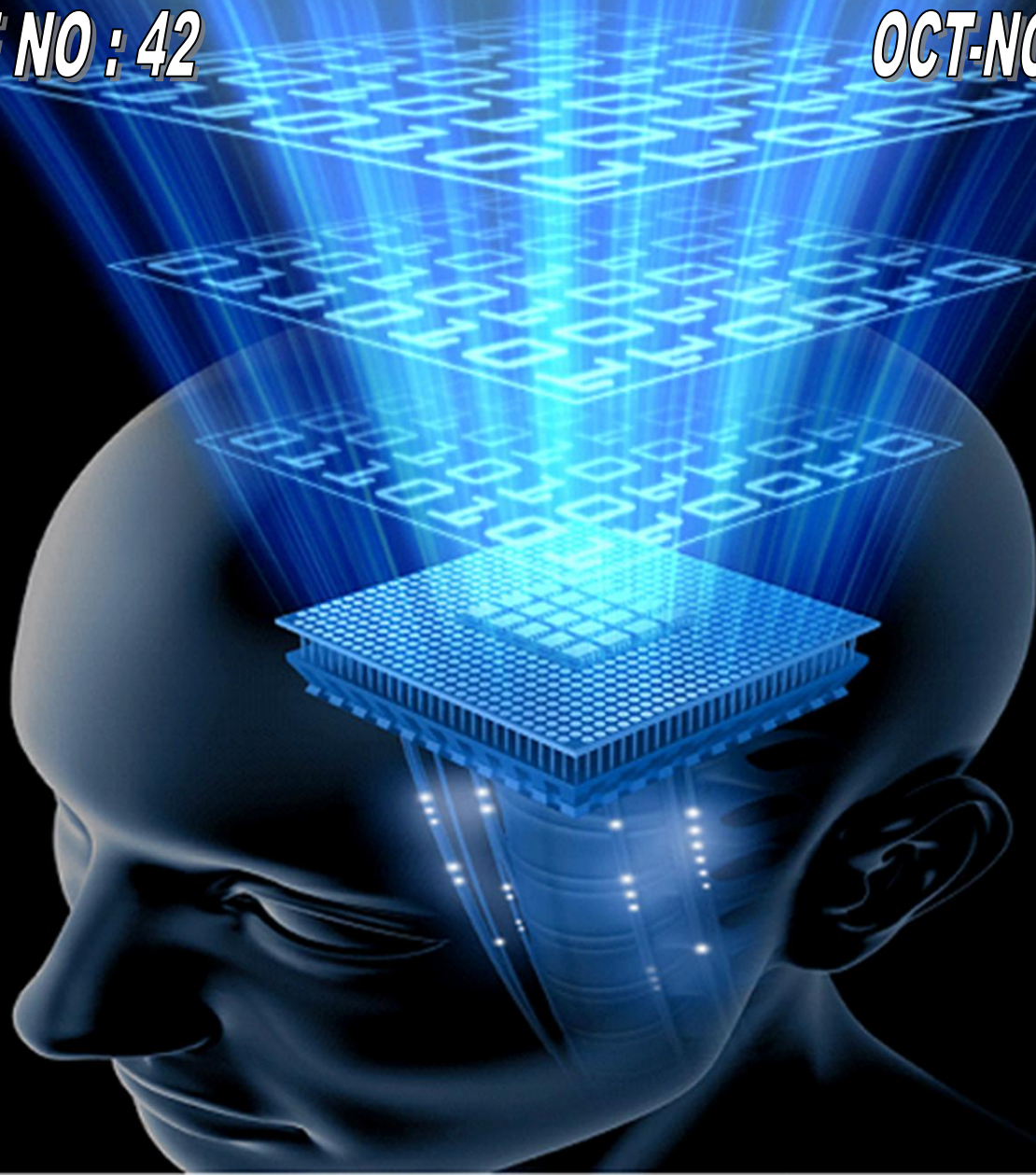# IT UNLIMITED MAGAZINE

a bi-monthly bonanza by students

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KONGU ARTS AND SCIENCE COLLEGE
Nanjanapuram, Erode
DEPARTMENT OF COMPUTER SCIENCE(UG)
Cyber Crews Association

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ISSUE

CONTENT

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HISTORY OF LOGO
(Cyber Crews Association)

Our logo is extracted from the Greek word (fee) .It shows the value of 1.618.

