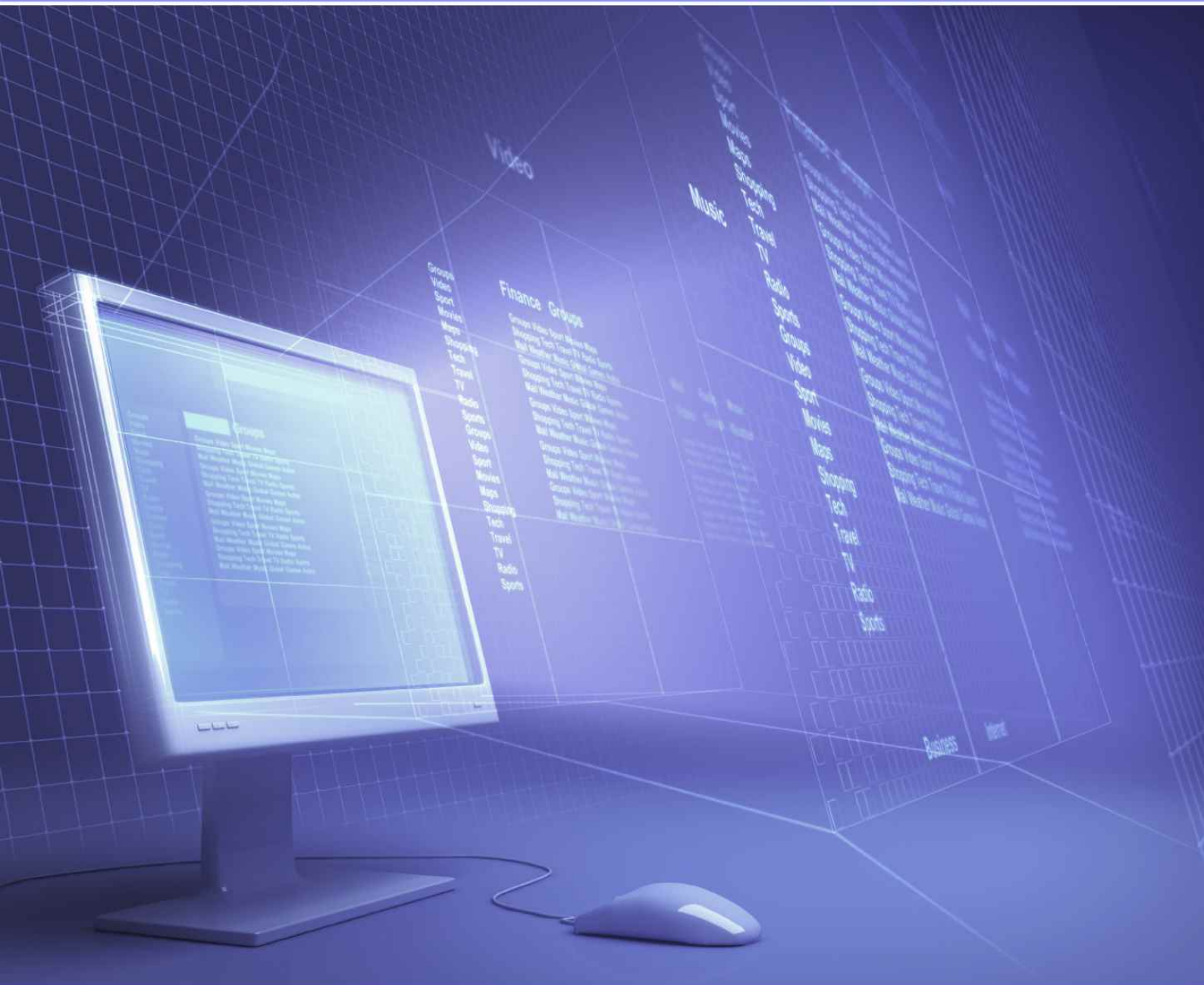


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From HOD's Desk**SURVIVAL OF THE FITTEST**

Prof. Kuttyamma A J
HOD, IT

Adaptability is an important characteristic that is required by an individual or system to survive and thrive in this era of change. Change is a constant phenomenon in our life. We cannot stop or go against the change. Rather you have to adjust yourself with the change. This has been a well-established fact from the beginning of the world. As always Charles Darwin's theory of 'survival of the fittest' is applicable even today.

The peculiarity of human nature is – each individual is different. The culture in a place (workplace or society) will unite this individual diversity. Olden days, each culture has its own individual nature and existence and it was not necessary to depend up on another. Today the scenario is completely different due to globalization and the concept of global village.

