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Ishare

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Ishare

Editorial

We would like to wholeheartedly thank our honorable Chairman, Secretary, Executive Director and Principal for their continuous encouragement and constant support for bringing out the magazine. We profoundly thank our Head of the Department for encouraging and motivating us to lead the magazine a successful one right from the beginning. Ishare serves as a platform for updating and enhancing upcoming technologies in Information and Communication. We are grateful to all the contributors to this magazine so far. The magazine has been sent to almost 60 institutions in and around Tamilnadu. So far we have received feedbacks and appreciations from various institutions.

We would be very pleased to receive your feedbacks. Please send your feed backs to ksrcas.ishare@gmail.com

By,

Editorial Board

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1. Windows 8 and 8.1 features and hotkeys

R.SARATHAPRIYA

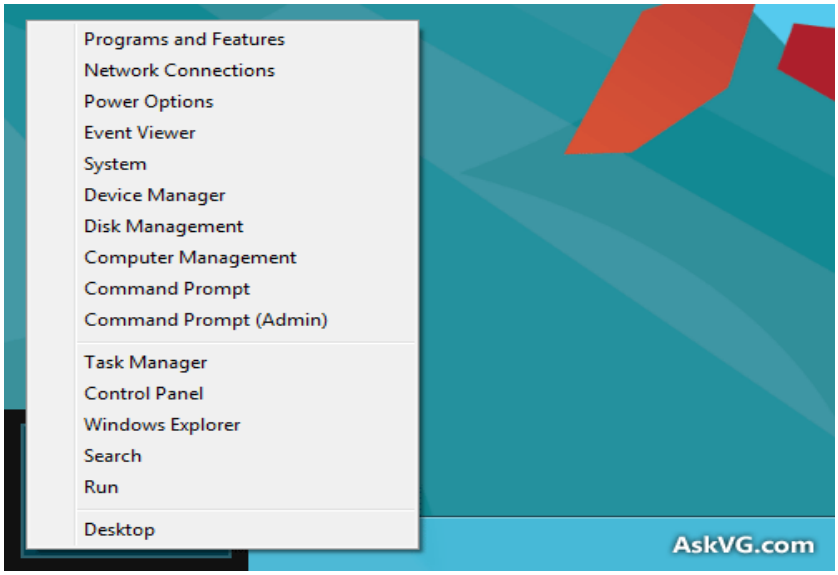
l-BSC(CS)-"B"

a. Hidden Quick Access Menu (Win+X Menu)

Although Microsoft has removed Start button and Start Menu from Windows 8 Taskbar but they have added a hidden **Quick Access Menu (QAM)** or **Win+X Menu** which provides easier access to many useful system tools such as:

- Programs and Features
- Power Options
- System Settings
- Device Manager
- Command Prompt
- Task Manager
- Control Panel
- Search
- Run

To access this menu, move your mouse cursor to extreme bottom-left corner of screen and right-click and you'll get the hidden system menu as shown in following screenshot:



You can also access it using "**Win+X**" hotkey.

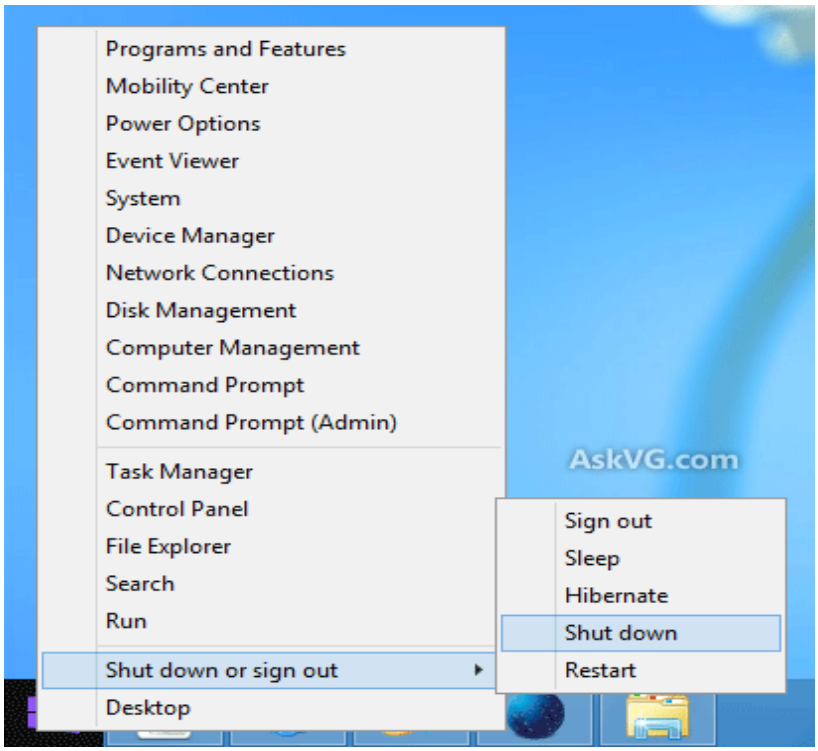
You can also check out following exclusive tutorial to customize this new menu in

Windows 8: Customize New Quick Access Menu (Win+X Menu) in Windows 8

If you are still using Windows XP, Vista or Windows 7, you can get a similar system menu in Desktop context menu or My Computer context menu using following tutorials:

- [AIO] Ultimate Tutorial to Customize My Computer Context Menu in Windows XP, Vista and 7
- [AIO] Ultimate Tutorial to Customize Desktop Context Menu in Windows Vista and 7

In **Windows 8.1**, Microsoft has added new options such as Shut down, Restart, Hibernate, Sleep and Sign out to Win+X menu as shown in following screenshot:



