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EDITORIAL

Innovation- STAY HUNGRY.... STAY FOOLISH!!!

Invention implies creating something new. We define creativity as the generation of novel, useful ideas and innovation as the process for bringing the best ideas to reality. Innovation is to "change something established by introducing new methods ideas, or products". Much of the technology - Internet, mobile phones, Personal Computers etc- we use today was not invented in the strictest sense of the word. Rather it was part of innovation. The innovation process starts with a need, which triggers a creative idea, which generates a series of innovative events. It is the result of a focused effort to introduce new ideas and ways of doing business. Innovation is a hallmark of leading companies as they change the game in order to stay ahead of the competition. Successful innovation is not an event; rather it occurs 24/7 enabling companies to keep pace. Innovating effectively requires concentrating on gaining the right structure, focusing on interdependencies, targeting the right capabilities and making it happen.

This year the world lost a visionary and creative genius STEVE JOBS. He was an American inventor, founder of APPLE Inc. widely recognized as a charismatic pioneer of the personal computer era. There is a strong link between Steve Jobs and innovation; it is nearly impossible to find one individual who is more closely associated with innovation than Steve Jobs. Indeed, even before his passing, Apple co-founder Steve Jobs had entered into the memorial of technology legends whose work will influence generations to come. Enterprise CIOs know only too well how Jobs' innovations at Apple have permanently altered the enterprise technology ecosystem. Whatever your feelings about Apple's products, there's no denying that creativity is at the core of Steve Jobs' legacy, and we would all do well to take away these lessons from his astonishing history of innovation.

Here are 4 lessons we can learn from Jobs.

Strive to Do More Than Seem Possible.

Learning to think in terms of limitless possibilities is the hallmark of a true innovator in any industry.

Don't worry about the cost. If there is anything that Steve Jobs proved over the years, it's that when it comes to innovation, getting it right doesn't come with a cost.

Every Last Detail Counts. Jobs examined all the minute details of Apple's products to ensure that they were on target. In the process, he delivered some of the most innovative (and sought-after) products in the world. The lesson here is that minding the details is just as important as dreaming up the impressive ideas.

Think you're better, prove you're better. Jobs proved that a leader who can make employees believe they're better than the rest is one who can drive true innovation.

Steve Jobs is undeniably an extraordinary man by any standard. He has left his mark on no less than five industries: personal computers with Apple II and Macintosh, music with iPod and iTunes, phone with iPhone, and animation with Pixar with his thirst for innovation.

"Innovation distinguishes between a leader and a follower." -Steve Jobs

EYE OS

By Sushma. M, CSE, B.E 4/4

Eye OS is an open source web desktop following the cloud computing concept that leverages collaboration and communication among users. It is mainly written in PHP, XML, and JavaScript. It acts as a platform for web applications written using the eye OS Toolkit. It includes a Desktop environment with 67 applications and system utilities. It is accessible by portable devices via its mobile front end. Eye OS is a disruptive desktop entirely usable from a web browser. It includes an office suite and some collaboration applications, as well as a full framework to develop new web apps as if they were desktop apps. It's Free and Open Source --so you can host your own system, keeping all your data under your control. It is possible to design and develop quality applications with total security, robust applications and customized, fully integrated in Eye OS and properly aligned with business goals of our clients. Written in: PHP, XML, JavaScript Platform:Cross-platform Available in Multilingual Type: Web application

Key Features:

Ubiquity: Access your documents, files and

Flexibility: From the small business to the big corporation. Also for individual use. There is an Eye OS for you!

Integration: The Eye OS architecture makes easier and faster the integration of any web application that you use.

Simplicity: From its first steps, Eye OS has been planned and created to be intuitive and easy to use.

Collaboration: Share files and edit them in a real-time collaboration suite with other users.

Privacy: Decide where your files are: You can have your own Eye OS server!

Security: Control your Eye OS. You are who manage roles and permissions for each user.

Low costs: All in one in a single platform: the best way to optimize time and resources.

