

DRONACHARYA COLLEGE OF ENGINEERING December Newsletter, 2008

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ISSUE OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY



From Editor's Desk :

"Blow blow thou winter winds thou art not so unkind As friends remembered not."

Come December and cold chilling wanton winds start blowing and fluttering on the wings of Winter-the season that brings along with it plentiful benedictions from Divine Dame nomenclatured Nature- the sincere, solemn and steadfast spokesperson of God on this Glorious Earth.



Wrapped in colorful well-woven warm woolens the Winter makes even a simpleton look chick, charming and smart. Christ descended from Heaven down to the Earth to redeen Mankind in the month of December that clinches the outgoing year and the X-mas bells ring in the New Year. Isn't it celebration time? Who can dare to deny it? But...but this is the tremendous time for students of professional courses who have to count every moment to countenance the Semester Exams- a crucial time to carve out and craft a commendable career. It is high time for our brilliant and diligent students and dedicated and focused Faculties to rise to the occasion, to gird up their loins, to be ready to accept the challenge, to remember myriad minded William Shakespeare's wonderful words:

"Readiness is all"..."Ripeness is all!"

Readiness and ripeness combined can cause miracles and work wonders .University examinations serve as a 'touchstone' to test the dynamism of Dronacharyians be they the enviable examinees or dedicated Faculties and the crew of this flagship Institution.

Go down memory lane and review the annals of Dronacharya College of Engineering and you will instantly find the radiant Result-sheets studded with the names of the pass-out starry stalwarts of the College. Seek inspiration from them and get started to enhance the luminous list of the brand ambassadors of the College. Please, remember Alfred Tennyson's motivating words:

"Great things are done when men and mountains meet These are not done by jostling in the street."

Since time and tide wait for none, go ahead and ride valiantly and vehementally on the tidal wave and return triumphantly ,glistening with flying colors ,winning laurels which will make us all proud of you. "**Godspeed you!**" these words come from the core of our hearts and take for sure these will lead you to our envisioned goals and your dream destinations.

All the best!



From HOD's Desk :

"Success is simple. Do what's right, the right way, at the right time."

The CSE & IT Department believes in doing "simple" thing right .That's why the Department has once again acquired the maximum number of merits in the previous semester result of Maharishi Dayanand University, Rohtak. Not only this, the Department also produced a result of about 90%. This exceptionally good result has proven the hard work of the H.O.D, the Faculties and the students. The Department of CSE and IT is determined to do even better this time. To ensure this we have identified the academically weak students and have been arranging special classes for them. To enrich the knowledge of the Faculties the Department always encourages the Faculties to attend seminars and conferences (both National and International).



Like always this year too the students have undertaken challenging projects like developing "*E-Tracking Distance Learning with WEB PRO"*, "*VOIP Protocol Testing Tool"*, "*Semantic Web Browser"*, "*Storage of Google Map's Data in a Server and Use it with Networking"* and many more. We have scheduled project labs on Friday which are being utilized by the students through out the day. The Department has been in talks with the industry to seize an opportunity for the students to work on real life projects. Our students are already placed in esteemed IT Companies like Infosys, L&T Infotech, Sasken, Convergys and many more. The Department of CSE & IT with its hard work and dedication is surely taking the name of the Dronacharya College of Engineering to new horizons. "I wish all students the very best for their University Exams!"

Head of the Department, (Mr. Jitender Yadav)

Live Projects Undertaken By Students :

STORAGE OF GOOGLE MAP'S DATA IN A SERVER AND USE IT WITH

The project is based on the increasing demand and popularity of Google maps. The project is an example of Google Maps usage. The project uses networking to establish a network which would have a centrally placed server which would have the entire maps' data stored on it. The server is attached to the clients and uses LAN connection to share information that it has.

The server would contain the land (property) details of a real estate company and the clients would extract this information of the required place from the server. The server would contain information as the maps of the property which are available for the sale. This would relieve the clients or the interested party from the overhead of visiting the site. This is just an application of Google maps and similar methods may be used for other such applications the project displays the idea on a small scale using LAN and can be enhanced using WAN.