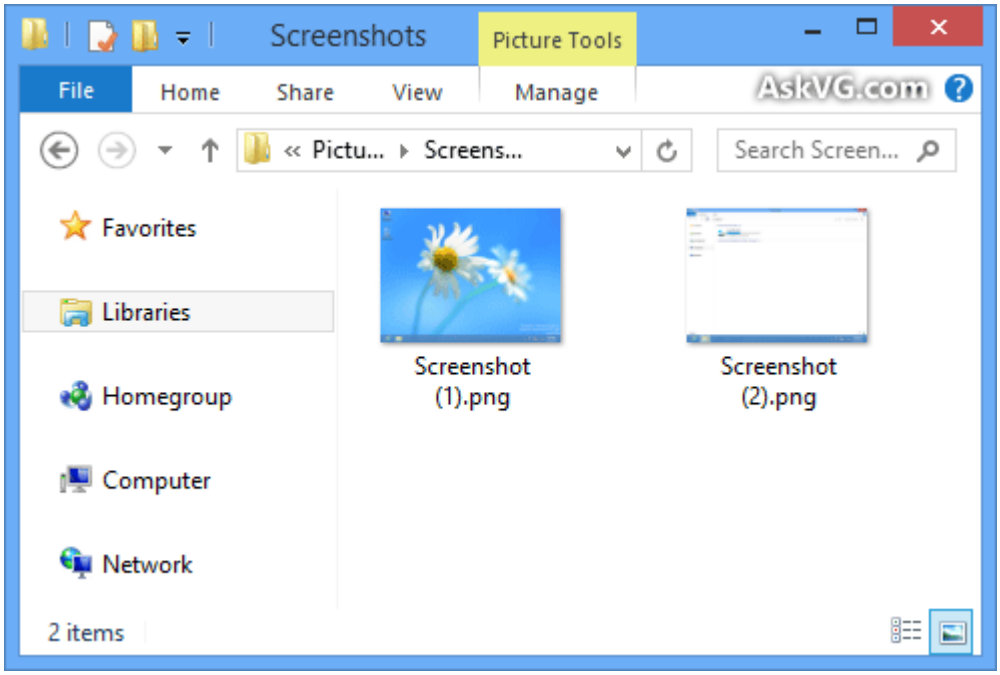
Windows 8.1 also allows to replace Command Prompt shortcut with PowerShell in Win+X Menu:

b. Auto-Save Screenshots

That's an awesome addition to Windows 8. In previous Windows versions, to take a screenshot of the screen, press "**PrntScr**" key or if we want to take screenshot of a specific

program window, you needed to click on it to make it active and press "**Alt+PrntScr**" keys. After doing this, the screenshot was captured by clipboard and you had to paste and save it using an image editing software like built-in MS Paint, Adobe Photoshop, etc.

Windows 8 makes the whole process a lot easier. You can just press "**Win+PrntScr**" keys together and Windows 8 will automatically save the screenshot in your "**Pictures**" library folder. The screenshot is saved with the name "**Screenshot.png**". If you take more screenshots, they are saved with an added number such as "**Screenshot (2).png**", "**Screenshot (3).png**" and so on.



c. New Hotkey to Access Safe Mode

In previous Windows versions, if the user wanted to boot into Safe Mode, he/she needed to press "**F8**" key at system startup but this good old and well know hotkey no longer works in Windows 8. Microsoft has replaced it with a new hotkey.

The new hotkey is "**Shift+F8**". So now you need to press "Shift+F8" keys together to access Safe Mode option in Windows 8.

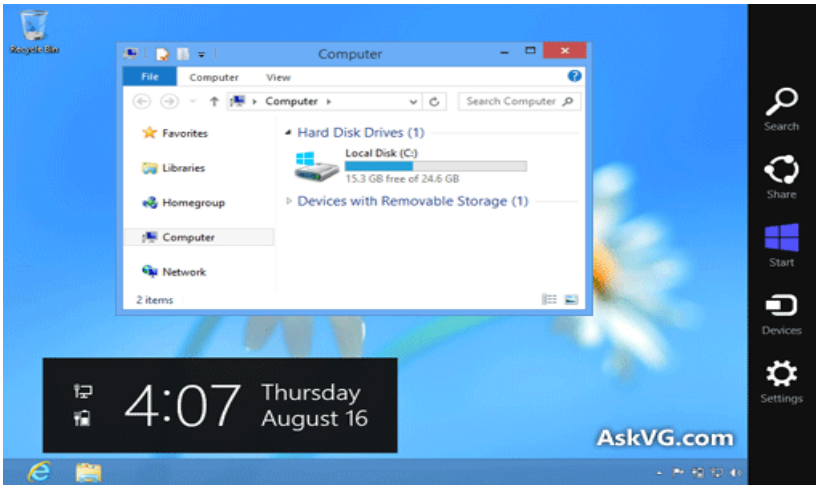
d. New Hot Corners in Screen

Windows 8 comes with hot corner feature which allows you to access some built-in options when you move your mouse cursor in a corner of your monitor screen.

When you move your mouse cursor to bottom-left corner of screen, it shows small Start Screen thumbnail which lets you go to Start screen.

When you move your mouse cursor to top-left corner of screen, it shows a list of all running Metro apps so that you can switch between apps or close an app.

When you move your mouse cursor to top-right or bottom-right corner of screen, it shows new Charms Bar where you can access Settings, Search, Share, Devices and Start Screen charm.

