DEPARTMENT OF INFORMATION TECHNOLOGY

3rd Edition August 2012

To Explore

COVERSIORY

GERMANY AND INDIA INFINITE OPPORTUNITES FOR IT



HOW TO MAKE MONEY WITH WEB-HOSTING



WHAT IS ARTIFICIAL INTELLIGENCE

AAKA#H UBISLATE
HEX GAMING MOUSE





VIDYAVARDINI'S COLLEGE OF ENGINEERING AND TECHNOLOGY

VIDYAVARDINI'S COLLEGE OF ENGINEERING AND TECHNOLOGY I - Tech Committee



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From HOD'S Desk

I am immensely proud to present to you yet another edition of VCET Information Technology's departmental magazine, "LOGIN... To Xplore". The magazine you are holding in your hands right now is the epitome of the zealous activities and profound involvement of the students as well as the staff of the Information Technology department.

This magazine will take you through a thrilling journey of the fast paced world of changing and emerging technologies thereby acquainting you readers with hitherto unknown marvels of the world of technology. For third and fourth year students, it will provide invaluable insights into what to be ready for, what skill-sets are essential in the industry and thus how to prepare themselves for employment.

The department staff predominantly the staff-in-charges of the I-Tech committee Prof. Mehul Khandhedia and Prof. Anagha Patil and the students who have toiled tirelessly for this magazine are to be highly congratulated for bringing out such a fine, informative piece of publication. I hope the IT department and the I-Tech committee will continue to strive and make mammoth efforts to keep up their good work and raise the bar of their soaring abilities.

Happy reading!!!

Prof. Chandan Kolvankar Head of Department, INFT VCET



From Staff-Incharge's Desk





We are highly delighted to present to you another edition of "LOGIN... To Xplore", the annual technical magazine of the department of Information Technology. The magazine that you hold in your hands now is an outcome of gruelling efforts of everyone involved in its making fuelled by the right mix of passion, dedication and determination.

The key purpose of this magazine is to convey to the readers the trends and developments in the field of Information Technology. You shall see a wide spectrum of subjects right from information security to upcoming mobile phones in the market. Also, the I-Tech Committee aspires to provide the students with a continual exposure to the ever increasing scope of Information Technology by enriching the knowledge base in their chosen field and thereby acquainting them with knowledge pertaining to the IT industry that awaits them.

For and behalf of the I-Tech Committee, we would like to extend our sincere gratitude to, Dr. Mohan Bhawe, our honourable Principal, for his support and guidance as also Prof. Chandan Kolvankar, H.O.D, I.T department, for constantly encouraging us to make this magazine bigger and better and infusing us with a dynamism to succeed in our endeavours. Also a special word of thanks to our dedicated team of designers and editors as also the entire I-Tech Committee who have put in their heart and soul to the making of this magazine.

We are sure you will enjoy the technological extravaganza this magazine holds.

Prof. Mehul Khandhedia STAFF INCHARGE I-Tech Committee Prof. Anagha Patil STAFF INCHARGE I-Tech Committee



3rd Edition

LOGIN

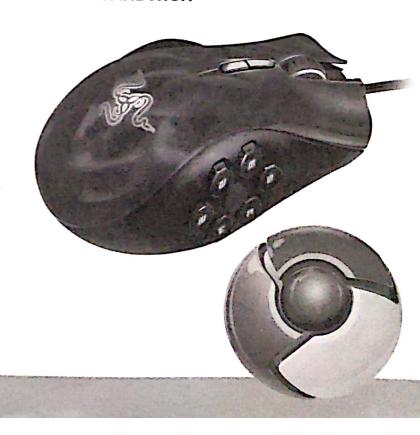
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As a big European technical market point of view, everybody in engineering must learn languages like German, Japanese, French, etc. Germany is one of the top most countries in the world as far as technology is concerned.

To mark 60 years of diplomatic relations between Germany and India, both countries are celebrating the year of Germany in India 2011-2012, based on the motto 'Germany and India Infinite Opportunities'. The goal is to intensify and expand Indo-German relations, highlight existing cooperation and stimulate the development of new projects.



Earlier in May, German Chancellor Angela Merkel visited New Delhi, where she formally inaugurated the programme. With a thematic focus on 'StadtRaume-CitySpaces', the programme will broach the implications of

rapid urbanization and challenges posed by the enormous changes the cities of both countries are facing today. Issues like mobility, energy, sustainable city development, architecture, cultural spaces and education will be prominently featured touching genres such as performing and visual arts, science, education, technology and business. The centerpiece of the project is the 'Mobile Space' a set of modern multipurpose pavilions, designed especially for the year of Germany in India by renowned German artist Markus Heinsdroff. The 'Mobile Space' will host interactive presentations by various German organizations on topics and solutions related to 'StadtRaume-CitySpaces'.

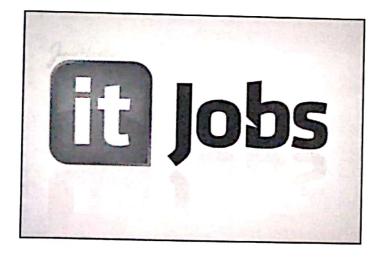


COVERSTORY



As technology grows in many such type of community, to enhance the communication between the foreign countries and us we should reduce this communication gap while learning the foreign language. Today, many business web sites/portals are built in German language. Even German universities have accepted 'Sanskrit' language instead of English as a secondary language in their schools and now in their universities many researches are going on to develop operating systems in Sanskrit language. Many of our hardware devices like SMPS, Add on cards have designed and manufactured in Germany.

So, you will find many opportunities in



Germany related to IT technical field. To learn German language is not difficult. Institutes like Max Mueller Bhavan located in Mumbai, Pune deliver the German language to students. Even Mumbai University has opened German language department where students can learn German language right from certificate course to Ph D level which you can do in Saturdays and Sundays. In Max Mueller Bhavan, they have six courses

in vacations like G I, G II, G III, M I, M II, M III.

So, other than technical subjects, if you learn foreign language, it will be helpful to you build bright career in IT world.

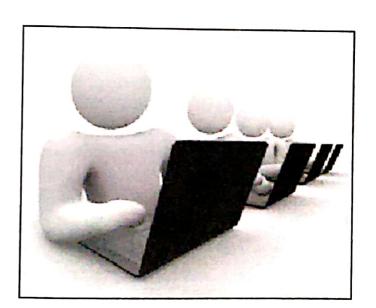
Some of the Websites for IT Jobs in Germany are:

http://www.toytowngermany.com/jobs/?p=0&l=&t=it http://www.technojobs.co.uk/info/candidate-guides/ it-jobs-in-germany.phtml

Http://www.eurosys.org/jobs/

http://www.mapsofworld.com/germany/
education-and-jobs-in-germany/germany-jobs/
engineering-jobs-in-germany.html

http://jobs.redhat.com/go/Germany-Java-Jobs/212300/ http://www.jobbind.com/germany/q-python-jobs.html http://www.theinquirer.net/jobs





COVERSTORY



GoogleClear

MOHIT SHAH

Today "sees" everything. Most Google products like Google Desktop, Google Chrome, Google Picasa, Google Earth and Google Toolbar collect data about the usage, generate a unique ID and transfer them back to Google. GoogleClean can prevent this and switches off those data transfers. It allows you to use all Google products without any headaches and without having to worry about the consequences. GoogleClean does not influence the functionality of Google products. It takes away the bad things and leaves you the good things.