ROCKMELT Browser Redefined

By Spurthy. R, CSE 4/4



RockMelt is re-imagining your online experience by creating a new web browser that makes it easy to stay in touch with friends, search online, and get updates from your favorite websites. RockMelt is a proprietary social media web browser developed by Tim Howes and Eric Vishria. The project is backed by Netscape founder Marc Andreessen. RockMelt is built first and foremost for sharing. The three biggest changes to the browser that you notice with RockMelt is that it is built around friends, feeds, and search results. The left rail is for friend. The right rail is for sites. And the top rail is for search. RockMelt integrates a unique technique for surfing the web that focuses on Google Search and Social Media, in particular Facebook and Twitter. The browser launched in private beta on November 8, 2010; in order to download it, users are required to connect their Facebook account to the website to receive an invitation email; RockMelt sup-

on Google's open-source project Chromium, a cross-platform family of browsers (available for Windows, Mac and Linux) that use the open-source web layout engine WebKit—jointly built by Apple, Google and the open-source community—but have the JavaScript engine replaced by Google's own V8, also open-source JavaScript engine developed by Google. Additional features of RockMelt that give it an edge over other browsers:

It would have multiple modes for browsing, search, following social data streams, and launching Web applications

The home page would be a stream reader which brings together real time streams from across the Web (which Facebook now has with Friendfeed).

IM, email, and public messages (status updates and Tweets) would be always accessible in the toolbar or a sidebar

It would support a variety of Web apps which could be launched seamlessly within the browser without going to a Website and logging in.

Real-time search and alerts from across the Web (social stream, news etc).

PHISHING - AN EMERGING ONLINE THREAT.

Sri Harsha. A, CSE -A, B. E 4/4

Phishing refers to luring techniques used by identity thieves to fish for personal information in a pond of unsuspecting Internet users. The criminals deceive Internet users into disclosing their bank and financial information or other personal data such as usernames and passwords.

Phishing includes many different types of attacks, including:

- Deceptive attacks, in which users are tricked by fraudulent messages into giving out information.

- Malware attacks, in which malicious software causes data compromises.

- DNS-based attacks, in which the lookup of host names is altered to send users to a fraudulent server.

Phishing targets many kinds of confidential information, including user names and passwords, social security numbers, credit card numbers, bank account numbers, and personal information such as birthdates and mothers' maiden names.

4 While legal remedies can and should be pur-

are an integral component of any long-term solution.

How Is Phishing Committed?

In a typical phishing scheme, criminals who want to obtain personal data from people online first create unauthorized replicas of (or "spoof") a real website and e-mail, usually from a financial institution or another company that deals with financial information, such as an online merchant.

The e-mail will be created in the style of e-mails by a legitimate company or agency, using its logos and slogans. Phishers typically then send the "spoofed" e-mails to as many people as possible in an attempt to lure them in to the scheme.

The Impact of Phishing

Phishing has distinct types of impact, both domestically and internationally, that are of concern to the commercial and financial sectors:

- 1) Direct Financial Loss
- 2) Erosion of Public Trust in the Internet
- 3) Difficulties in Law Enforcement Investigations

Prevention and Reporting Checklist for Phishing Schemes

One of the most basic measures that government and the private sector are taking to protect the public from phishing is the provision of specific advice to the public about how to avoid phishing schemes and how to report phishing schemes.

Prevention: What to Do

Protect your computer with anti-virus software, spyware filters, e-mail filters, and firewall programs, and make sure that they are regularly updated.

Ensure that your Internet browser is up to date and security patches applied.

Be suspicious of any e-mail with urgent requests for personal financial information or threats of termination of online accounts.

When contacting your financial institution, use only channels that you know from independent sources are reliable (e.g., information on your bank card, hard-copy correspondence, or monthly account statement), and don't rely on links contained in e-mails, even if the web address appears to be correct.

Always ensure that you're using a secure website when submitting credit card or other sensitive information via your Web browser.

Regularly log into your online accounts.

Regularly check your bank, credit and debit card statements to ensure that all transactions are legitimate.