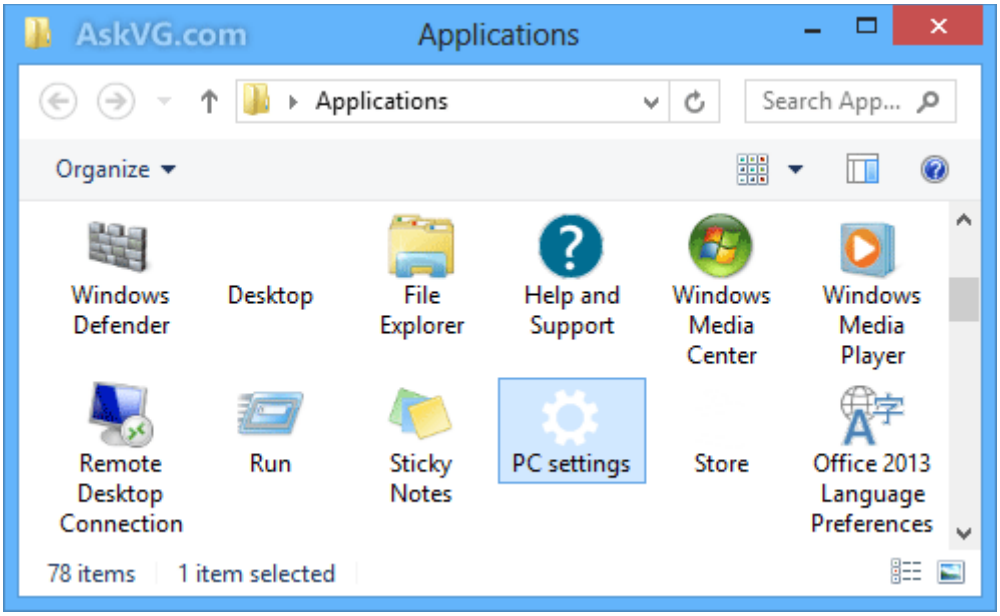


e. Hidden "Applications" Folder to Launch Metro Apps Directly from Desktop

To access a hidden folder "**Applications**" in Windows 8 use the following command:

explorer shell:::{4234d49b-0245-4df3-b780-3893943456e1}
or
shell:AppsFolder

You can execute the above mentioned command in RUN dialog box, in Command Prompt or from anywhere else. It will open a secret "Applications" folder containing shortcuts of all installed apps as shown in following screenshot:



This way you can directly launch Metro apps without going to Start Screen.You can create a shortcut for this command using a simple method given here and then pin the shortcut to Taskbar, Start Screen or put it on Desktop for quick and easy access.

f. Hidden "Slide to Shutdown" Feature in Windows 8.1

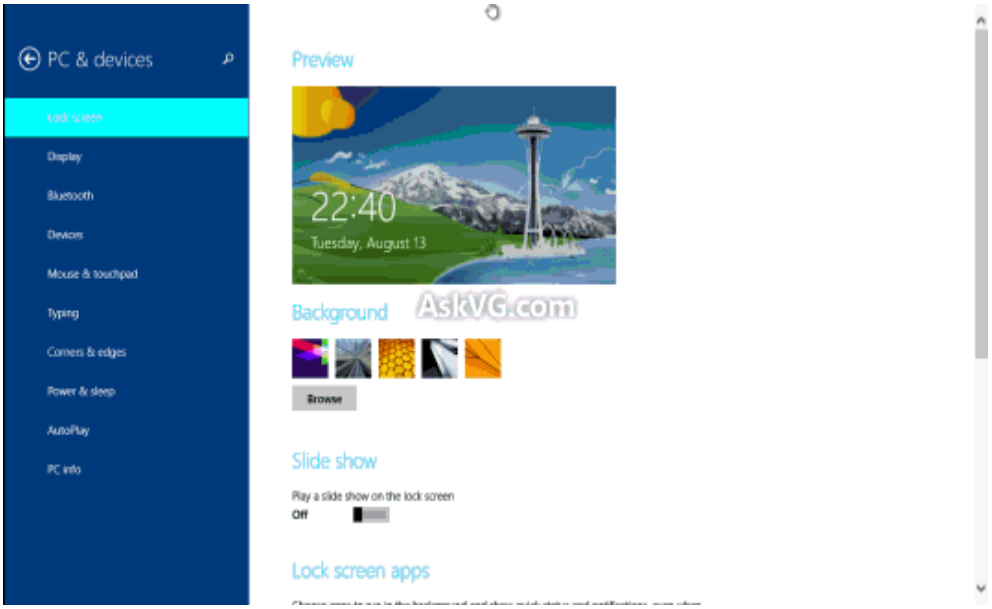
Windows 8.1 comes with a hidden "Slide to Shutdown" feature which allows you to quickly shut down your PC using a simple slide down mechanism.

g. Use Camera on Windows 8.1 Lock Screen

Windows 8.1 allows you to access your computer or tablet Camera directly from Lock Screen without log into your user account. You can take photos or create videos by using this hidden Camera app at Lock Screen.

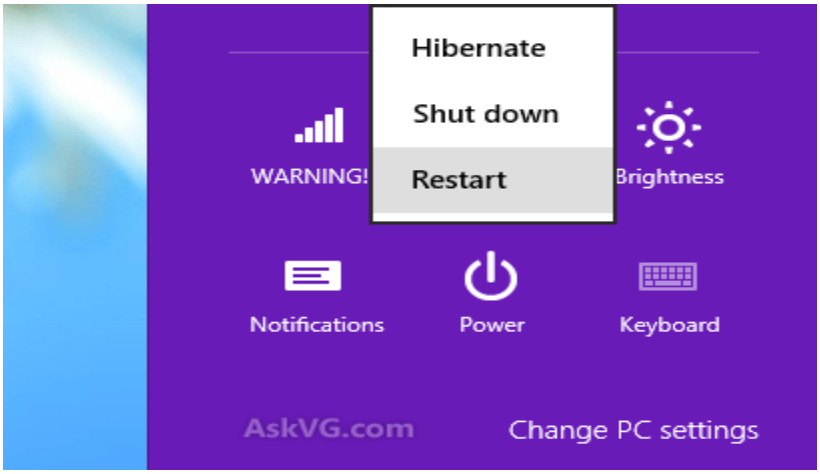
h. Hidden Trick to Close Metro Apps Permanently in Windows 8.1