LOGIN

GoogleClean - Control Google spy functionality

Switch off Google spy functionality

Many Google Applications collect Information about their users and send data back home. Google exactly knows which websites you visit and what contents you are looking for in the internet. It is almost impossible to deactivate some of these spy features manually. With GoogleClean you can switch off those data transfers easily.

Google Clean support:

Google Web Applications (Search, Mail, Maps, etc.)

Google YouTube

Google Chrome

Google Analytics Tracking (used by many websites)

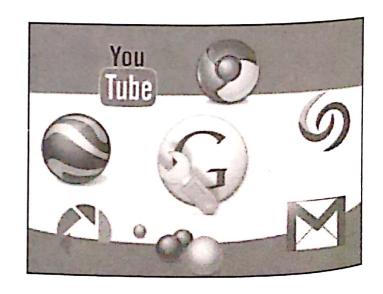
Google Toolbar

Google Desktop Search

Google Earth

Google Updater (integrated into many applications)

Google Picasa





Delete Tracking-Cookies

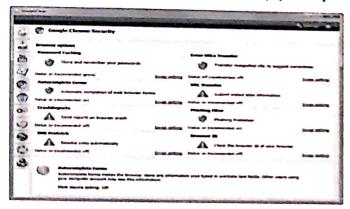
Tracking-Cookies were invented to observe your surfing behavior. Cookies are small data spies that are stored on your computer while surfing. Cookies enable websites to track much information like how long you remain on a certain web page or what for links you click.

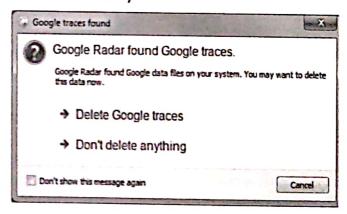
Delete Google-Traces

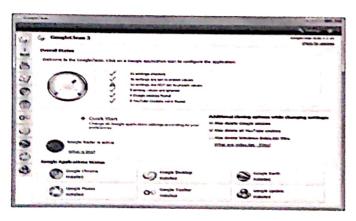
Find and delete Flash cookies (also known as Super-Cookies), form data, surfing traces and data garbage of Google applications.

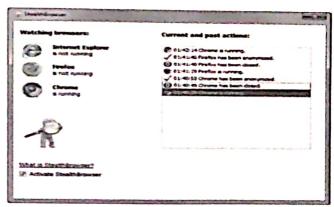
Protect your Computer automatically

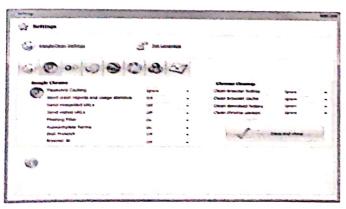
No need to delete surfing traces manually. The Google Radar is a small application that will permanently look out for Google traces and data garbage on your Computer. The Google Radar starts up with Windows and will keep your system clean automatically.

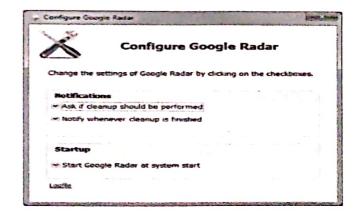












HOW TO MAKE MONEY FROM WEB HOSTING

SHRUTI MESHRAM BE IT



W. J. Cameron has wisely stated that, the money never starts an idea, but an idea is the reason for money inflow. It is very true even in the World Wide Web, as best affiliate marketing program has all the money invested at the moment. Living in and out of technology is commonplace these days.

Millions of users come online and the possibilities are innumerable as global platform is available. To make the most of it with a web hosting affiliate program is a favorable option. Everyone is interested in resources leading to financial gains. Creating website of your own just got simpler with multiple options. Selling products online after finding trustworthy web hosting services is very convenient.

Reseller hosting can be the first step of web hosting services. High capacity for storage and

bandwidth is the prime criteria for best affiliate marketing program. Monthly subscription charge can be divided amongst individuals on basis of regular fee. Web presence with URLs and search engine base marketing strategy, website or a banner and even advertisements can ensure gains.

More marketing and quality services will bring in more clients based on mutual trust and reliability. Blogs, articles, ads in form of text links can improve traffic on your hosting site. Reading regularly about the changing trends in the web hosting and marketing e-commerce options will boost business. Excellent web hosting at affordable rates will keep you in the popular list.



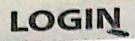


You should focus on generating a directory or web-hosting index that ensures placement of affiliated links on top of website. Writing about these web hosting affiliate programs will reflect your knowledge and improve links through the article submissions. Content analysis for regular articles and blogs is necessary for more clicks and trade. Review sites and forums for web hosting services will open a gateway for interaction with customers. A site that is always running with a functional backup is useful in the long run.

Promoting the web hosting services will bring in more clients and better revenues. Email campaigns can improve business proportions. Direct mailing process also increases earnings as you analyze the prospects and implement the methods with promotional strategies. Timely customer support will ensure more long term clients and more money.

Many individuals need the web hosting services. There are many competitors in this field. Low investment and higher gains bring many people into this business. The best affiliate marketing program can ensure income source for you find out more information and begin planning right away.







Internet Protocol Television

AMITESH KOKANE

Internet Protocol television (IPTV) is a system through which television services are delivered using the Internet Protocol Suite over a packet-switched network such as the Internet, instead of being delivered through traditional terrestrial, satellite signal, and cable television formats.

IPTV services may be classified into three main groups:

Live television: with or without interactivity related to the current TV show;

Video on demand (VOD): browse a catalog of videos, not related to TV programming.

"IPTV is defined as multimedia services such as television/ video/ audio/ text/ graphics/ data deliveredover IP based networks managed to provide the required level of quality of service and experience, security, interactivity and reliability."



Time-shifted television: catch-up TV (replays a TV show that was broadcast hours or days ago), start-over TV (replays the current TV show from its beginning);





INVENTION

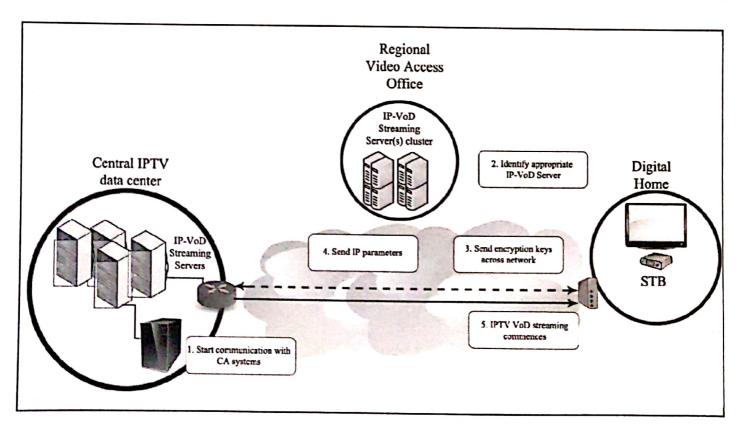
In 1994, ABC's World News Now was the first television show to be broadcast over the Internet, using the CU-SeeMe videoconferencing software.

PROTOCOLS

IPTV covers both live TV (multicasting) as well as stored video (Video-on-Demand, or VoD). The playback of IPTV requires either a personal computer or a set-top-box connected to a TV. Video content is typically compressed using either a MPEG-2 or a MPEG-4 codec and then sent in an MPEG transport stream delivered via IP Multicast in case of live TV or via IP Unicast in case of video on demand.