Today individuals are exposed to different cultures other than theirs in different aspects of their lives like career, entertainment, media, communication, travel etc. You will have to respect individuals, societies and cultures and appreciate differences in order to be in peace with yourself. Flexibility is the key word for adaptability.

Technology has brought many changes in our day-to-day life, whether it is communication or travel or banking or acquiring information. We cannot think life without mobiles, e-mails, ATMs etc.. If an individual think he will not embrace new technologies because they have many demerits, he will find his life miserable.

It's time to let technology guide Your Projects



Neethu S. Thulasidharan
Lecturer, DIT

Completing projects on time is critical to any business. Project delays, lack of communication within the team and escalating costs are some dreaded road blocks faced by project managers during a Project's life cycle. The root cause of delays lies in incorrect estimation, a shortage of resources or skills and many other factors. These symptoms, if noticed early in the project's life cycle can lead to early preventive action, ensuring timely delivery. Project Management software keeps raising alarms on project delays with dogged persistence, until appropriate action is taken.

Project management software isn't an automation tool for daily operations. It goes beyond that. Every project should have a set of deliverables, an assigned budget, and an expected closure time. These constitute the scope of the project. Any amount of variation in the scope of project can affect the schedule, budget and in turn the success of project. Project Management tools help Project Managers manage projects from start to finish by tracking work and it simplifies the coordination between multiple people on a team, ensuring the timely delivery of projects.

In addition to this, it helps manage costs, facilitate collaboration and make more efficient documentation. It also creates a central repository for all projects and resources and thus enables you to handle multiple projects simultaneously. The software also enables regular communication with customers and stakeholders, giving them confidence in their investment being protected. Project management software allows the sharing of files with office staff as well as outside vendors. Further, these tools have been developed with a vision to implement best practices collected from other organizations.

Online Project Management tools are cost-effective as they require little upfront investment. There are many open source free-of-cost options worth examining. Some must-check-out cost effective Project Management software include Deskaway, Basecamp, Zoho Projects, VPMi Express, DotProject, RedMine, ProjectPier etc.

Selecting a really good software tool is a challenging thing to do. Choosing the right project management software is a combination of matching needs to features, and balancing training and support considerations, budget, and software and hardware requirements. It's best to decide what kind of user you are before you spend the time to learn to use a project management tool. You should consider so many factors when choosing one, like ease of use, user friendliness, is it worthwhile?, support for users etc. It contributes a lot to the entire project development and it earns you a lot of appreciation because you've done it so well.

E-Ink – 'Ink of the Future'



Jisha G
Lecturer, DIT

Different technologies are emerging from laboratories to compete to be the e-reader screen of the future. Latest technologies that are in contention to be the display of the future are Electrophoretic pixel, 3 QI Multimode, Cholesteric LCD, Mirasol, Electrofluidic Pixels, Photonic Ink. These new technologies combines today's print publications with the flexibility, timeliness and multimedia capabilities of online publications. So that you can view the most recent e-issue of any magazine or newspaper on your e-reader

E-Ink is the proprietary “electronic paper” technology available in today's electronic readers such as Amazon Kindle and Sony Reader. Displays are high contrast, use very little power, can be read easily in both dim and bright light and are said to closely resemble the sharp look of physical ink on paper.

Advantage of Electrophoretic technology is, it is simple to produce. Limitation of Electrophoretic technology is that, it has less potential for displaying full-color images and the slow switching limits video capability and the full color is dim. E-Ink products are anywhere near the end of their evolution

Lack of color and animation support leads many to opt smart phones, i-Pads etc. Color animated E-Ink is on its way, and there are yet other sizes and formats to be rolled out — good news for newspaper readers who appreciate a larger canvas.

Pixel Qi which uses 3 QI Multimode technology which both reflects and transmits light is expected to ship this year.

KGB ARCHIVER



Sanjay Menon
S8 IT

STUDENTS CORNER

The archiving solutions that we all have nowadays are good enough so that no one can complain. But there are several good ones that you can freely choose from. Giving these terms, it's hard for a new comer to compete with all the veterans, unless it can compress files to a size as small as a cherry.

I might just have found such an application, and its name is KGB Archiver. Don't be fooled by its name, as it is not the old soviet intelligence agency. But it might just prove to be as extreme as KGB used to be. The program claims to dramatically compress your files, better than any software that's been released so far.

Compressing

When compressing, you have two output formats to choose from: KGB and ZIP. The compression level for KGB archives is quite impressive. Surely, it depends on the type of file that you're compressing. For instance, should you try to compress a bitmap image, you will get a good result, but when compressing a JPG or a similar compressed image format you won't be able to do much more.