Microsoft has changed the mechanism to permanently close Metro apps in Windows 8.1. Now if you simply drag-n-drop an app to bottom as you used to do in Windows 8, the app won't close permanently in Windows 8.1. Instead the app will enter into suspend mode and will continue to run in background.



i. Hidden Way to Access "Advanced Startup Screen" in Windows 8 and 8.1

Windows 8 and 8.1 comes with a hidden secret method to directly access "Advanced Startup Screen" without restarting your PC. You can access various options such as restart your PC into another installed operating system, restart in Safe Mode or choose several advanced system recovery options from this screen.



j. New Useful Hotkeys (Keyboard Shortcuts)

There are a few useful hotkeys (keyboard shortcuts) introduced in Windows 8 which can make your Windows 8 experience better. Some of them are given below:

- **Win key** - Toggles between Start Screen and Windows Desktop
- **Win+X** - Opens Quick Access Menu as mentioned in point 1
- **Win+PrntScr** - Automatically saves screenshot in Pictures folder as mentioned in point 2
- **Win+C** - Shows Charms Bar
- **Win+I** - Shows Settings panel
- **Win+K** - Launches Devices charm
- **Win+H** - Launches Share charm
- **Win+Q** - Launches Search charm
- **Win+W** - Launches Settings search page

- **Win+F** - Launches Files search page
- **Win+Tab** - Shows Metro apps switcher as mentioned in point 4
- **Win+Z** - Shows / hides App bar at Start Screen to show all apps
- **Win+Spacebar** - Toggles between input languages and keyboard layout
- **Win+,** - From Start Screen peeks at the Desktop
- **Win+Enter** - Launches Narrator
- **Ctrl+F1** - Minimizes / maximizes ribbon in Windows Explorer
- **Ctrl+Tab** – Launches All Apps list on Start Screen

2. Just a Minute

A.Gokulraj
II-B.C.A-A

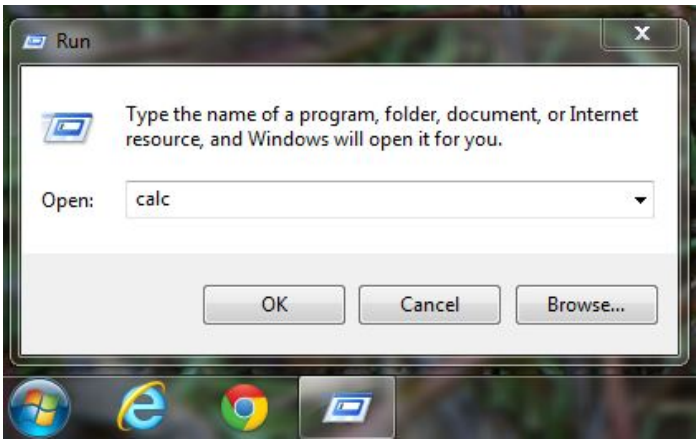
Bug(s) in Windows

There are 90% of populations using "Microsoft Windows" Operating System. Schools, Colleges, Workstations, Offices and many other places but it has some errors/bugs some times that may cause serious problems. The very first bug is,

Windows Calculator Bug

1) Ordinary Calculation $\sqrt{4} = 2 - 2 = 0$
2) Now check Windows Calculator

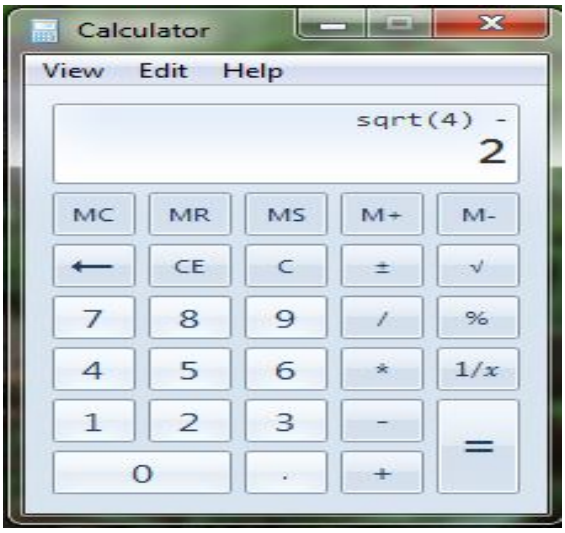
Step 1> Let's Navigate Start→Run→type "calc" and Hit Enter,
As soon as it will open Calculator dialog box.



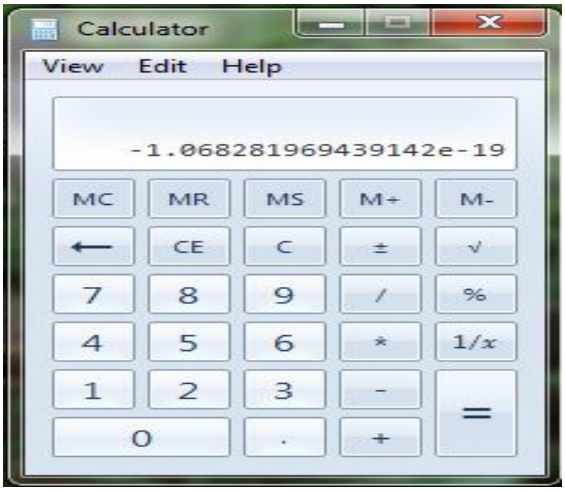
Step2> Type 4 and take Square root

The answer will be displayed as 2 (Correct answer)