What are Fibonacci numbers?

Discovered by **Leonardo** Fibonacci (1170-1250 A.D.) who was born in Pisa, Italy, the Fibonacci sequence is an infinite sequence of numbers, beginning: 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144 ... where each number is the sum of the two preceding it. Thus: 1+1=2, 1+2=3, 2+3=5, 3+5=8, 5+8=13 and so on. For any value larger than 3 in the sequence, the ratio between any two consecutive numbers is 1:1.618, or the Golden Ratio.

The modern history of the golden ratio starts with Luca Pacioli's *De divina proportione* of 1509, which captured the imagination[1] of artists, architects, scientists, and mystics with the properties, mathematical and otherwise, of the golden ratio

Here our logo shows the 0 ,1 computer can reads the binary values as zero's and one's the golden ratio which coincide with nature so we called as " NATURE OF FINGER PRINT " we conclude this "TECHNOLOGY'S FINGER PRINT "
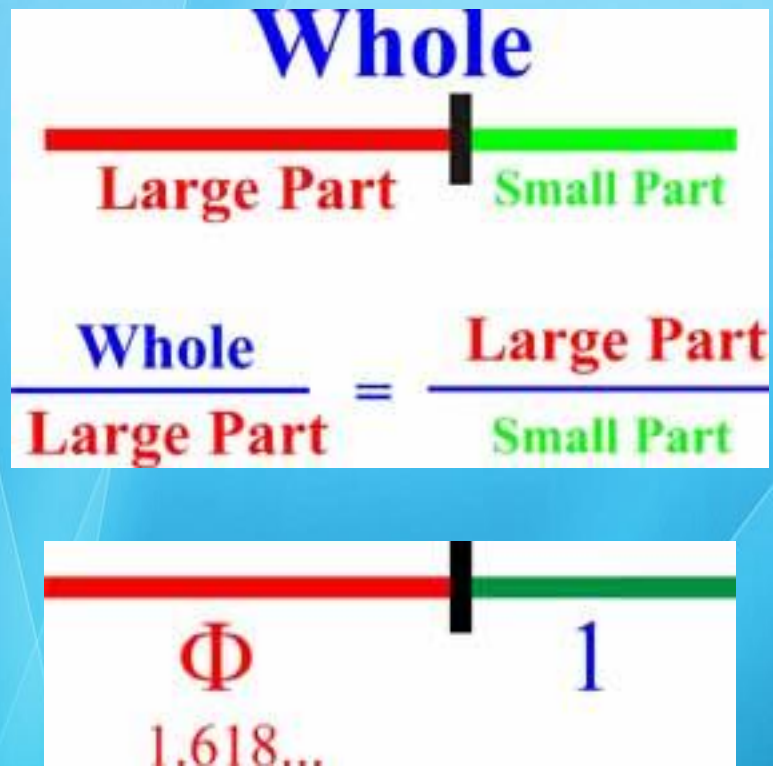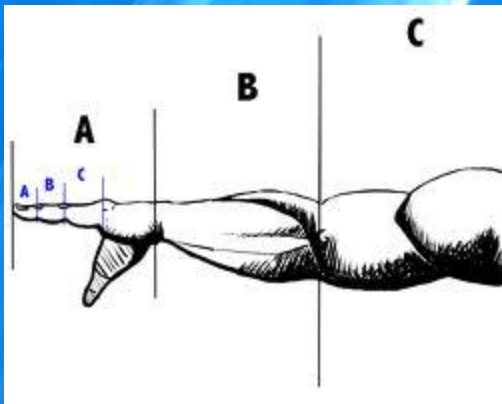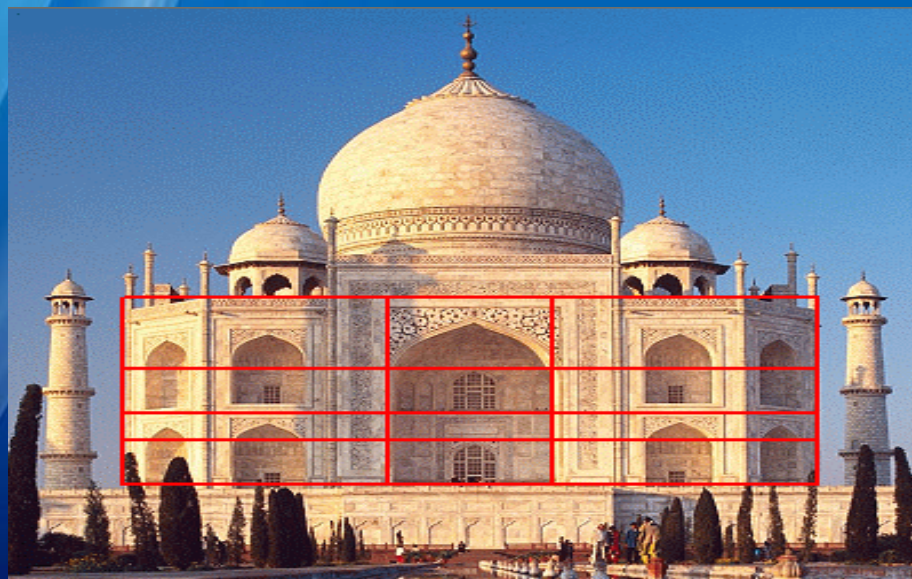
Golden Ratio in Face