In standards-based IPTV systems, the primary underlying protocols used are:

- 1. Live IPTV uses IGMP for connecting to a multicast stream (TV channel) and for changing from one multicast stream to another (TV channel change).
- 2. VOD(Video On Demand) uses UDP or RTP protocols for channel streams and control is done using the Real Time Streaming Protocol (RTSP).
- 3.A network personal video recorder, like VOD, uses UDP or RTP for IPTV streams and RTSP for end-user control communications



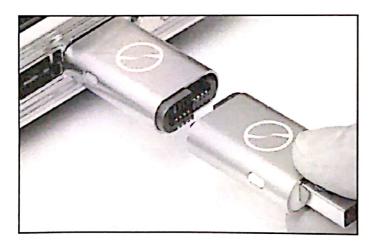


iTuin

ABHISHEK S GHATVILKAR

What is an iTwin?

iTwin is a revolutionary new file sharing and remote access device brought to you by a company called iTwin.It's like two ends of a cable, without the cable. It's as simple to use as a flash drive. It's literally plug and play. iTwin can connect any two online computers anywhere in the world. There's no in-built limit to the amount of storage you can access with iTwinhe only other "limit" is the speed of your Internet connection



How does it work?

plugged in a regular USB flash drive. Drag and drop files and folders into this window to share them - as many as you want. Leave your computer with one half of iTwin connected to it. Detach the other half of iTwin and take it with you. Wherever you go, you can remotely

access the shared files, simply by plugging the half you are carrying into any online Windows computer.

Just how secure is it?

the two halves "pair" and create a secure key that only these two halves know. No one else knows this key - including the iTwin company. This means your data is completely secure. iTwin uses 256-bit AES encryption. iTwin uses hardware crypto, not software, which makes iTwin's encryption even more difficult to crack! iTwin enables a simple and secure, one-to-one connection between any two computersYes. You can pair two halves of differently colored iTwins.





IS iTwin a USB flash drive?

No, iTwin does not store any data on itself. Instead, it provides a secure encrypted connection to a remote computer, allowing the users to access their data. Unlike a flash drive, there is no storage limit, except the size of the hard disk of the remote computer.iTwin will make use of the Wi-Fi. It does not utilise bluetooth for communication.

Requirements

Supports Win XP, Vista and 7 and Mac OS X 10.6 and above.

Requires min. 512 MB RAM Requires 15 MB hard-disk space.

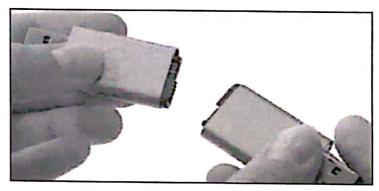
USB 2.0 port.

Requires broad-band Internet access

iTwin software self-installs on first plug-in.

Features

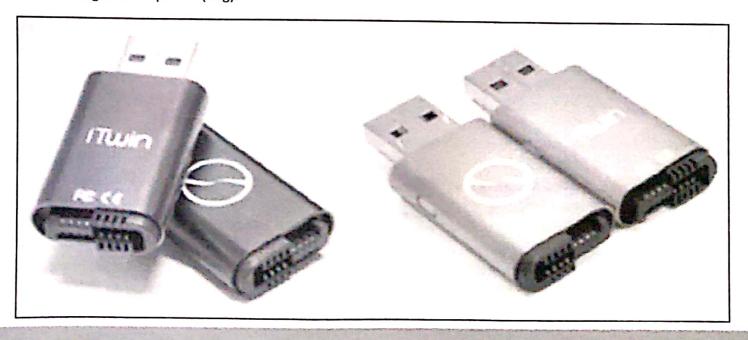
Multi-language Support No Storage Limitations Bi-Directional File Access

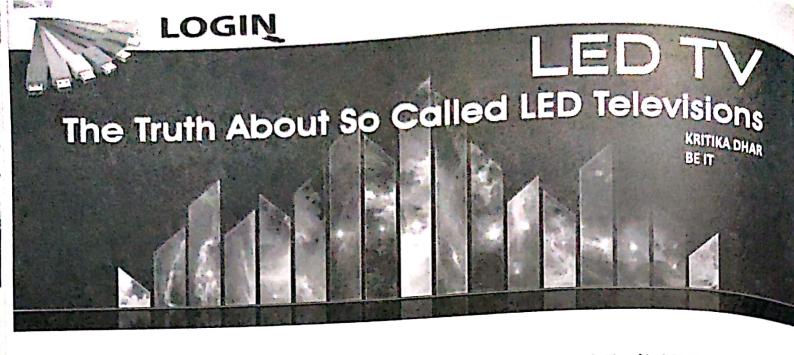


Advanced Encryption Standard (AES) 256 bit encryption is used to protect all data communication. Unlike other web services, iTwin's password is stored on itself, not on any server. If you forget your password, simply pair both halves of your iTwin, plug them into a computer and set a new password. No need for tech support!

Size and weight

Length: 3.54 inches (90 mm). Width: 0.82 inch (21 mm). Depth: 0.314 inch (8.0 mm). Weight: 0.11 pound (50g).





here has been a lot of hype and confusion surrounding the introduction of "LED" Televisions. Even many marketing representatives and sales professionals that should know better are falsely explaining what an LED Television is to their prospective customers. To set the record straight, it is important to note that the LED designation refers to the backlight system used in many newer LCD Televisions, not the chips that produce the image content.



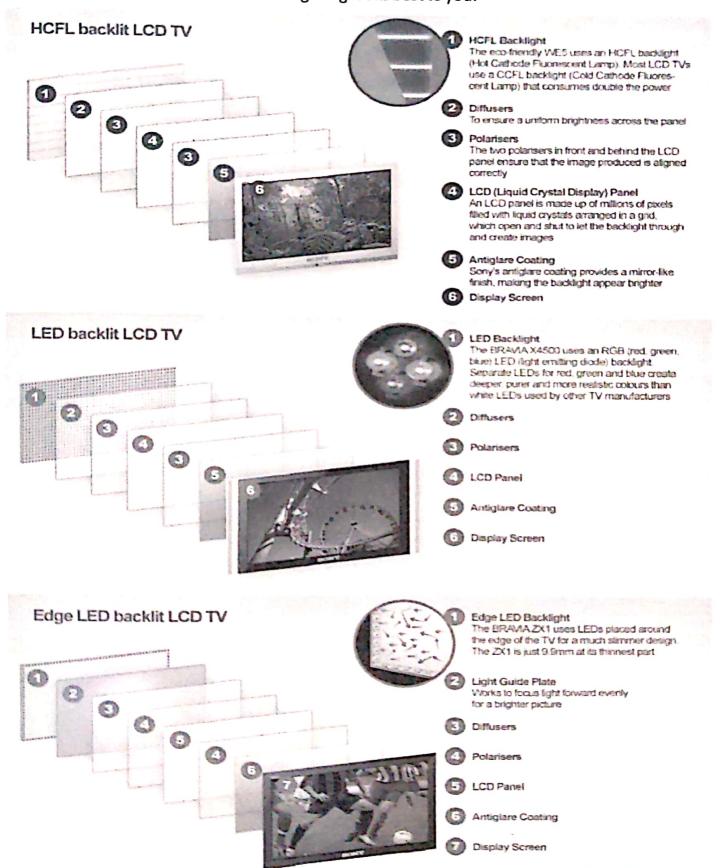
LCD chips and pixels do not produce their own light. In order for an LCD television to produce a visible image on a TV screen the LCD's pixels have to be "backlit".LED TVs are still LCD TVs. It is just that these new sets use LED backlights rather than the fluorescent-type backlights used in most other LCD TVs.In other words, LED TVs should actually be labeled LCD/LED Tvs

How LED Technology is Used In LCD TVs

There are currently two main ways that LED backlighting is applied in LCD flat panel televisions. One type of LED backlighting is referred to as **Edge Lighting**. In this method, a series LED backlights are placed along the outside edges of the screen. The light is then dispersed across the screen. The advantage of this method is that the LED/LCD TV can be made very thin. On the other hand, the disadvantage of Edge lighting is that black levels are not as deep and the edge area of the screen has a tendency to be brighter than the center area of the screen.