Step3>Subtract 2 from the previous answer (i.e 2-2)



Step4>Now see the answer



It shows some large amount of digits (Wrong Answer)

3. LIST OF WEBSITES

P.Thamarai selvan

II BSC CS

Site	Domain	Alexa traffic rank	Type
Google	google.com	1	Search
Facebook	facebook.com	2	Social Networking
YouTube	youtube.com	3	Video-Sharing
Yahoo!	yahoo.com	4	Search
Wikipedia	wikipedia.org	6	Reference
Windows Live	live.com	7	Portal
Amazon.com	amazon.com	8	Commerce
Twitter	twitter.com	10	Microblogging / Instant Messaging / Social Media
Taobao	taobao.com	11	Commerce
Blogspot	blogspot.com	12	Blogging
Google India	google.co.in	13	Search

Site	Domain	Alexa traffic rank	Type
LinkedIn	linkedin.com	14	Social Networking
MSN	msn.com	17	News
eBay	ebay.com	19	Commerce
Google Germany	google.de	21	Search
WordPress.com	wordpress.com	22	Social Media / Blogging
Bing	bing.com	23	Search
Google China	google.com.hk	24	Search
Google UK	google.co.uk	26	Search
Google France	google.fr	27	Search
Microsoft	microsoft.com	31	Consumer Software and Technology
Google User Content	googleusercontent.com	33	Content Storage Domain
Mail.	mail.ru Ru	34	Search
Pinterest	pinterest.com	35	Social Media

Site	Domain	Alexa traffic rank	Type
Apple Inc.	apple.com	36	Consumer Software and Technology
Google Brazil	google.com.br	37	Search
PayPal	PayPal.com	39	E-commerce
Google Russia	google.ru	40	Search
Google Spain	google.es	41	Search
Google Italy	google.it	42	Search
xHamster's Free Porn Videos	xhamster.com	43	Pornography
Tmall	tmall.com	44	Commerce
FC2, Inc.	fc2.com	45	Blogging / Video-Sharing / Live-Chat
Blogger	blogger.com	46	Blogging
Internet Movie Database	imdb.com	47	Movie Database
Craigslist	craigslist.org	48	Commerce

Site	Domain	Alexa traffic rank	Type
Ask.com	ask.com	50	Search
Hao123	hao123.com	52	Search
Conduit	conduit.com	53	Search
BBC	bbc.co.uk	54	News
Go.com	go.com	55	Portal
Amazon Japan	amazon.co.jp	56	Commerce
Google Mexico	google.com.mx	57	Search
Google Canada	google.ca	59	Search
Youku	youku.com	60	Video-Sharing / News
Amazon Germany	amazon.de	62	Commerce
Adobe Systems	adobe.com	63	Software
AVG Technologies	avg.com	65	Consumer Software and Technology
Ifeng News	ifeng.com	66	News

Site	Domain	Alexa traffic rank	Type
AOL	aol.com	69	News
Rakuten	rakuten.co.jp	70	Commerce
CNN	cnn.com	71	News
MyWebSearch	mywebsearch.com	73	Search
eBay Germany	ebay.de	74	Commerce
Amazon UK	amazon.co.uk	75	Commerce
Adf.ly	adf.ly	76	URL-Shortening Service
Alibaba Group	alibaba.com	77	Commerce
ESPN.com	espn.go.com	78	Sports News
Blogspot India	blogspot.in	79	Blogging
Google Turkey	google.com.tr	80	Search
Google Indonesia	google.co.id	82	Search
Alipay	alipay.com	85	E-commerce

Site	Domain	Alexa traffic rank	Type
About.com	about.com	86	Search
Sogou.com	sogou.com	88	Search
Google Australia	google.com.au	89	Search
360buy	360buy.com	91	Commerce
eBay UK	ebay.co.uk	92	Commerce
Imgur	imgur.com	95	Image-Sharing

4. Technology News

S. Venkatesh

III B.Sc [CS] –'A'

a. IBM'S NEW CHIP TECHNOLOGY FOR HIGHER DATA FLOW

The technology will allow the increasing amounts of data to flow through network.

IBM has introduced a fifth generation of semiconductor technology, 9HP silicon-germanium (SiGe) chip-making process for high performance communications. **Silicon-Germanium** is a general term for the SiGe, which consists of any molar ratio of silicon and germanium. It is commonly used as a semiconductor material in integrated circuits (ICs) for

heterojunction bipolar transistors or as a strain-inducing layer for CMOS transistors. IBM introduced the technology into mainstream manufacturing in 1989. This relatively new technology offers opportunities in mixed-signal circuit and analog circuit IC design and manufacture.

The technology is claimed to allow the increasing amounts of data to flow through network in applications like the Wi-Fi, LTE cellular, wireless backhaul and optical communications.

According to David Harames, “Silicon-germanium technology allows the wireless operators to keep up with the growth in data traffic generated from mobile handsets.”

Before SiGe, the high-performance chips used in base stations and optical links were built using expensive, esoteric processes.

SiGe provides the necessary performance as well as integration and cost savings via its CMOS base.

The 9HP SiGe technology will offer support to the engineers who design chips for LTE cellular base stations, millimeter-wave wireless communication links, and optical communications and will improve technology for applications test equipment, automotive radar and security imaging.

IBM's 9HP SiGe technology features support for the 90nm CMOS that will allow the highest level of integration in SiGe BiCMOS technology, which offers enhanced performance, lower power and higher levels of integration compared to the current 180nm or 130nm SiGe technologies.