2
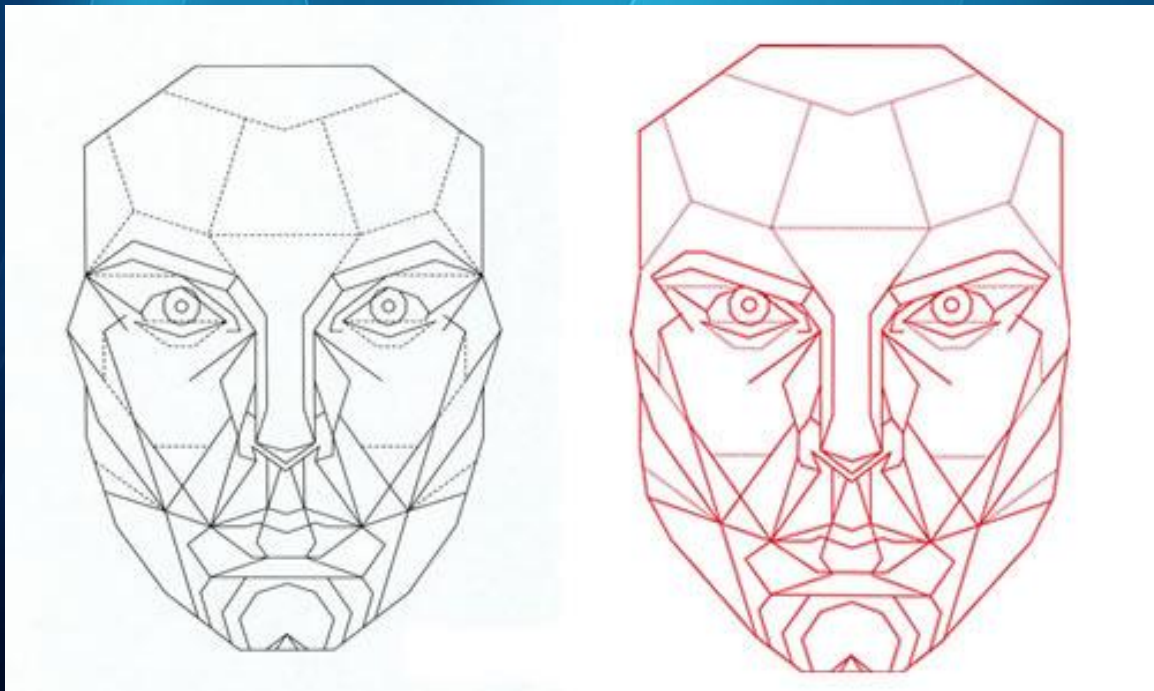
For Example…….