The other type of LED backlighting is referred to as Full-Array (also referred to sometimes as Full LED). In this method, several rows of LEDs are placed behind the entire surface of the screen. The advantage is that these sets can employ "local dimming". Local dimming means that each LED or a specific group of LEDs can be turned on and off independently within certain areas of the screen, thus providing more control of the brightness and darkness for each those areas, depending on the source material being displayed. On the other hand, LCD TVs that employ full array or full LED backlighting are thicker than LCD TVs that employ an Edge-lit LED

If you are considering the purchase of an LED/LCD Television, find out which brands and models are currently using the Edge or Full Array method and take of a look at each type when you go shopping to see which type of LED backlighting looks best to you.



Reference:-hometheater.about.com/od/televisions/qt/ledlcdtvfacts.htm

What is artificial intelligence? BHAGYASHREEKULKARNI BE IT

When it comes to making complex judgment calls, computers can't replace people. But with artificial intelligence, computers could be trained to think like humans do. Artificial intelligence allows computers to learn from experience, recognize patterns in large amounts of complex data and make complex decisions based on human knowledge and reasoning skills. Artificial intelligence has become an important field of study with a wide spread of applications in fields ranging from medicine to agriculture.

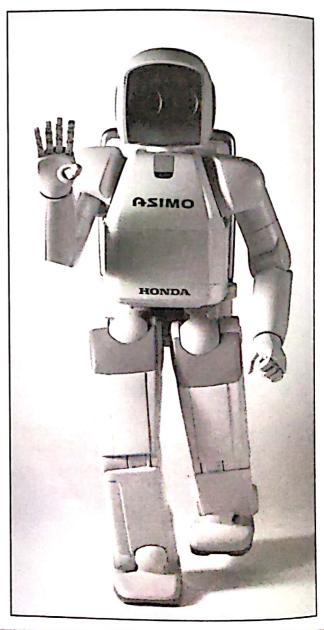
Two of the most important and most used branches of AI are neural networks and expert systems.

An expert system can solve real-world problems using human knowledge and following human reasoning skills. Knowledge and thinking processes of experts are collected and encoded into a knowledge base. From that point on, the expert system could replace or assist the human experts in making complex decisions by integrating all the knowledge it has in its knowledge base.

Neural Networks: A neural network is made of nodes arranged in different patterns representing the "intelligence" of the network. The line thickness indicates the strength of the connections.

The most important application of neural networks is in pattern recognition. Humans, through neurons in their brains, learn how to read human writing, recognize a bad apple from a good one or identify their children from a set of kids. Neural networks allow computers to use the same principles that neurons in the brains use to recognize and classify different patterns. So in a way, neural

networks are a digital represen





tation (although very simplified) of our brains. They are made of artificial neurons, connected by weights, which are indicative of the strengths of the connections. The neurons are arranged in layers, and depending on the complexity of the application, there could be a few of them or a very large number of them (hundreds or thousands). Iterative propagation of input from one layer of neurons to the next (training) is what enables the neural network to learn from experience.

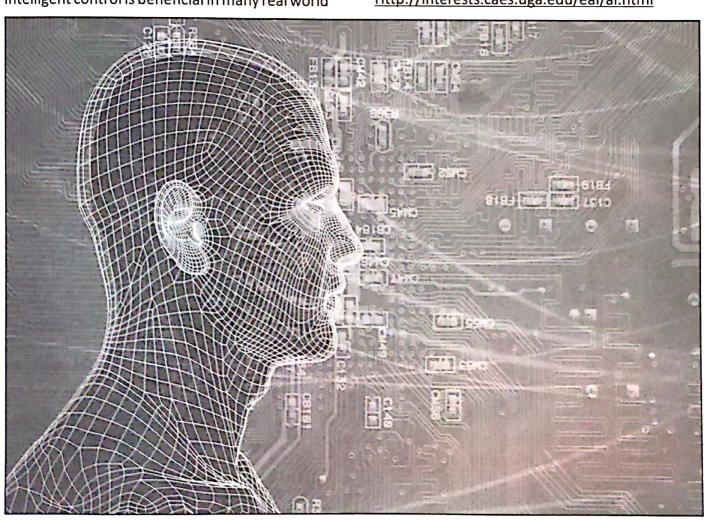
Unlike humans, when a neural is fully trained, it can classify and identify patterns in massive amounts of complex data. It could do this at high speeds that can not be duplicated by humans.

Real-World Applications of Artificial Intelligence Intelligent control is beneficial in many real world applications because it is good at solving complex problems. The flexibility inherent in AI techniques makes the technology adaptable to fields as diverse as agriculture, business, and literature.

UGA scientists have used artificial intelligence in many different ways: monitor and adjust the climate in greenhouses and poultry production houses help forecast weather and predict crop development determine when vegetables are ripe identify molecules by their "chemical fingerprints" candle eggs to determine which have cracks and other defects.

Hope all the third year students who would be taking up artificial intelligence must have got a good overview.

References: http://interests.caes.uga.edu/eai/ai.html

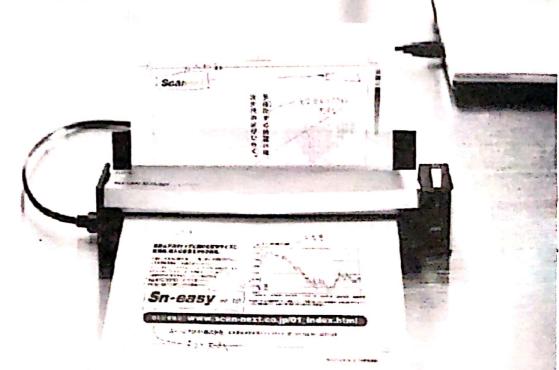




Portable Document Scanner ScanSnap

ScanSnap S1100 document scanner, is touted to be one of the smallest in the world without compromising on performance and functionality. The new ultra-portable scanner will tip the scales at slightly more than 12 ounces, cramming inside enough technology to pay homage to its larger brethren in the series despite sporting a new sleek style that allows you to easily fit it into a briefcase or purse and digitizes your documents anywhere, and at any time.

The ScanSnap S1100 was specially designed to see action with a PC or Mac, where it will rely on its innovative paper path system and fast front-side color scanning functionality to quickly scan anything ranging from contracts and long receipts to business cards and plastic IDs. A single USB cable is all it takes to power the ScanSnap S1100, where it will convert all scanned data into searchable PDF files while enabling you to quickly transform your paperwork into editable Word and Excel files. Apart form that, ScanSnap S1100 lets you to scan documents directly to Evernote and Google Docs cloud services, making it a snap to store your paperwork and photos from just about anywhere as long as you're hooked to a decent Internet connection.