Additionally, the technology is compatible with IBM's 90nm low power CMOS technology platform that allows foundry clients to port a range of intellectual property circuit blocks and standard cell library elements

b. TINY MEDICAL ELECTRONICS DISSOLVE HARMLESSLY INSIDE OUR BODY

A team of researchers has created a form of electronics that can be implanted in a patient's body then forgotten about — because the implants will dissolve within a week or two. Such safe and hassle-free electronic monitoring could revolutionize medical care.

Implanting devices in the body is nothing new, but usually the risk is only worth it for life-threatening problems: a pacemaker, for instance, or an insulin pump. But there are lots of situations where constantly monitoring some vital statistic would be useful. A thermometer or blood sugar monitor could help make sure a post-operative patient is safe during the critical first week — but the stress and cost of the implantation and removal operations can't be justified.

But what if the implant was inexpensive and made of nontoxic materials that would break apart and be resorted into the body after a set period of time?

The tiny devices, which they call "transient electronics," are made from silicon and silk. Silicon is, of course, a normal material for electronics, but it is also a common organic element found in our own bodies, and small amounts of silicon are easily dissolved in water or bodily fluids. Modern manufacturing techniques allowed the team to make silicon circuits only tens of nanometers thick, meaning they are well within healthy quantities to be ingested.

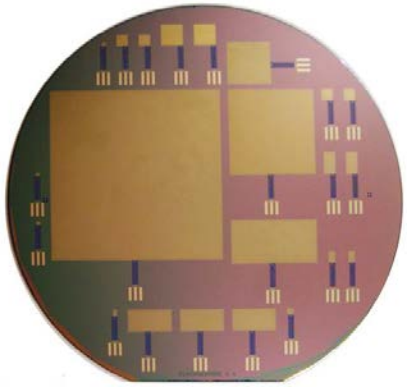
Circuits are usually mounted on plastic or some other non-soluble material. But on transient electronics, the circuit board is made of silk protein extracted from silkworm cocoons, a material that is strong but also very biodegradable. Omenetto and his team managed to adjust its properties so they can control how long it takes for the silk to degrade — meaning they can create devices that melt down after a day, a week, or more.

They use wireless power — harvesting energy from radio transmissions to operate the circuits. Rogers said that they can do non-rechargeable batteries, too, but that work isn't published yet.

So far, they've put together a temperature monitor and a tiny camera, both of which could be used for a number of purposes in the medical establishment. The next step, aside from applying for the usual testing and approvals, is to make the devices responsive to things like light or pressure, so that they could be activated or perhaps even destroyed at the command of a doctor or patient.

Beyond the body, such biodegradable devices could also safely be introduced to natural environments without the need to recover them, and without the risk of polluting or poisoning local wildlife. The research was made possible by a number of grants from DARPA, the NSF, the NIH, and others.

c. FUTURE BRAIN IMPLANTS COULD RUN ON BRAIN FUEL



Research at MIT has produced a fuel cell that could power small neural implants with the same source of energy as the brain itself: glucose. Engineers created a fuel cell that breaks down the ubiquitous sugar molecule much the same way as the body does, and it could enable a new generation of self-sustaining medical devices.

Glucose is one of the main fuels used by the body and especially the brain, so the idea of using it to power implants isn't new; in fact, it goes back as far as the 1970s. But poor energy production or questions of safety have prevented such devices from being put into use. The new system does not rely on enzymes or micro organisms, as earlier ones did, but on a stable solid-state catalyst that produces modest power and (due to its platinum construction) is unlikely to cause an immune response within the body.

The project, led by MIT associate professor Rahul Sarpeshkar, was created with brain implants in mind, with the fuel cell tapping the glucose-rich cerebrospinal fluid that surrounds the brain and fills its cavities. And it's designed to allow electronics to be connected easily, as the fuel cell is itself embedded on a silicon chip that could easily be modified for different applications.

The power it generates isn't much: up to 180 microwatts per square centimeter at maximum, but only a modest 3.4 microwatts can be counted on for a steady current. That's not

nearly enough to power something like a laptop, but the team says that for a tiny implant that only needs to activate a few key cells, it should be sufficient.

Benjamin Rapoport, who also worked on the project, warns that such devices are still a ways off: "It will be a few more years into the future before we see people with spinal-cord injuries receive such implantable systems in the context of standard medical care." But as a proof of concept, it's a major step forward.

d. IMPLANT ALLOWS REMOTE CONTROL OF HAND, NO SPINAL CORD NECESSARY

Researchers at Northwestern University have created a system by which a paralyzed hand can be controlled through an implant in the brain by "eavesdropping" on the brain's commands and relaying them to corresponding implant in the arm.

The study, led by Lee E. Miller at NWU's Feinberg School of Medicine, demonstrated that a monkey, its hand temporarily disabled by an anesthetic, could perform simple movements far better with the implants, together called a "neuroprosthesis," in place.

"We are eavesdropping on the natural electrical signals from the brain that tell the arm and hand how to move, and sending those signals directly to the muscles," said Miller.

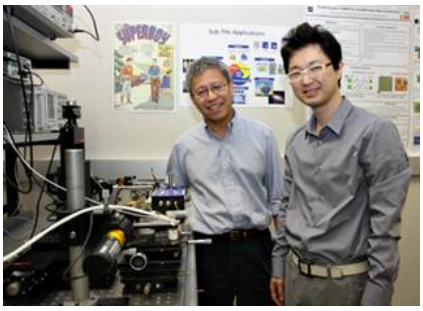
Normally, a "move" signal would originate in the brain, travel down the spinal cord, and exit a spinal nerve into a limb, where it connects with muscle systems. But the neuroprosthesis intercepts that signal using an electrode array in the brain, and sends it directly to the implant in the arm. The process takes less than 40 milliseconds.

It's a powerful advantage for people who would like to use a prosthetic limb but can't due to spinal damage. In their case, the signal to move a limb never reaches its destination, and that limb is disabled even if it is itself in perfect health.