GOLDEN RATIO IN HUMAN

GOLDEN RATIO IN ARCHITECTURE

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Introduction

Bluetooth is a wireless technology for creating personal networks operating in the 2.4 GHz unlicensed band, with a range of 10 meters. Networks are usually formed ad-hoc from portable devices such as cellular phones, handhelds and laptops. Unlike the other popular wireless technology, Wife, Bluetooth offers higher level service profiles, e.g., FTP-like file servers, file pushing, voice transport, serial line emulation, and more. The Bluetooth stack in FreeBSD is implemented using the Net graph framework (see).

A broad variety of Bluetooth USB dongles is supported by the driver. The Boredom BCM2033 chip based Bluetooth devices are supported via the and drivers. The 3Com Bluetooth PC Card 3CRWB60-A is supported by the driver. Serial and UART based Bluetooth devices are supported via and this section describes the use of the USB Bluetooth dongle.

Host Controller Interface (HCI)

Host Controller Interface (HCI) provides a command interface to the baseband controller and link manager, and access to hardware status and control registers. This interface provides a uniform method of accessing the Bluetooth baseband capabilities. HCI layer on the Host exchanges data and commands with the HCI firmware on the Bluetooth hardware. The Host Controller Transport Layer (i.e., physical bus) driver provides both HCI layers with the ability to exchange information with each other.

A single Netgraph node of type *hci* is created for a single Bluetooth device. The HCI node is normally connected to the Bluetooth device driver node (downstream) and the L2CAP node (upstream). All HCI operations must be performed on the HCI

node and not on the device driver node. Default name for the HCI node is "devicehci". For more details refer to the manual page.One of the most common tasks is discovery of Bluetooth devices in RF proximity. This operation is called *inquiry*. Inquiry and other HCI related operations are done with the utility. The example below shows how to find out which Bluetooth devices are in range.

RFCOMM Protocol

The RFCOMM protocol provides emulation of serial ports over the L2CAP protocol. The protocol is based on the ETSI standard TS 07.10. RFCOMM is a simple transport protocol, with additional provisions for emulating the 9 circuits of RS-232 (EIATIA-232-E) serial ports. The RFCOMM protocol supports up to 60 or between the device and a modules that communicate via Bluetooth wireless technology on one side and provide a wired interface on the other sidedem in the network case. RFCOMM can supportotherconfigurations, such as simultaneous connections (RFCOMM channels) between supportotherconfigurations, such as modules that communicate via Bluetooth wireless technology on one side and provide a wired interface on the other side.two Bluetooth devices.For the purposes of RFCOMM, a complete communication path involves two applications running on different devices (the communication endpoints) with a communication segment between them.

Pairing of Devices

By default, Bluetooth communication is not authenticated, and any device can talk to any other device. A Bluetooth device (for example, cellular phone) may choose to require authentication to provide a particular service (for example, Dial-Up service). Bluetooth authentication is normally done with *PIN codes*. A PIN code is an ASCII string up to 16 characters in length. User is required to enter the same PIN code on both devices. Once user has entered the PIN code, both devices will generate a *link key*. After that the link key can be stored either in the devices themselves or in a persistent storage. Next time both devices will use previously generated link key. The described above procedure is called *pairing*. Note that if the link key is lost by any device then pairing must be repeated.

Service Discovery Protocol (SDP)

The Service Discovery Protocol (SDP) provides the means for client applications to discover the existence of services provided by server applications as well as the attributes of those services. The attributes of a service include the type or class of service offered and the mechanism or protocol information needed to utilize the service.

SDP involves communication between a SDP server and a SDP client. The server maintains a list of service records that describe the characteristics of services associated with the server. Each service record contains information about a single service. A client may retrieve information from a service record maintained by the SDP server by issuing a SDP request. If the client, or an application associated with the client, decides to use a service, it must open a separate connection to the service provider in order to utilize the service. SDP provides a mechanism for discovering services and their attributes, but it does not provide a mechanism for utilizing those services.