The Fujitsu ScanSnap S1100 measures a mere 10.74 x 1.87 x 1.33 inches and weighs 12.3 oz, and is USB bus powered for easier use, but can still scan a letter-sized color document in 7.5s. There's also support for scanning plastic cards, such as credit cards, or scan direct to Evernote or Google Docs. Although there's no sheet feeder as on the larger ScanSnap models, you do get a continuous document feeding function which allows you to turn on scanning, feed in pages at your leisure, and then end the process later, with all documents saved concurrently. By using a highlighter, you can also create searchable keywords.



Key features of the ScanSnap S1100 include:

The Smallest and Lightest ScanSnap in the World: With an ultra-compact footprint measuring a mere 10.74 x 1.87 x 1.33 inches and weighing only 12.3 ounces, the ScanSnap S1100 is the perfect solution for digitizing your paper world anywhere, and at anytime.

Fast Scanning Speeds: With the push of a button, ScanSnap S1100 can scan a letter-size sheet of paper in an astounding 7.5 seconds (300dpi, color).

Cloud Services Support: The ScanSnap S1100 enables you to scan documents directly to Evernote and Google Docs cloud services, making your paperwork and photos easy to store, share and access from just about anywhere.

Continuous Document Feeding (CDF): Utilizing the scanner's Continuous Document Feeding (CDF) function, users are able to scan multiple-page documents into PDF by simply pushing the "Scan" button and inserting each page into the scanner.

After scanning is complete, users simply push the "Scan" button again to end the scanning task and convert the data into a PDF.

Switchable Paper Paths: With an adjustable two way paper path, ScanSnap S1100 is able to support a wider range of documents such as plastic cards, IDs and thick stock (through the strait paper path), normal paper, as well as long forms up to 34 inches (through the "L-shaped" paper path).

Intelligent Document Processing: For convenient automated scanning, ScanSnap S1100 selects the page size and page orientation while adjusting the resolution accordingly, and will recognize a document as color, black & white or grayscale.

Mark Text Function: To quickly and easily search and find documents, users can utilize a standard highlighter pen on a black & white document to automatically create searchable keywords of the highlighted text, such as an invoice number or last name.







BRINGS SMARTPHONE BACK-UP SERVICE

F-Secure.

NEETI AGRAWAL TE IT

OPERATORS CAN OFFER F-SECURE MOBILE BACKUP AS A STAND-ALONE OR BUNDLED SERVICE SAN JOSE, US:

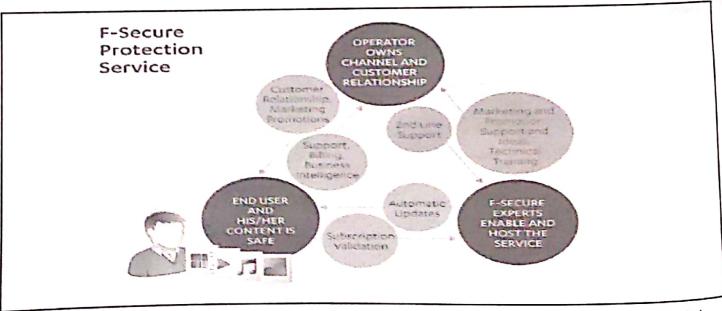
F- Secure, a leading anti-virus company, has launched Mobile Backup service through operators to meets the growing need for security of smartphones.

The F Secure back-up provides a user content security even if the device is lost, stolen or broken. The service backs up a user's mobile-specific content, such as contacts, SMS, photos and videos. The solution can also be used to ease swapping information from one phone to another, a company release said.

OPPORTUNITY FOR OPERATORS

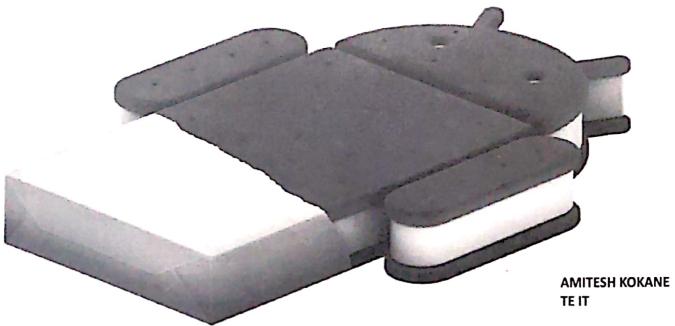
According to F-Secure, operators can offer F-Secure Mobile Backup as a stand-alone or bundled service. It provides operators with an excellent platform to increase brand leverage, revenue potential and retention rates.

"Our solution allows the operator to tap into the growing market for online services while standing out with a product that goes beyond basic security. It offers a unique user experience; it's quick and easy to install, and file backup is done with an extremely simple and hassle-free interface," said Sebastian Neittamo, solution manager at F-Secure.



//Security.ciol.com/mobile-security/news-reports/f-secure-brings-smartphone-back-up-service/157608/0/

ICE CREAM SANDWICH



What Is Android's Ice Cream Sandwich?

Ice Cream Sandwich is Google's "most ambitious" update yet. It's not just for phones but also for tablets and computers. The next Android phone version 4.0 Ice Cream Sandwich has one clear motive: to put a stop to having dozens (ok, under ten) different versions of Android on devices. It will put a stop to Android fragmentation.

There's nothing worse than your friends having a more recent Android version than what you have, and thus getting cool new features. Google said they want "one OS that runs everywhere." They're going to do this by adapting the framework and adding new APIs "to help developers optimize for all various devices." Naturally, they're going to be open source

Unlike Honeycomb, which Google says was not made open source as they worked to unify the Android OS for various devices and form factors, Ice Cream Sandwich will be open sourced for developers to do as they please with.





Everyone's going 3D! So it makes sense Google wants in on the action too; albeit in a different way to most. Ice Cream Sandwich is going to use OpenGL head tracking, so it can track the user's facial features—your eyes, two noses, big smile grin and so on—and kind of like the Kinect, the device will replicate what the user is seeing.

you will turn into a DIYer with Ice Cream Sandwich. Google's going down the maker route with the Android Open Accessory feature, which is a set of APIs that let third-party devices, such as your bike, actually sync up with your 2.3.4 or 3.1 device and send the data both ways. It will use USB for starters, and Bluetooth later, and while you need a compatible app (in the bike's case, they were using the CardioQuest app), you'll be able to write it yourself!

The Next Version of Android After Ice Cream Sandwich Will Be Called Jelly Bean. It's supposed to pack "game-changing stuff" that was originally supposed to be on Ice Cream Sandwich but didn't quite make it in time.



HEX GAMING MOUSE

MADHAVI DHONE TE IT

aming is serious business, and for those who take their frags and RTS strategies seriously, then surely highend hardware is the name of the game for such gamers. CES 2012 proved to be a potent platform for Razer to continue with their serpentine collection of gaming peripherals, with the latest one being the Razer Naga Hex gaming mouse. Their latest gaming mouse will feature half a dozen thumb buttons that was specially designed for MOBA (Multiplayer Online Battle Arena), action-RPG and hack and slash genres.

The inspiration behind the Naga Hex is its predecessor of sorts, the award-winning Razer Naga MMO gaming mouse came with a 12-button thumb grid, so the Razer Naga Hex now sports six large thumb buttons that have been optimized for the user interfaces found in action-RPG and MOBA games.