Only further experimentation will tell whether it is possible to adapt the technology for human use, but it is at the very least a groundbreaking and highly promising piece of research.

e. CELLPHONE THAT SEES THROUGH WALLS CLOSER TO REALITY

Complementary Metal-Oxide Semiconductor (CMOS) technology is the basis of most gadgets we use today, such as smart phones, laptops and HDTVs, the team notes.



The combination of CMOS and terahertz means that we could put this chip and receiver on the back of a cell phone, turning it into a device carried in our pocket that can see through objects.

The team envisions such a device as a handy tool for finding studs in a wall, detecting counterfeit money and scanning for cancer tumors.

f. MEDICAL SENSOR THAT SWALLOW GAINS FDA APPROVAL

Proteus Digital Health's ingestible sensor technology has gained FDA approval. The sensor communicates with a patch worn on the skin that relays information to your doctor via mobile phone on when and what type of medication was taken.

An ingestible silicon sensor gained the federal government's approval. The sand grain-size device is embedded in our pill. Once swallowed, stomach fluids power it long enough to send a unique signal through body tissue to a patch worn on the skin.

The signal contains information on the type of pill swallowed and time of ingestion. The patch relays this information via the mobile phone in our pocket to our medical provider along with physiological data such as heart rate, body temperature, and activity patterns.

Once consumed, the sensor passes through our body like high-fiber food. The Ingesting Event Marker gained European regulatory approval in 2011. The approval from the FDA on Tuesday represents a major milestone in digital medicine.

Directly digitizing pills, for the first time, in conjunction with our wireless infrastructure, may prove to be the new standard for influencing medication adherence and significantly aid chronic disease management.

5. Download YouTube videos Without Any Software

M.VIVEK KUMAR

III B.COM (CA)"B"

Steps

1) Go to www.youtube.com . Open the page of the video you want to download.

2) Add "ss" between the www. and the youtube.com section of the URL and hit enter.

Example:

***Original YouTube URL*:**

http://www.youtube.com/watch?v=ykF-rktutV4&list=CLTaJ1PHDR84I&feature=plcp

Modified YouTube URL:

http://www.ssyoutube.com/watch?v=ykF-rktutV4&list=CLTaJ1PHDR84I&feature=plcp

3) This will redirect your browser to another site savefrom.net

4) Choose the format of the video you want to download. Click on the link of the format you want.

5) And your download will start in your downloader.

6. Most Dangerous Computer Viruses in History

R. Sudha
Asst. Professor, Dept of CS

Computer viruses have a relatively short history, but the damages caused by some of them pushed cyber-experts to opening a new chapter on computer viruses. Some viruses led to serious damages and affected a large number of companies, universities and even governments.

Jerusalem - 1987

This is one of the first **MS-DOS** viruses in history that caused enormous destructions, affecting many countries, universities and companies worldwide. On Friday 13, 1988 the computer virus managed to infect a number of institutions in Europe, America and the Middle East. The name was given to the virus after one of the first places that got "acquainted" with it - the **Jerusalem University**.

Along with a number of other computer viruses, including ***"Cascade"***, ***"Stoned"*** and ***"Vienna"*** the Jerusalem virus managed to infect thousands of computers and still remain unnoticed. Back then the **anti-virus programs** were not as advanced as they are today and a lot of users had little knowledge of the existence of computer viruses.

Morris (a.k.a. Internet Worm) - November 1988

This computer virus infected over 6,000 computer systems in the United States, including the famous **NASA research Institute**, which for some time remained completely paralyzed. Due to erratic code, the worm managed to send millions of copies of itself to different network computers, being able to entirely paralyze all network resources. The damages caused by the Morris computer virus were estimated at $96 millions.

To be able to spread, the computer virus used errors in such operating systems as Unix for VAX and Sun Microsystems. The virus could also pick user passwords.

Solar Sunrise - 1998

A decade later the situation didn't change, in fact it even got worse. Using a computer virus, hackers, in 1998, penetrated and took control of over 500 computer systems that belonged to the army, government and private sector of the United States. The whole situation was dubbed **Solar Sunrise** after the popular vulnerabilities in computers that run on the operating system called Sun Solaris. Initially it was believed that the attacks were planed by the operatives in Iraq. It was later revealed that the incidents represented the work of two American teenagers from California.

After the attacks, the Defense Department took drastic actions to prevent future incidents of this kind.

Melissa - 1999

For the first time computers got acknowledged with Melissa computer virus on March 26, 1999, when the virus shut down the **Internet mail system**, which got blocked with e-mails infected by the worm. It is worth mentioning that at first Melissa was not meant to cause any harm, but after overloading the servers, it led to serious problems. For the first time it spread in the **Usenet** discussion group alt.sex. Melissa was hidden within a file called *"List.DiC"*, which featured passwords that served as keys to unlocking 80 pornographic websites. The original form of the virus was sent through e-mail to different users.

Melissa computer virus was developed by **David L. Smith** in Aberdeen Township, New Jersey. Its name comes from a lap dancer that the programmer got acknowledged with while in Florida. After being caught, the creator of the virus was sentenced to 20 months in federal prison and ordered to pay a fine of $5,000. The arrest was made by a team of representatives from FBI, New Jersey State Police and **Monmouth Internet**.

Melissa had the ability to multiply on Microsoft Word 97 and Word 2000, as well as on Microsoft Excel 97, 2000 and 2003. In addition, the virus had the ability to mass-mail itself from Microsoft Outlook 97 and Outlook 98.