Scope:

Interactive maps are becoming more and more widespread in modern web applications. Potential uses abound: real estate and tourism are two obvious domains where interactive maps can provide real added value, but there are dozens of others as well. Many of today's web applications make good use of integrated mapping software.

Two relatively recent technologies, Google Maps and Ajax, can make life considerably easier in this area. We can integrate a feature-rich map into our application in record time, by using the Google Maps API. The Google Maps API is an easy-to-use JavaScript API that enables us to embed interactive maps directly in our application's web pages. And it is easy to extend it to integrate real-time server requests using Ajax. Getting started with the Google Maps API is easy.

Ajax is the technology behind Google Maps. It is also the technology we will use to extend and integrate our Google Map into a dynamic web application. Ajax stands for **"Asynchronous JavaScript and XML."** Behind all the hype, Ajax is basically a technology that enables JavaScript code to send a request to a server, retrieve some data in response (generally in XML format, hence the X in Ajax), process this data, and update the web page accordingly.

We would be using JavaScript for the coding purpose. The API once extracted also enables us to add many features to our Google maps. So, this can be achieved by using the JavaScript.

There are essentially two types of network architectures client-server and peer-to-peer. In the client-server scheme, a central server handles all security and file transactions; in peer-to-peer networks, each machine shares its own resources and handles its own security. We would be setting up a LAN between the machines. The demo includes 3 machines, one of them acting as server and the other 2 as clients.



E-TRACKING DISTANCE LEARNING WITH WEB PRO NETWORKING

This project is targeted to design a website for "*Dronacharya Institute of Distance Education"*. The codename WebPro is coined in order to facilitate the reference to our project in the writing of its different features and tools.

The website will present complete information regarding various programs - their eligibility criteria, syllabus, structure, duration, procedure, and other information. The Focal Point of this website will be UID, i.e., user interface design. We are using Microsoft Visual Studio 2005 for website development, Macromedia flash, Photoshop for website designing. Database Connectivity is done through SQL Server 2005 and ADO.Net interface.

Web is the visual interface and what people look on the web will be manipulated and interpreted into their mind and perception. So being website designer, we will be wary about the GUI i.e., case of color effects, lights, visual effects, positioning and use of search engine friendly technology. Webpro also intends to further enhance to Cascade style sheets (CSS) and the Ajax tools to deploy in a sleeker and faster manner.

A User Case Diagram (UCD) is a type of behavioral diagram created from a Use-case analysis. Its purpose is to present a graphical overview of the functionality provided by a system in terms of actors, their goals (represented as use cases), and any dependencies between those use cases. The UCD for our project is shown:





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VOIP PROTOCOL TESTING TOOL

Traditional telephones use cables that are connected to telephone exchange .the calls are first transmitted to the nearest phone exchange which is then send to the telephone exchange to the area belonging to the person to whom we are calling. The whole process is charged by the service provider. Whereas VoIP (Voice Over Internet Protocol) enables voice calls to be carried over the Internet or other networks designed for data. The fact that VoIP transmits voice as digitized packets over the Internet means that it has the potential to converge with other digital technologies, which in turn will result in new services and applications becoming available. The wonderful thing about this is that it does not cost you anything beyond your normal ISP costs while the telephones cost much more because, telephonic system involves the establishment of base stations, maintenance of base station and more of that each call needs to be the allocation of a particular frequency.

Scope:

The purpose is on developing IP-based voice communication solutions because we believe that it is the future of telecommunications. VoIP signaling protocols have been rapidly evolving and standardization continues to be elusive. As a consequence, multiple protocols and their countless variations are the reality.

The main aim of this project is to meet these protocol testing challenges. The project focuses on testing on the VoIP protocol. VoIP is the technology used to transmit voice conversations over a data network using the Internet Protocol. The data network can be the Internet, local network, or combination thereof such as a virtual private network (VPN). Basically, by creating a messenger window in which the detailed information is required for the communication and is tested at the two ends. It deals with transaction of messages, initially when the call is made, when the call is ended and also during the duration of the call. To set up the connection between the two end points we require the IP addresses and ports. The VC++ has been used for designing the front end of the project. The Session Initiation protocol (SIP) is also used that enables the flow of voice messages. Initially the call initiates using SIP protocol. SIP is the connection that connects you to other end. Most of this is behind the scenes and requires no intervention on user part. SIP proxies are simple devices. Once a call is connected the end devices can exchange data directly. The proxy do not have to be on the path and they are only involved in the setting (and later the ending) of the session.

