoft Windows operating system for use on computers. Windows 8 has pumped in a lot of changes to the platform of the operating system by taking advantage of new and emerging technologies, improving user experiences on mobile devices, adding new security features, along with other changes and improvements in performances.

The most notable change introduced in Windows 8 is the start window with a whole lot of vigorously updating blocks to represent applications, and the Windows store using this it won't ever be a worrying task to obtain and purchase applications for the system and also the capability to orchestrate the settings and programs between numerous devices.

Well to talk a little bit more about its features the first thing that caught my attention is the new "Hybrid Boot" mode which hibernates the Windows kernel on shutdown simply to speed up the succeeding boot. Windows 8 also adds up the much needed support for the USB 3.0 devices which obviously means faster data transfer and enhances power management with compatible devices.

Now moving on to the safety and security features Windows 8 has included two new substantiation methods customized towards touch screens i.e. PIN numbers and picture passwords, the inclusion of antivirus capabilities into Windows defender brings it in equivalence to Microsoft Security Essentials software and also Smart Screen filtering and support for the Secure Boot adds up to the security features. And if Windows crashes it shows a diverse blue screen of death. It also provides integrated system recovery through the new refresh and reset functions. Now talking about its online service and functionality a user can log in to Windows using the "Windows Live ID" which is a Microsoft account using this users can enter services and coordinate applications and settings between devices. A few other features connected to this are sky drive cold storage service which allows apps to save file directly to sky drive. Windows 8 has something for gamers

as well it comes with a whole lot of multimedia apps under the Xbox brand which includes Xbox music, Xbox smartglass for use with Xbox 360 console and also Xbox video games can be incorporated into an Xbox live core app, which also allows users to check their game score and also view their profiles. Windows 8 also has something for people who just can't stay away from social networking by setting up a whole lot of apps with the capability to link services such as Flickr and Facebook.

To talk a little about the interface and desktop part Windows 8 introduces quite a lot of changes to the operating systems UI; by centering most of them to improve the experience on tablet computers and a lot other touch screen devices. The metro design has entirely changed the window by displaying a whole set of customizable array of blocks which link to multiple applications and programs some of which can display continually updated information through "live tiles". Windows 8 also supports a feature called Secure Boot which uses a public key infrastructure to check the reliability of the operating system which helps prevent unauthorized programs such as Bootkits from corrupting the device. Windows 8 is a whole lot different from Windows 7 not just because of all the freshly added features but also because of all the many more features that were removed.

To start with it's the start menu that is nonexistent in the new OS as mentioned earlier. A few other features removed are the support for playing DVD's from Windows Media Player the reason being the fact that the cost of licensing the necessary decoders and the pervasiveness of streaming services such as Netflix, which also means that Windows Media Center will no longer be the default on Windows 8. And file history, the new feature will replace backup and restore which was traditionally used by its predecessors, Windows 8 has also ditched the whole customize the font color as well as the color of maximize/minimize buttons, which in other words means it's almost impossible to read the text and see the buttons but don't be alarmed this is true only in case the user chooses a dark color for the border and the task bar. Hardware requirements for the Windows 8 are marginally higher than in Windows 7. Windows 8 is a promising and refreshing new operating systems with its many new features its surely is a class apart from all its previous versions, what I have mentioned above on Windows 8 is just a tiny peek into the amazing new operating systems. So go ahead guys for all those out there who are looking forward to a new, refreshing and an amazing experience in computing go for the upgrade!!!!

BEST PRACTICES

Technical communities

Inorder to enhance knowledge in various technical domains in IT, students seminars are held based on the six technical communities formed, viz. Networking, Cloud Computing, Mobile Computing, Security and Embedded Systems.

Few seminars held in this semester are: the seminar conducted by **Dona Johnson and Bineesh M.S (I MCA)** on the topic TCP/IP. The presentation consists of

physical layer, network layer, data link layer, session layer, presentation layer, transport layer and application layer. Along with the protocols.

The second seminar was conducted by **Arshitha T.M and Alvi Anto (I MCA)** on the topic Cloud Computing which included the architecture and the comparative study of cloud computing system.

The third seminar was conducted by **Alex James and Baby K. Jojo** on the topic Jail Breaking which included the introduction to jail breaking, benefits and disadvantages of jail breaking, how to jail break, different jail breaking tools.

The last session was taken by **Vineeth V. George and Rahul Krishnan (I MCA)** on the topic Firewall. The session included the introduction, types of firewall, working of firewall and the examples of firewall rules.

SEMINARS



The faculty members in the department are involved in research activities. As a part of

faculty development programme, they take part in various seminars and workshops and also publish articles in various journals.

Prof. Ambika.P participated in an International Conference in R.V college of Engineering, Bangalore on 22nd and 23rd of December 2012 and presented a research article- "Colour Emotion Based Image Retrieval".

Prof. Jyothi Manoj participated in a 3 day workshop on Data Analysis (Jan 31st to Feb 2nd 2013) held in Kristu Jayanti College, Bangalore.

EDITORIAL TEAM

Chief Editors



**Rev. Fr. Sebastian T.A, CMI,
Principal**



**Rev. Fr. Augustine George,
CMI, Head of the Department**

Staff Editors



**Prof. A. Muruganatham
Dept. of MCA**



**Prof. Jyothi Manoj
Dept. of MCA**

Student Editors



**Ms. Alisha Antony
I Sem MCA**



**Mr. Moziihrii Ado
I Sem MCA**

WORKSHOP



Dr. Sameer Kalekar, Development Director, MCA programme, Kristu Jayanti College, conducted a two- day workshop on Network Security on 22nd and 23rd of Nov, 2012 for the MCA students which helped the students to know about the nuances and intrigues of Security system which is very relevant in today's IT field.

Research Colloquium



The Computer Science department organizes 'Research Colloquium' every semester for the faculty members, to provide a platform for sharing the advancements in their area of research interest

The fifth session of Research colloquium by the dept. of computer science was conducted on 12- 01 – 13 at 11.00AM. The programme had a presentation by Mr. Bino Joseph (Dept. of Electronics) on the topic 'Understanding High Definition'.

The talk threw light upon the nuances of High- Definition technology like, the stipulation of a perfect signal source, screen resolution, pixels- progressive scan, audio enhancements etc. The session gave the audience an overview on what are the specifications that one has to be stress upon while going for electronics goods that has High Definition technology.

The programme ended with a question answer session. Rev. Fr. Augustine George, Head, Dept. of Computer Science appreciated the efforts by Mr. Bino, and handed over the certificate of appreciation.

Up Coming Events

- ★ Mirtosava - Alumni Meet on 17th Feb 2013
- ★ SHELLS 2013 – National Level Inter - Collegiate IT Fest (March 2013)