All of the six mechanical buttons can be bound to specific spells, abilities, items, and other invaluable commands in MOBA games such as League of Legends. This alone paves the way for faster and easier actuation, where a mechanical key infrastructure that uses less force to actuate allows you to have the upper hand in terms of speed over your enemies. This results in you being able to strike them before they can react, pretty much in the same way most snakes attack

with lightning fast reflexes. Not only that, with Diablo III more or less ready to roll out in due time (not taking as long as Duke Nukem forever, I hope), you can prepare yourself by getting the Razer Naga Hex beforehand since it is perfect for obsessive clicking in hack and slash games.



Special switches are used in the construction of the Razer Naga Hex's buttons, where they are able to withstand up to 250 clicks per minute – if you average that out, it amounts to slightly more than 4 clicks a second. Fret not about hyper-clicking though, as the Razer Naga Hex is said to be good for up to a whopping 10 million clicks – that translates to 40,000 minutes, which leads us to 666 hours if you decide to break it down further – now that is a whole lot of clicks (and a diabolical number to boot), so chances are you would settle for a new mouse long before the Naga Hex bites the proverbial dust.



AAKA5H

This tablet aims to be able to speak all 22 of our official languages (and the 415 not-so-officual ones)





he Aakash is an Android-based tablet computer produced by British company datawind It is manufactured by the India-based company Quad, at a new production centre in Hyderabad under a trial run of 100,000 units The tablet was officially launched as theaakash in New Delhi on 5 October 2011. The Indian HRD ministry projects introduction of an upgraded secondgeneration model called Aakash 2 in April 2012.

The Aakash is a low-cost tablet computer with a 7-inch touch screen, ARM 11 processor and 256 MB RAM running under the Android 2.2 operating system. It has two universal serial bus (USB) ports and delivers high definition (HD) quality video. For applications, the Aakash will have access to Getjar, an independent market, rather than the Android Market. The device was developed as part of the country's aim to link 25,000 colleges and 400 universities in an e-

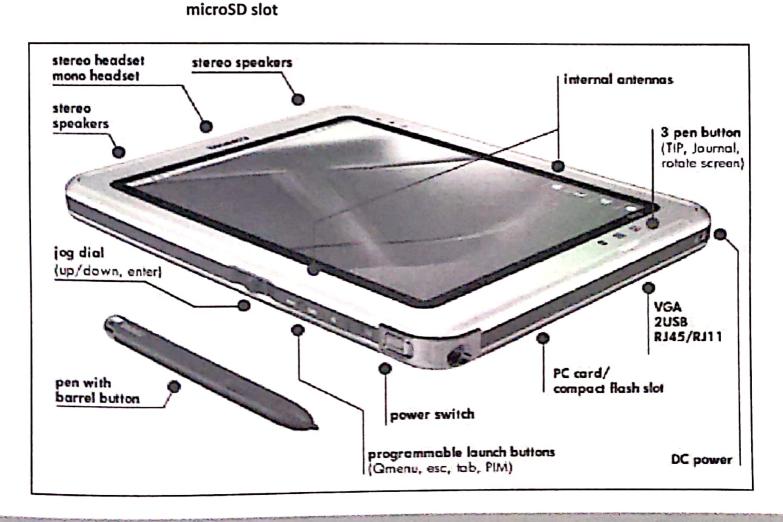
learning program. Originally projected as a "\$35 laptop", the device will be sold to the Government of India at US\$50 until further orders are received to obtain the \$35 committed price, and will be distributed to university students for free. A commercial version of Aakash is currently marketed as ubislate 7+] at a price of \$60.

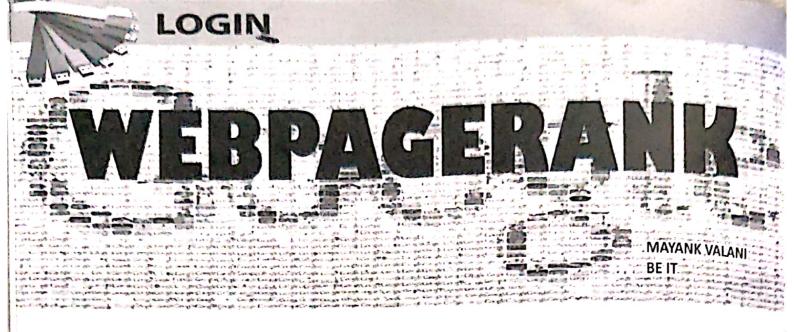
The Ubislate website accessed on 7 February 2012 informs that a lakh Ubislate 7+ devices are being pre-booked each day, bookings are being taken for March, capacity for February being sold.





Developer	DataWind	Memory	256 MB RAM
Manufacturer	DataWind	Display	800 × 480 px
Туре	Tablet computer		7 in (18 cm) diagonal
Introductory price	US\$35 / 2,250	Sound	Built in microphone; stereo earphones;
Operating system	Android 2.3		3.5mm jack
Power	2100 mAh li-po battery, 2–3 hr life	Input	Multi-touch resistive touchscreen, headset controls
СРИ	Cortex A8-700 MHz processor	Camera	None
		Connectivity	Wi-Fi (802.11 a/b/g/n)
Storage capacity	Flash memory Internal: 2 GB flash		
	External: 2 to 32 GB		





This article is dedicated to all those web masters who have put their sweat and blood in building links and posting quality content on their website but still haven't got any page rank update in 2011. I know this can be very frustrating. Moreover, some do not even bother for the page rank.

My website did not get any page rank update in January 2011 which bothered me. In terms of SEO, page rank has lost its importance but when you do reciprocal links or one way links for other sites at that point of time page rank really counts.

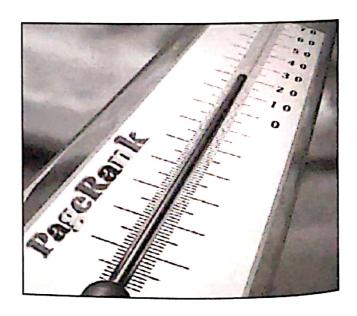
I have put a lot of effort in this website and was expecting page rank of PR2-PR3 on Google update but the results were not as

Google

PageRank Update In Progress

expected which lead me to investigate what went wrong. On searching I found that all the websites which are older than 6-8 months have their page rank updated and the new websites did not get any page rank update.

So, if your new website does not get any page rank update then there is no need to panic or worry. It seems to be a new policy adopted by Google. Moreover if you're posting quality, unique content regularly then you might have observed increase in traffic as is the case with me. So, concentrate more on what your readers want.





WebPageRank is Google's way of deciding a page's importance. It matters because it is one of the factors that determine a page's ranking in the search results. It isn't the only factor that Google uses to rank pages, but it is an important one.

To use our WebPageRank Finder to your website or blog, you must add the HTML code on right side to those pages where you want to display the webpagerank. Our WebPageRank Finder will show a small icon that displays the current Google WebPageRank of those web pages. Just follow these steps:

- 1. Click in the text box to highlight the text, right-click and 'Copy' the text.
- 2. Paste the html code into your page/s, save and upload your website.

The Google Toolbar's PageRank feature displays a visited page's PageRank as a whole number between 0 and 10. The most popular websites have a PageRank of 10. The least have a PageRank of 0. Google has not disclosed the specific method for determining a Toolbar PageRank value, which is to be considered only a rough indication of the value of a website.

PageRank measures the number of sites that link to a particular page. The PageRank of a particular page is roughly based upon the quantity of inbound links as well as the PageRank of the pages providing the links. The algorithm also includes other factors, such as the size of a page, the number of changes, the time since the page was updated, the text in headlines and the text in hyperlinked anchor texts.