Dial-Up Networking (DUN) and Network Access with PPP (LAN) Profiles

The Dial-Up Networking (DUN) profile is mostly used with modems and cellular phones. The scenarios covered by this profile are the following:

- Use of a cellular phone or modem by a computer as a wireless modem for connecting to a dial-up Internet access server, or using other dial-up services;

- Use of a cellular phone or modem by a computer to receive data calls.

Network Access with PPP (LAN) profile can be used in the following situations:

- LAN access for a single Bluetooth device;
- LAN access for multiple Bluetooth devices;
- PC to PC (using PPP networking over serial cable emulation).

NEXT TOP IT COMPANIES

Type	: MNC Public
Industry	: Computer hardware, Computer software.
Founded	: Endicott, New York, U.S.(June 16, 1911)
Headquarters	: Armonk, New York, U.S.
Area served	: Worldwide
Founder	: Charles Ranlett Flint
CEO & MD	: Ginni Rometty
Revenue	: ▲US$ 106.91 billion
Operating income	: ▲US$ 020.28 billion
Net income	: ▲US$ 015.85 billion
Total assets	: ▲US$ 116.43 billion
Total equity	: ▼US$ 020.13 billion
Employees	: 433,362 (2012)
Divisions	: Financing, Hardware, Services, Software

Charles Ranlett Flint

Ginni Rometty

Website : www.IBM.com

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Google

Type	: Public
Industry	: Internet, Computer software
Founded	: Menlo Park, California-1998
Founder(s)	: Larry Page, Sergey Brin
C.E.O	: Eric Schmidt
Area served	: Worldwide
Headquarters	: Googleplex, California
Revenue	: ▲US$ 37.905 billion
Operating income	: ▲US$ 11.632 billion
Profit	: ▲US$ 09.737 billion
Total assets	: ▲US$ 72.574 billion
Total equity	: ▲US$ 58.145 billion
Employees	: 53,546 (2012)[4]

Larry Page

Eric Schmidt

Website :www.Google.com

8

Reliance Communications
Anil Dhirubhai Ambani Group

Type	: Public
Industry	: Telecommunications
Founded	: 2004
Founder	: Anil Ambani
C.E.O	: Gurdeep Singh
Headquarters	: Mumbai, India
Area served	: India
Revenue	: ₹ 11,110 crore $ 2.02 billion
Net income	: ₹ 156 crore $ 28.39 million
Total assets	: ₹ 80,395 crore $14.63 billion
Employees	: 28,065

Anil Ambani

Gurdeep Singh

Website : www.rcom.co.in

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Cloud computing is the use of computing resources (hardware and software) that are delivered as a service over a network (typically the Internet). The name comes from the use of a cloud-shaped symbol as an abstraction for the complex infrastructure it contains in system diagrams. Cloud computing entrusts remote services with a user's data, software and computation.

The origin of the term *cloud computing* is obscure, but it appears to derive from the practice of using drawings of stylized clouds to denote networks in diagrams of computing and communications systems.

The word *cloud* is used as a metaphor for the Internet, based on the standardized use of a cloud-like shape to denote a network on telephony schematics and later to depict the Internet in computer network diagrams as an abstraction of the underlying infrastructure it represents. The cloud symbol was used to represent the Internet as early as 1994.

Types of public cloud computing :

There are many types of public cloud computing

- Infrastructure as a service (IaaS)
- Platform as a service (PaaS)
- Software as a service (SaaS)
- Storage as a service (STaaS)
- Security as a service (SECaaS)
- Data as a service (DaaS)
- Database as a service (DBaaS)
- Test environment as a service (TEaaS)
- Desktop virtualization
- API as a service (APIaaS)
- Backend as a service (BaaS)

The cloud providers manage the infrastructure and platforms on which the applications run. SaaS is sometimes referred to as "on-demand software" and is usually priced on a pay-per-use basis. Saas providers generally price applications using a subscription fee.