There are 10 levels of compression that you can select: minimal, very weak, weak, normal, medium, above medium, good, very good, extreme and maximum. When working with compression levels up to the good one, you will pretty much get the same result as you would get with any other archiving application. But, when you land in the next category (very good, extreme and maximum), things do change dramatically. If you should choose the ZIP output format for your archive, just as the producer

informs you, the memory usage is very small (about 10 MB) and regardless of the mode that you select, compressing files is done instantly. Nevertheless, the compression rate is not as good as it is for KGB files.

Decompressing

If you've selected the decompress option from the main screen, you will get a simple window where you can select your source archive, the destination of your extracted files, and a file list area that contains all the files in your archive.

The Good

The program definitely deserves its credit for the compression level. Also, the featured AES-256 encryption makes your archives not only small in size, but also secure. You can also easily compress files right from Windows Explorer, since the application is integrated in the context menu.

The Bad

If you're planning on compressing larger files using the Very good (or higher) level, you will have to wait some time until the operation completes. The system resources needed for the program to run are high, and if you want both good compression and fast functionality, you must perform considerable upgrades on your computer.

The Truth

Using the higher compression levels slows down your system and it's faster to burn an entire DVD at 1x than archiving 1Mb with the maximum compression level. But for all compression levels under "very good" (including it) this is the best program I've used so far. It's also free, so give it a try and see for yourself.

So people if you are interested in this software check it out, it's freely available in the net.

THE iPad: A REVIEW BY AN APPLE-HOLIC



Nina Jose
S6 IT

Man is the only species on earth that craves for shiny objects. And to quench that need, people developed technology. The latest technology is always more shinier, sleeker, faster and what not. Usually the male species is more prone to fall for the next-big-thing to hit the market. But the trend is slowly changing and women are also getting into the groove. And one such person is me.

I am an apple-holic. Apple is a California based company that strives to satisfy man's insatiable need for more technology. Ok, so I do not own ALL their products. But, I have had the opportunity to interact with most of their products, and let me tell you, it's a treat for the senses. Apple Inc. is an American multinational corporation that designs and manufactures consumer electronics, computer software, and personal computers, Established in Cupertino, California on April 1, 1976.

When I got my Apple Macbook Pro last year, I thought I was the luckiest person on earth and that there was nothing more I could possibly want. Never did I imagine that I would actually visit the Apple home page ritually just to ogle over something for hours on end. But, with the release of the iPad, a day hasn't gone by without me day dreaming of owning one someday. With killer dimensions of 9.56" height, 7.47" width and merely 0.5" thick, it is a beauty to behold. The design itself would make anyone give it a second look and weighing barely over half a kilogram, you wonder if it truly is real.

iPad has the same kind of smart sensors that change the orientation of the screen from portrait to landscape, depending on how it's rotated. The iPad is not so much about what you can do—browse, do e-mail, play games, read e-books and more—but how you can do it. That's where Apple is rewriting the rulebook for mainstream computing. All programs arrive directly through Apple's App Store. Apple's tablet is fun, simple, stunning to look at and blazingly fast. Inside is a new Apple chip, the A4.

Regarding cost, personally I think that the pricing is pretty reasonable. Wi-Fi-only models will cost \$499 for a 16-gigabyte version, \$599 for 32 GB, and \$699 for 64 GB.

Now, before I go all high and mighty about the iPad, here are some of the disadvantages noticed by many iPad owners. There's no webcam for those of us hoping to do video chats. The battery is sealed. It's too big for your pocket. Some will decry the absence of a USB port or other connectors, which might let you hook up a printer or bolster storage.

Apple has pretty much nailed it with this first iPad, though there's certainly room for improvement. Nearly three years after making a splash with the iPhone, Apple has delivered another impressive product that largely lives up to the hype. Now to go convince my dad to get me one.

New @ IT



More efficient power saving devices, games and films in 3D and the emerging success of the cloud will be some of the biggest trends in the year 2010.

Intel's Westmere CPU generation will become the first mainstream CPU + GPU chip. Quad cores will become more popular.

The New-Gen speed bearing technology USB 3.0 and SATA 6 Gbps interface standard will become more popular.

Advanced Micro Devices is trying to beat Intel on price with its latest six-core desktop Phenom II X6 processors. The Phenom II X6 1090T processor runs at 3.2GHz and is priced at \$295, while the 1055T, which runs at 2.8GHz, is priced at \$199. Intel's Core i7-980XM desktop processor is priced at \$999, according to a price list on Intel's Web site.