VoIP involves single network that replaces the current set-up of twin, separate networks of voice (PBX) and data (LAN). This provides some immediate benefits such as increased reliability and reduced total cost of ownership, as well as additional functionality such as portability in which incoming phone calls are automatically routed to the VoIP phone, regardless of where it is connected on the network.

VoIP is to offer features that improve on those offered by traditional PBX systems. VoIP offers some of the distinctive features that are not provided by traditional PBX system such as voice and e-mail, instant messaging and video. Moreover, it enables those with disabilities to access their message through voice, audio or a combination of both. Hearing-impaired people can place or receive calls from their computer without the need for a legacy TTY device.

The main benefit, apart from replacing expensive mobile phone calls with cost-effective Internet-based calls, is that with wireless VoIP the user, once logged into the network, can access their usual phone extension, with all its usual functions and features, regardless of their actual location.

<u>Team Members</u> CSE & IT VII Semester



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Madhvi Gupta (8041 - CSE)

Student's Viewpoint About The Department :



"Whatever I am or hope to be, I owe to this temple of learning" While framing these words, ABRAHAM LINCON may not have kept "Dronacharya College of Engineering" in mind, but he undoubtedly bestowed his immortal honor to every institution of learning which take up an onerous task of moulding futile lines into focused minds.

Ever since, I have been admitted in the college, I have been loosely monitored, guarded and skillfully moulded into a grown up young girl ready to take on life and its offerings in a manner envied by many. On a closer look, my strictest teachers are my guiding force and the ones which kept me going in the toughest portions of my life. With their support and immense faith in me, I also got a job in L&T Infotech. I wholeheartedly thank this institution and its every member who have been a support throughout.





Nothing of great consequence can be achieved in any field of human endeavor may it be academics, fine arts, sports, business etc. without disciplined application of mind, without persistence, without unrelenting tenacity.

Dronacharya College of Engineering holds all these qualities and has played a very important role in moulding my life. This institution has inculcated all those qualities which are required to sustain in this world of competition. A combination of teacher's efforts as imparter on knowledge, a counselor and guide made me capable and strong person who can contribute positively to the society. **Due to my persevering attitude and diligent efforts, along with the right guidance and support of my teachers, I landed up with a job in L&T Infotech.** I pledge that wherever I will go, I will maintain its pelf and glory.





Situated in a lush green environment, Dronacharya College of Engineering is one of the top most Engineering colleges in NCR that stands true to its vision,"*Gurukul Combining Tradition with Modernity*".

It has a team of experienced faculty who motivates and provides the best of morals and knowledge, grooming students into engineers who excel not only in their respective fields but in their life as well. The college provides an atmosphere that is apt for creating disciplined and well versed engineers.

Placed in the one of the topmost company "Sasken Communication Technologies Ltd.", it gives me a great honor to thank my college principal, TPO, HOD and the faculty. The college has transformed me into what I am today, making a student into an engineer who will work in the corporate atmosphere retaining the values provided by the college and always try to uphold the dignity of the college.





My college Dronacharya College of Engineering has been a path for accelerating my academic growth as well as over all personality development. It strives to continuously improve quality of education to nurture our talent to enable us to venture upon a successful career ahead. It stimulates our creative thinking and inculcates a will of leadership in us. I have got 2nd RANK in my Third Semester and got 6th RANK in the Fourth Semester in MDU. To encourage my spirit the management has awarded me a cash prize of Rs.10,000. The College has highly qualified and experienced faculty. Everyone provides a constant support, help and encouragement. Mr Jitender Yadav, the HOD of my department (CSE & IT) is indeed very supportive. He along with all our faculties always listens to all our problems and makes it a point to find a solution to it.