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In addition, the application is hosted centrally, so updates can be released without users having to reinstall new software. The drawback of SaaS is that the user stores their data on the cloud provider's server. As a result, there could be unauthorized access to the data.

Cloud computing relies on sharing of resources to achieve coherence and economies of scale similar to a utility (like the electricity grid) over a network. At the foundation of cloud computing is the broader concept of converged infrastructure and shared services.

Security

As cloud computing is achieving increased popularity, concerns are being voiced about the security issues introduced through adoption of this new model. The effectiveness and efficiency of traditional protection mechanisms are being reconsidered as the characteristics of this innovative deployment model can differ widely from those of traditional architectures.

The relative security of cloud computing services is a contentious issue that may be delaying its adoption. Physical control of the Private Cloud equipment is more secure than having the equipment off site and under someone else's control. Physical control and the ability to visually inspect the data links and access ports is required in order to ensure data links are not compromised. Issues barring the adoption of cloud computing are due in large part to the private and public sectors' unease surrounding the external management of security-based services. It is the very nature of cloud computing-based services, private or public, that promote external management of provided services. This delivers great incentive to cloud computing service providers to prioritize building and maintaining strong management of secure services. Security issues have been categorised into sensitive data access, data segregation, privacy, bug exploitation, recovery, accountability, malicious insiders, management console security, account control, and multi-tenancy issues.

Similar systems and concepts

- ✓ *Autonomic computing.*

- ✓ *Client–server model.*

- ✓ *Mainframe computer.*

- ✓ *Utility computing.*

- ✓ *Peer-to-peer. ud gaming.*

K7 Total Security AntiVirus, developed by K7 Computing, provides malware prevention and removal during a subscription period and uses signatures and heuristics to identify viruses. Other features include a software firewall, e-mail spam filtering and phishing protection.

Developer(s)	K7 Computing
Stable release	Version 2012
Operating system	Microsoft Windows
License	Proprietary
Website	www.k7computing.com

K7 Computing

K7 Computing Pvt. Ltd. is an IT software and hardware security company Founded in 1991 by Jayaraman Kesavardhanan in Chennai, India.Company has 90+ employees in its Chennai HQ with more employees all around the world. Software research and virus detection is handled by its own virus lab in Chennai.

K7 Computing is a member of AVAR - Association of Asia Anti Virus Asia Researchers, Jayaraman Kesavardhanan, Founder and CEO of K7 Computing was granted the Best Member Award in recognition of his significant contributions to AVAR for the year 2008 Chennai, TN, 16 December 2008

K7 Computing's Cloud Computing division, K7 Cloud Solutions was formed as a result of K7 Computing's acquisition of BinaryKarma, a Chennai, India based start-up working on products in the area of Virtualization Management.

Awards

- K7 Total Security received Advanced+ Award from AV-Comparatives

  Performance test July 2011 overall winner for PC Mark performance test. K7

  Antivirus Plus is a overall winner of AV-Comparatives Performance test

  November 2011

- K7 Total Security was awarded the winner of the Performance Test by AV-Comparatives for 2010

- VB-100, December 2011 VB-100 award for K7 Total Security

- Checkmark by WestCoast Labs

- ICSA Labs

Products

K7 Computing has been developing antivirus software for 16 years.

Most recognized antivirus software from K7 Computing is the K7 Total Security which won AV-Comparatives Performance Test for 2010, version 11 was released in February 2011 together with K7 Ultimate Security 11 and Antivirus Plus and Antivirus Premium. In 15 June 2011 K7 released Business Edition of its Antivirus security K7 Enterprise Security - Business orientated antivirus product offering remote management and installation.

K7 Computing security products are build on own NST (Nano Secure Technology) is the next generation security software CORE enabling prudent security solutions at multiple layers, analyzing and collating various events to detect and block existing as well as future threats.