The Google Toolbar's PageRank is updated infrequently, so the values it shows are often out of date.



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ome of you might have a fair idea of hacking while some others would really like to know how it is done.

These are the five basic steps of hacking.

- 1. Information Gathering (Reconnaissance)
- 2. Scanning
- 3. Gaining Access
- 4. Maintaining Access
- Clearing Tracks

To achieve these 5 steps you have to use different tools.....but here is 1 awesome toolkit by which all these results you will get by using just 1 toolkit and that's called Mantra Security Toolkit

Basically it is a collection of free and open source tools integrated into a web browser (Mozilla Firefox, to b more specific), which can be used by students, penetration testers, web application developers, security professionals etc. The main advantage about this toolkit is that it is portable, ready-to-run, compact and follows the true spirit of free and open source software. Mantra is a security framework which can be very helpful in performing all the five phases of attacks mentioned above. Apart from that it also contains a set of tools targeted for web developers and code debuggers which makes it handy for both offensive security and defensive security related tasks.

Mantra is a dream that came true. It is a collection of free and open source tools

integrated into a web browser, which can become handy for students, penetration testers, web application developers, security professionals etc. It is portable, ready-to-run, compact and follows the true spirit of free and open source software. Mantra is a security framework which can be very helpful in performing all the five phases of attacks including reconnaissance, scanning and enumeration, gaining access, escalation of privileges, maintaining access, and covering tracks. Apart from that it also contains a set of tools targeted for web developers and code debuggers which makes it handy for both offensive security and defensive security related tasks.

Mantra is lite, flexible, portable and user friendly with a nice graphical user interface. You can carry it in memory cards, flash drives, CD/DVDs, etc. It can be run natively on Linux, Windows and Mac platforms. It can also be installed on to your system within minutes. Mantra is absolutely free of cost and takes no time for you to set up.

The Mantra is a powerful set of tools to make the attacker's task easier. The alpha version of Mantra contains following tools built into it. You can also always suggest any tools/ scripts that you would like see in the next release.



OWASP Mantra is such an innovative product, a security framework built on top of a browser. Its cross platform, portable and can run out of the box. You can take it with you where ever you go in absolutely any rewritable media including memory cards, flash drives and portable hard disks. More over, Mantra can be used for both offensive security and defensive security related tasks which makes it incredible.

The intention behind developing Mantra was to provide security professionals with a platform for manual web application penetration testing by utilizing open source software and add-ons updated daily to test large numbers of exploits that are not easy to

include in automated vulnerability scanners. Some of the features of Mantra

- 1. Its built on top of the browser Saves lots of man power and learning curve. 2. It is Cross platform and flexible It can easily run on Windows, Mac and Linux natively
- 3. Its free as "free beer" and "free speech"
- 4. Its open source, so you are free to use it or modify it your own way.

All inbuilt tools kit:

http://www.getmantra.com/download/mantra-security-toolkit/index.html

Dowloadlink:

Http://www.getmantra.com/download/mantra-security-toolkit/index.html





41 Megapixel Camera

SNEHA RAMAN BE IT

If photography is your forte then this will bowl you over.

If there's ever been a nit to pick with most smartphones, it was usually related with the phone's camera. In this area, Nokia has been far ahead of the competition, with the 12MP Carl Zeiss-lensed camera on the Nokia N8 blowing the competition out of the water. Now, the Finnish company managed to raise the bar even higher with the introduction of the Nokia PureView 808 phone that features an unheard-of hold your breath-41MP camera!

At their Mobile World Congress 2012's press event earlier this year, Nokia brought the PureView teaser to fever pitch with the 41 megapixel camera of the Symbian Bellerunning Nokia PureView 808. It has a singlecore 1.3 GHz processor and 512 MB of with a display of 16:9 4" AMOLED unit of nHD (640 x 360) resolution covered with curved Gorilla Glass.

The Nokia 808 PureView uses a 41 MP sensor, which captures image data from seven

adjacent pixels and condenses it into one, resulting in stills at around 5 MP resolution with amazing detail and low noise levels. The optics are Carl Zeiss and there's a Xenon flash and an LED one acting as a video light.

Nokia has always been eager to push the boundaries of hardware, and it really outdone itself with the camera on the PureView 808. The 1/1.2 inch (largest size of any current smartphone) camera with Carl Zeiss lens boasts an incredible sensor resolution of over 41MP when capturing stills (34MP when shooting in a 16:9 aspect ratio), with a 3X lossless zoom.

It also shoots continuous-focus 1080p video, with 4X lossless zoom. At lower resolutions, zoom capabilities increase at 6X for 720p and 12X for nHD (640×360) resolutions. With the PureView 808, Nokia sets new standards in audio recording, as well. It's the first video recording device to offer distortion-less audio recording even in the harshest environments, giving users CD-like audio quality





Packing a huge sensor with almost four times the resolution of other phone cameras does not necessarily translate into better pictures. In fact, smaller pixels collect less light and reduce image quality. The trick employed by Nokia to solve this conundrum is to use only a part of the full resolution of the sensor, especially when shooting small pictures. As a result, the PureView's 808 camera defaults to a 5MP setting. Through a process called oversampling, Nokia combines seven pixels into one super pixel. This reduces image noise in low light conditions and makes noise non-existent in good lighting.

Over-sampling also allows for lossless digital zoom. As you zoom out, the over-sampling reduces until you reach the limit of the actual resolution. So, if the setting is at 10MP, you can continue to zoom out until it uses a 10MP area of the sensor. Unlike the digital zoom on

most cameras, which only "blow up" a picture, reducing image quality, in the case of PureView 808, there is no up scaling, leaving a pure 10MP image. Reducing or increasing the resolution has the same effect on the lossless zoom, i.e. at 5MP, the zoom is 3X, but at 10MP, it will be lower. Nokia has also added a new Slide Zoom feature which allows you to zoom in and out by moving your finger up and down anywhere on the display. Since there are no moving optical components, you will not hear the zooming, which can be important when you record video.

The Nokia 808 Pure View is a show stealer and no other Mobile World Congress phone will trump the camera's sensor. No matter how great your camera is, you simply can't beat 41-megapixels.



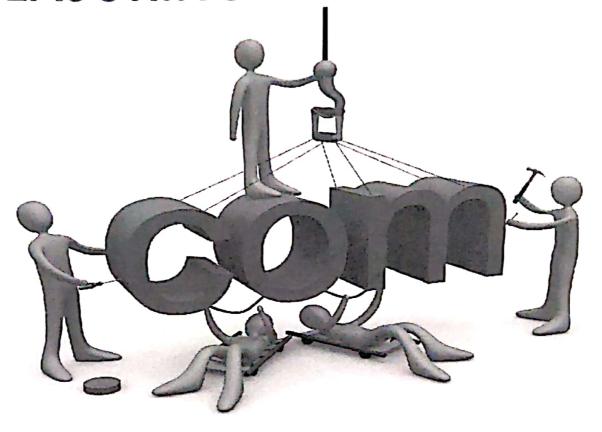
Http://www.gsmarena.com/nokia_officially_outs_the_pure_view_808-news-3901.php http://www.androidauthority.com/nokia-pureview-808-preview-specs-availability-64682/