Intel and Nokia are merging their popular Moblin and Maemo software platforms. This will create a unified Linux-based platform that will run on multiple hardware platforms across a wide range of computing devices including pocketable mobile computers, netbooks, tablets, mediaphones, connected TVs and in-vehicle infotainment systems. Called MeeGo, the open software platform will accelerate industry innovation.

Web giant Google launches a free public DNS service. The DNS system translates text URLs to physical IP addresses. Google claims its DNS is faster, it crawls the web constantly to update its search results. Google's move gives it access to a user's complete browsing history, though its privacy policy states it will not harvest this information or use it to serve ads.

Events



ITRAX conducted a talk on "Computer Security" by Mr. Alan Lukose, Executive Director of Deutron technologies on 19th January 2010.



A two day workshop on "ANIMATION TECHNOLOGY" was organized by ITRAX on 30th January and 6th February 2010.



A career orientation seminar on logistics, its scope and opportunities was conducted on behalf of ITRAX. The talk was delivered by Ms. Silpa Podli, Manager, Indian institute of logistics, Cochin .

A quiz Competition was also organized by ITRAX. Mr.Badal Agarwal and Mr.Jesvin of S6 IT won the first prize, whereas Mr.Sajin Seethi and Mr.Gabriel Benny of S8 IT won the second prize.

Green Computing (green IT)



Steffy Santhosh
Assistant Systems Engineer- Trainee
Tata Consultancy Services

Green computing or green IT, refers to environmentally sustainable computing or IT. It is "the study and practice of designing, manufacturing, using, and disposing of computers, servers, and associated subsystems efficiently and effectively with minimal or no impact on the environment". Greening our IT products, applications, services, and practices is an economic and an environmental imperative, as well as our social responsibility. Green computing researchers look at key issues and topics related to energy efficiency in computing and promoting environmentally friendly computer technologies and systems include energy efficient use of computers, design of algorithms and systems for environmentally-friendly computer technologies.

Approaches to green computing Algorithmic efficiency:-The efficiency of algorithms has an impact on the amount of computer resources required for any given computing function and there are many efficiency trades-offs in writing programs. A study by Alex Wissner-Gross, a physicist at Harvard, estimated that the average Google search released 7 grams of carbon dioxide. Algorithms can also be used to route data to data centers where electricity is less expensive.

Virtualization:-Computer virtualization refers to the abstraction of computer resources, such as the process of running two or more logical computer systems on one set of physical hardware. With virtualization, a system administrator could combine several physical systems into virtual machines on one single, powerful system, thereby unplugging the original hardware and reducing power and cooling consumption.

Terminal Servers:- Terminal servers have also been used in green computing methods. When using terminal servers, users connect to a central server; all of the computing is done at the server level but the end user experiences the operating system. These can be combined with thin clients, which use up to 1/8 the amount of energy of a normal workstation, resulting in a decrease of energy costs and consumption.

Power supply:- Desktop computer power supplies (PSUs) are generally 70–75% efficient, dissipating the remaining energy as heat. An industry initiative called 80 PLUS certifies PSUs that are at least 80% efficient; typically these models are drop-in replacements for older, less efficient PSUs of the same form factor.

Display:- LCD monitors typically use a cold-cathode fluorescent bulb to provide light for the display. Some newer displays use an array of light-emitting diodes (LEDs) in place of the fluorescent bulb, which reduces the amount of electricity used by the display.

Roads to Green Computing:- To comprehensively and effectively address the environmental impacts of computing/IT, we should make the entire IT lifecycle greener by addressing environmental sustainability along the following four complementary paths:

Green use — reducing the energy consumption of computers and other information systems as well as using them in an environmentally sound manner.

Green disposal - refurbishing and reusing old computers and properly recycling unwanted computers and other electronic equipment.

Green design — designing energy-efficient and environmentally sound components, computers, servers, cooling equipment, and data centers

Green manufacturing— manufacturing electronic components, computers, and other associated subsystems with minimal impact on the environment

Modern IT systems rely upon a complicated mix of people, networks and hardware as such, a green computing initiative must be systemic in nature, and address increasingly sophisticated problems. Elements of such a solution may comprise items such as end user satisfaction, management restructuring, regulatory compliance, disposal of electronic waste, telecommuting, virtualization of server resources, energy use, thin client solutions, and return on investment (ROI). Together let us make the face of IT green to make a safer world, an eco friendly world.



ON DESK

Prof. Kuttlyamma A J
 Ms. Neethu S Thulaseedharan
 Ms. Aswathy M C
 Mahesh Mohan
 Antony Palackan

"A successful man is one who can lay a firm foundation with the bricks others have thrown at him."

David Brinkley