I Love You - May 2000

Using a similar method as the Melissa, the computer virus dubbed ***"I Love You"*** managed to infect millions of computers around the world overnight. Just like Melissa this computer virus sent passwords and usernames, which were stored on the attacked computers, back to the developer of the virus. After authorities traced the virus they found that a young Filipino student was behind the attack. The young man was released due to the fact that the **Philippines** did not have any law that would prevent hacking and spreading malware. This situation served as one of the premises for creating the **European Union's global Cybercrime Treaty**.

The Code Red worm - July 2001

This 21st century computer virus managed to penetrate tens of thousands of systems that ran Microsoft Windows NT and Windows 2000 server software. The damages caused by the Code Red computer virus were estimated at **$2 billion**. Core Red was developed to use the power of all computers it infected against the official website of the **White House** at a predetermined date. In collaboration with different virus hunters and tech firms, the White House managed to decipher the code of the Code Red virus and stop traffic as the malware started its attacks.

Nimda - 2001

Shortly after the September 11 tragedy this computer virus infected hundreds of thousands of computers worldwide. Nimda was considered to be **one of the most complicated viruses**, having **5 different methods of infecting** computers systems and being able to duplicate it.

Downadup - 2009

The latest and most dangerous virus is the ***"downadup"* worm**, which was also called *"Conficker"*. The computer security company **F-Secure** stated that the computer virus has infected 3.5 million computers worldwide. This malicious program was able to spread using a **patched Windows flaw**.

Downadup was so "successful" in spreading across the Web, because it used a flaw that Microsoft patched in October in order to distantly compromise computers that ran unpatched versions of Microsoft's operating system. But the greatest power of the worm is believed to be the ability of computers, infected with the worm, to download destructive code from a random drop point. F-Secure stated that three of the most affected countries were China, Brazil and Russia.

7. Bluefish-The Feature Rich Editor

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This is a light and fast open source editor, best suited for Web development, is available across multiple platforms and supports many programming languages. The editor has also been translated to Tamil.

Bluefish is an open source editor that is highly customizable. It supports many programming, scripting and mark-up languages. The editor can be extended by adding external programs such as filters and by also adding snippets of code. As it is an open source project, new features and language support, too, can be added. This article is based on the latest version of Bluefish 2.2.4 on Windows.

Cross-platform support:

The cross-platform support is very useful if you choose to master just one editor for all your programming or mark-up needs. If your work environment is Microsoft Windows and the home PC has a Mac or Linux OS (or vice versa), then a cross-platform editor is extremely useful.

Light and fast:

The binary size of the latest version of Bluefish (2.2.4) on Windows is around 4.2 MB. Over the years, it has improved both on features and performance. From version 1.0 to the latest,

the editor has improved on the maximum file size it can handle and also the number of files that can be opened simultaneously.

Multiple language support for the Web programming languages, in particular:

The list of programming languages that Bluefish supports is large, the most popular ones being C, C++ and Java. In mark-up languages, it supports HTML5 and ColdFusion Markup language. The scripting languages it supports are Perl, Python, Ruby, PHP, JavaScript and VBScript.

The editor is translated into 17 languages such as Russian, Japanese, Chinese and Tamil. It is best suited for Web development and deployment on Web servers.

Basic editing with Bluefish Screen layout and panels

The editor has a menu bar, toolbar, tabs for quick access HTML mark-up, a file browser and editing area. At the bottom of the screen is the command output and status bar. The complete UI layout is customizable, with an option to hide/show panels. The menus are tear able, for accessing the most frequently-used menu items quickly. The side panel on the left gives views of the file browser, bookmarks, character maps and code snippets. Bookmarks and snippets are special features in Bluefish, which we will cover in upcoming articles.
In the side panel with the file browser view, one can perform operations on files like rename, delete, create new file, etc.

Standard project support

When working on Web projects or Java, one works with a set of files, which can be grouped as one project. You can create multiple projects of the same code base or different ones.

Word processing tools

The editor comes with a rich set of word processing capabilities, like filtering the file contents, beautifying the code (specific to the language), removing empty lines, and converting files from dos2unix, removing duplicate lines, etc. Many command line utilities to process files can be added.

One interesting feature in word processing is the Synchronize Text Block feature. When multiple files are open, one can ensure a block of code is the same across the files. One of the scenarios could be that the copyright text needs to be the same across files. Another scenario could be when the footer for all Web pages needs to be exactly the same across different pages.

To ensure that, you can use the Synchronize Text Block feature. The editor allows you to mark the beginning and the end of the section you need to synchronize. Note that these sections will be overwritten in all destination files.

Spell check

Bluefish comes with the spell check feature, which is useful when developing Web pages that have a lot of content. The user has the option of selecting the language and the locale at the time of editing, based on language sets chosen at the time of installation. The editor also gives the option to 'Add to dictionary' and 'Ignore' a spelling.

Code block folding

For easy code navigation, Bluefish offers a way to collapse and expand blocks of code. The blocks are automatically identified based on the programming language. To identify more types of blocks, you can modify the default settings in 'Preferences'. For example, in PHP, Bluefish can identify the comments block, PHP code snippets, HTML sections and JavaScript functions as separate sections.

Advanced features of Bluefish File Browser – Open Advanced

When you need to browse a large project with multiple files, it would be painful to open one file at a time. Bluefish gives an option to open multiple files from a directory. Right click on a directory (left side panel) and select 'Open Advanced …' Files can be opened based on type (.css, .java, .html), a string or pattern within the file and also recursively traverse multiple sub-directories.

Bookmarking

When browsing code across multiple files or a single large file, bookmarks come handy. They let you pin a few locations of code that you would like to switch to frequently. The bookmarks are persistent across sessions of Bluefish.

Additionally, you can create bookmarks based on a pattern. This would be useful if you want to review functions that all start with a common string. In the 'Advanced Find and Replace' dialogue box, there is the option to bookmark all lines that match a string. The capability to match a regular expression makes it more powerful.

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