Prevention: What Not to Do

Don't assume that you can correctly identify a website as legitimate just by looking at its general appearance.

Don't use the links in an e-mail to get to any web page, if you suspect the message might not be authentic, call the company on the telephone, or log onto the website directly by typing in the Web address in your browser.

Avoid filling out forms in e-mail messages or pop-up windows that ask for personal financial information.

You should only communicate information such as credit card numbers via a secure website or telephone.

PALIMPOST

Information convergence using sticky notes

By P. G Sri Kiran, B.E 4/4, CSE- A

In today's world, the digital information retrieval experience is inherently a sparse device-centric activity. Users rely on the ability of the currently used device to supply the requested information, in some disconnection from past activities on other devices. There is a growing need to develop new methods of connecting cross-context information retrieval sessions. We present PalimPost, a converged system for storing, searching, and sharing digital and physical world information using sticky notes and mobile devices.

WHAT IS PALIMPOST?

PalimPost is a system for digital-physical and cross-device information convergence using sticky notes and mobile devices. The mobile application extracts contextual cues from a user's physical environment and activities, and connects them to the user's digital world research. An automatic topic categorization process aids the users in organizing the relevant information into the research domains in a just-in-time manner. Whether a user is writing down a shopping list on a sticky note after surfing the internet at home or checking

out hundreds of products at hand in a physical store, PalimPost integrates information from different research sessions to form a seamlessly connected experience for the user.

HOW DOES THIS WORK?



PalimPost extracts contextual cues from a user's physical environment and activities, and connects them to the user's digital world research. Subsequently, the system presents systematically categorized information that is relevant to the moment of interaction in a just-in-time manner. PalimPost uses physical sticky notes with embedded QR codes, as well as virtual sticky notes on mobile devices. The system incorporates Automatic Speech Recognition (ASR), Optical Character Recognition (OCR), and Natural Language Processing (NLP) techniques for understanding and categorizing the content.

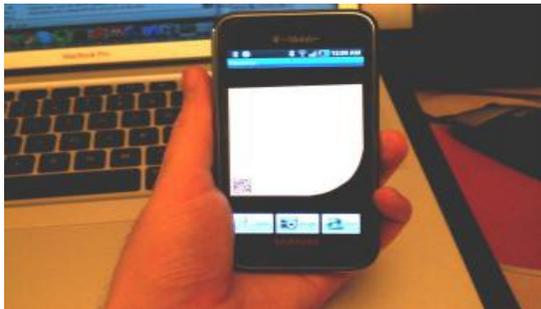
TECHNICAL DESCRIPTION OF THE SYSTEM

Physical Sticky Notes: In a desktop environment, the users can use a

physical sticky note to store the current state of work. They can use a pen to write a short message on the note and in the moment of scanning the digital information is attached to the note. Scanning is done using the camera attached to the computer, which is constantly activated as waiting for a QR code to be scanned. When the code is scanned, in order to capture a full sensory view of the computer, the application takes a screenshot capture, records the URLs of the open tabs of the Internet browser, and records a sound message and the image seen through the camera. Each of these aspects carry a wealth of contextual information on the intention and status of the user in the moment of recording, so when they are replayed, the users can easily be reminded of what they were doing. All the information is sent to a web-service over an HTTP session, which stores the information in a cloud associated with the unique ID that was given to the note.

Virtual Notes: When a user is out of the house, for example in the store, he can use his phone's camera to scan QR codes on products, or take pictures, sound and video clips. The recommendations that other people give to the user at the store, whether sales representative or fellow customers, can also be recorded and provide a more lively version of product reviews. An application on the smart-phone cre-

virtual PalimPost note on the screen, where the recorded information accumulates. The user's speech is transcribed and appears as text on the virtual note, and textual cues are also searched in the images, while the data from any scanned QR codes is added. Naturally, any acquired information is sent to the server.



Sharing PalimPost Notes: The users can share their recorded experiences, either physically or virtually via their social network.