3RD EDITION AUGUST 2012

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MEASURING THE SIZE OF WEB

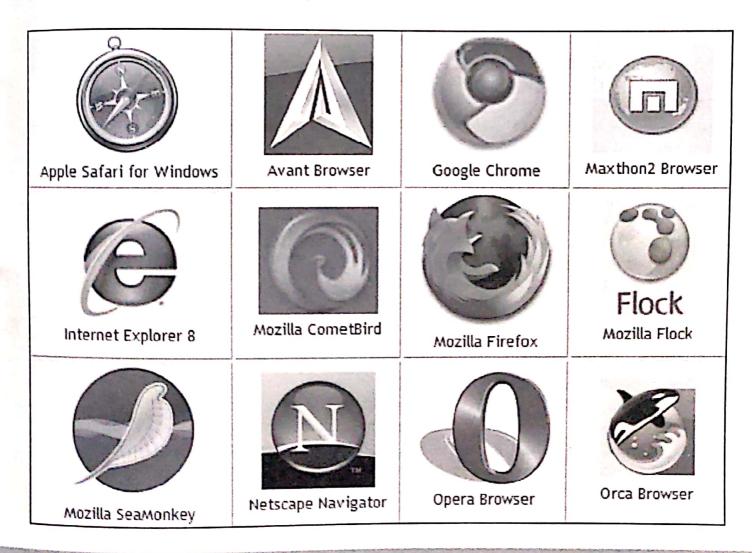


o measure the size of the Web, Lawrence and Giles had an ingenious idea based on a widely used statistical method to estimate the size of a population, which is called the capture—recapture method [680]. To illustrate the method, suppose you have a lake of fish and you want to estimate their number. Randomly select, say 100 fish, tag them, and return them to the lake. Then, select another random sample with replacement, say of 1000 fish, from the lake and observe how many tagged fish there are in this second sample. In this second sample, some of the fish may be selected more than once, noting that the chance of selecting a tagged fish will be the same for each fish in the second sample; that is, 100 divided by the total number of fish in the lake. Suppose that there were 10 tagged fish out of the 1000, that is, 1%. Then we can deduce that the 100 fish are in the same proportion relative to the whole population, that is they are 1% of the total population. So, our estimate of the number of fish in the lake in this case will be 10,000.



Using this method, Lawrence and Giles defined the following experiment with pairs of search engines to estimate the size of the Web. To start with, they tagged all the pages indexed by the first search engine as were the fish. They then chose several typical queries (575 to be precise) and counted the number of unique hits from the first search engine in the pair; that is, they counted the number of web pages returned from the first search engine. They then fired the same queries to the second search engine and measured the proportion of tagged pages from the results set; these pages are in the intersection of the results of the two search engines. As with the fish, assuming that the set of all tagged pages

is in the same proportion relative to the set of all accessible web pages, as is he intersection relative to the results set of the second search engine, we can estimate the size of the accessible web. The resulting formulae is the number of pages indexed by the first search engine multiplied by the number of pages returned by the second search engine, divided by the number in the intersection. Their estimate of the size of the Web from a study carried out in 1998 was 320 million pages, and around 800 million from a later study carried out in 1999. A further estimate from 2005 using a similar technique claims that the size of the indexable web has more than 11.5 billion pages.



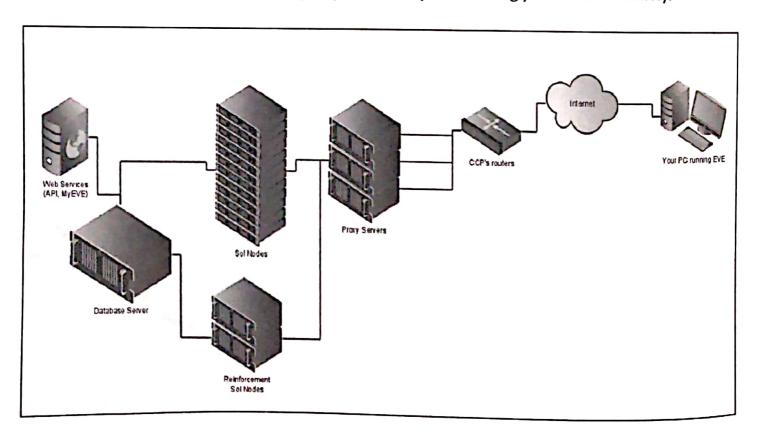


How To Surf the Internet Anonymously With Proxies

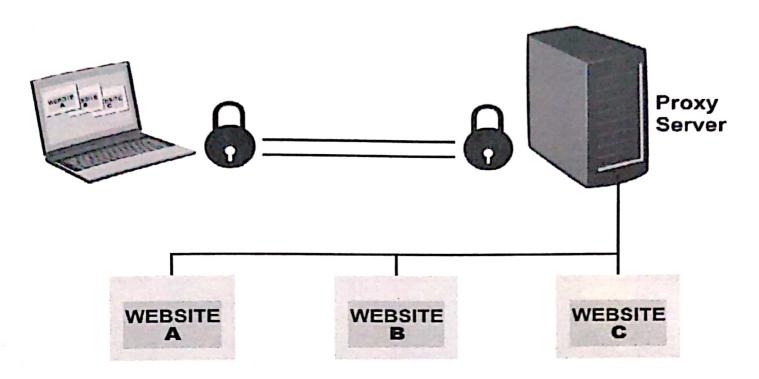
RAJ DAMANIA BE IT

ave you ever wanted to surf the net at your own pace and leisure without the risk of being followed or monitored by unwanted net enforcers or uninvited hackers? Your concern over your online privacy can be addressed if you take the right precautions and measures. One very efficient way to minimize your fear of being followed is to browse online through an anonymous web proxy. Here is how to how to surf the net anonymously with proxies and secure your online browsing experience.

Search for these proxies on a reliable and dependable search engine. You will find a large amount of web resources that store anonymous web proxies that effectively mask your server's identity, however, not all of these proxies are given out for free. While free proxy sites exist and function relatively well, paid proxy sites will allow you to customize your anonymous web proxy to your own choosing. Please be reminded that free sites will not give out proxy servers on a random basis and will not usually allow you to choose. It is strongly recommended, however, to stick to a free proxy server unless you feel that an outside party is forcefully threatening your online security.







When you have found yourself confronted with a list of anonymous proxy servers, you will find that some servers differ from others. For instance, most proxy servers will allow you to directly use the service by providing you with your very own search field. These are for the most part easier to use, as there is no need to alter your browser's settings. Usually, these proxies will allow you to simply type the site or page you want to view and access and hit the "enter" button next to the proxy server's provided search field or bar. Something to take into consideration would be some discrepancy in the outcome of some pages that may appear to be quite altered based on the technical functions and specifics of the proxy server. If this happens, it might be a good idea to go through with the other way to make use of an anonymous web proxy. These are proxy servers who adhere to user browser changes. In the event that you prefer this, you must follow the directions entailed by the server and make the necessary adjustments to your browser's settings and configurations.

Now that you have either directly entered your desired website onto the proxy server's search field or adjusted your browser's configurations and settings accordingly, you are now all set to carry on with your online business without the fear of your security being compromised or threatened. Make sure to stay on a prescribed and active proxy window so you don't fall into browsing from another window that does not share an anonymous proxy server. Be sure if you are still working under an anonymous proxy at all times and refrain from opening new windows or tabs so as not to lose track of the window your are supposed to be browsing with.



PLACEMENT RECORD OF INFORMATION TECHNOLOGY BATCH 2012

Company	Student(s) Placed	
	28	
TCS	04	
Quinnox		
Wipro	01	
Oracle financial	02	
Syntel	04	
NIIT	03	
Raw Engineering	06	
Diebold	02	
TOTAL	50	

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