USAGE SCENARIOS

Buying New Shoes: With the flourishing of e-commerce websites in the past decade, online shopping experience has improved tremendously. A customer no longer needs to compare prices among stores on the street. All the brands and prices are neatly arranged in tables on WebPages. However, only at a physical store can a customer touch and feel the actual products. In fact, for any wearable products such as shoes, a customer often risks wasting time buying products that don't end up fitting nicely due to the discrepancy

between expectation from online research and findings of the real products in physical stores.

Dinner Preparation: Initially a chef goes online to search for existing dishes using lobster meat, and saves her findings on a PalimPost sticky note marked "Lobster Dish". She also records a short voice message of herself saying, "Lobster could go very nicely with asparagus or garlic." Later, she goes to the market. She finds some asparagus and records a new message about the smell and texture of it. The system links her transcribed voice message with the existing PalimPost sticky note regarding asparagus. When she returns, the chef scans the physical PalimPost note to retrieve all her online exploration and the sensory experience in the market. She now has a better idea of how to cook a lobster with asparagus.

RACETRACK MEMORY

By A. ChandraVyas, CSE- B, B.E 4/4

IBM developed a new technology "racetrack memory" which is an entirely new way to store information: a memory chip with the huge storage capacity of a magnetic hard drive.

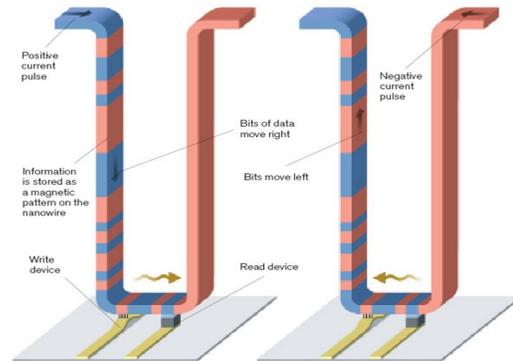
Both magnetic disk drives and existing solid-state memory technologies are essentially two-dimensional relying on a single layer of either magnetic bits or transistors. Both

technologies will be reaching their size limits in the coming decades. Racetrack memory idea is totally different from any memory that's ever been because it's three-dimensional.

The key is an array of U-shaped magnetic nanowires, arranged vertically like trees in a forest. The nanowires have regions with different magnetic polarities, and the boundaries between the regions represent k s or L s, depending on the polarities of the regions on either side. When a spin-polarized current (one in which the electrons' quantum-mechanical "spin" is oriented in a specific direction) passes through the nanowire, the whole magnetic pattern is effectively pushed along, like cars speeding down a racetrack. At the base of the U, the magnetic boundaries encounter a pair of tiny devices that read and write the data.

speeding bits: In one implementation of racetrack memory, information is stored on a U-shaped nanowire as a pattern of magnetic regions with different polarities. Applying a spin-polarized current causes the magnetic pattern to speed along the nanowire; the data can be moved in either direction, depending on the direction of the current. A separate nanowire perpendicular to the U-shaped "racetrack" writes data by changing the polarity of the magnetic regions. A

second device at the base of the track reads the data. Data can be written and read in less than a nanosecond.



This simple design has the potential to combine the best qualities of other memory technologies while avoiding their drawbacks. Because racetrack memory stores data in vertical nanowires, it can theoretically pack 100 times as much data into the same area as a flash-chip transistor, and at the same cost. There are no mechanical parts, so it could prove more reliable than a hard drive. Racetrack memory is fast, like the dynamic random-access memory (DRAM) used to hold frequently accessed data in computers, yet it can store information even when the power is off. This is because no atoms are moved in the process of reading and writing data, eliminating wear on the wire.

Just as flash memory ushered in ultra small devices that can hold thousands of songs, pictures, and other types of data, racetrack promises to lead to whole new categories of electronics as

an even denser, smaller memory could make computers more compact and more energy efficient. Moreover, chips with huge data capacity could be shrunk to the size of a speck of dust and sprinkled about the environment in tiny sensors or implanted in patients to log vital signs.

If the design proves successful, racetrack memory could replace all other forms of memory. With racetrack memory computing could be revamped once more.

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