IT TRIVIA

1. DNS refers to_____.

2. The unit of speed used for super computer is_____.

3. Whose trademark is the operating system UNIX?

4. The parity bit is added for the purpose of_____.

5. India's first Supercomputer is_____.

6. The first movie released in 1982 with terrific computer animation and graphics was_____.

7. Graphic interfaces were first used in a xerox product is called_____.

8. ROM is composed of_____.

9. ISDN stands for_____.

10. FPI stands for_____.

11. Who is considered to be The Father of Artificial Intelligence?

12. Numbers and formulae entered in a cell are called_____.

13.What is windows explorer?

14. What provide expansion capability for a computer system_____.

15. What is the name for a match between the words or phrases being searched and the items found in an electronic database?

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Dolphin Browser

Dolphin Browser is a proprietary mobile browser for the Android operating system and iOS developed by Mobotap. It was one of the first alternative browsers for the Android platform that introduced support for multi-touch gestures Dolphin HD uses the Webkit engine and the native platform rendering capabilities, which allows for a small disk footprint.It is capable of running Adobe Flash on Android, but it can have problems with video streaming.

Features

- **Dolphin Sonar** Users can use their voice to search, share and navigate within Dolphin, without typing a word. You can say *eBay Nike Shoes* and Dolphin goes into the eBay website, searches and displays all Nike shoes available on eBay.
- **Gesture Browsing** Users can create custom gestures for individual websites, and Dolphin Browser also comes pre-programmed with Gestures for many popular websites. For example, drawing a "T" may be used to visit Twitter and "F" to visit Face book.
- **Webzine** Webzine displays web content in a magazine-style format, providing select content from over 300 sources on topics including lifestyle, music, technology, business and many others. Webzine also caches content to be available offline.
- **Tabbed Browsing** Users can open and switch between web pages with multiple tabs at the top of the screen.

Versions

Both iOS and Android versions are free without advertising. There is an advanced version called **Dolphin Browser HD** for Android 2.0 or later. Dolphin Browser Beta was also launched in May 2012 and it is cited as most capable HTML5 browser scored over 450 on HTML5test.com.

Privacy concerns

In October 2011, privacy concerns were raised about Dolphin browser after it was discovered that all URLs loaded in Dolphin HD were being relayed as plain text to a remote server, a process described by Ars Technica as "an unambiguous breach of privacy". This breach was patched in the next update.

Reception

Since its initial release for Android, Dolphin has received generally positive reviews from both the media and the public. Both the Android and iOS versions have been particularly lauded for their gesture-based functionality, speed and ease-of-use. Business Insider claims "Dolphin Browser blows Safari out of the water."

As of November 15, 2011 Dolphin Browser iOS has maintained a 5 star rating across more than 6,500 reviews in the App Store. Dolphin Browser HD for Android has over 600,000 5 star reviews on Google Play (highest among browsers).

Awards

Since its launch, Dolphin Browser has received several notable awards. The app was named one of PC Magazine's Best Free iPhone and iPad Apps of 2011, was an Editors Choice at PC Magazine and was named to the CNet 100.

In November, 2011, The Street's Tamara Chuang described Dolphin as a better alternative to Android's Built-in Apps.Dolphin is included in the top startups to watch in 2012 according to Network world and Appolicious.
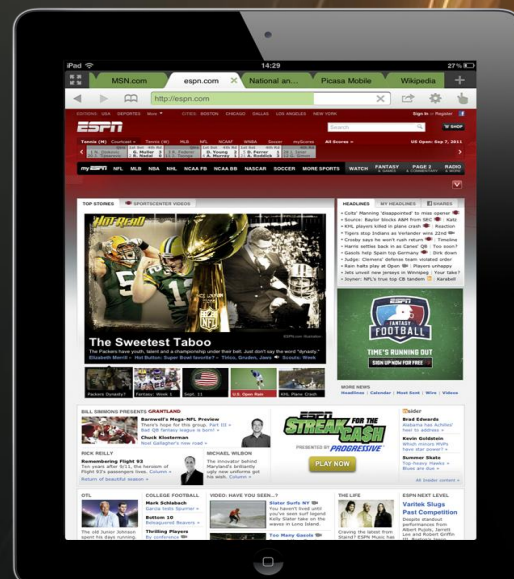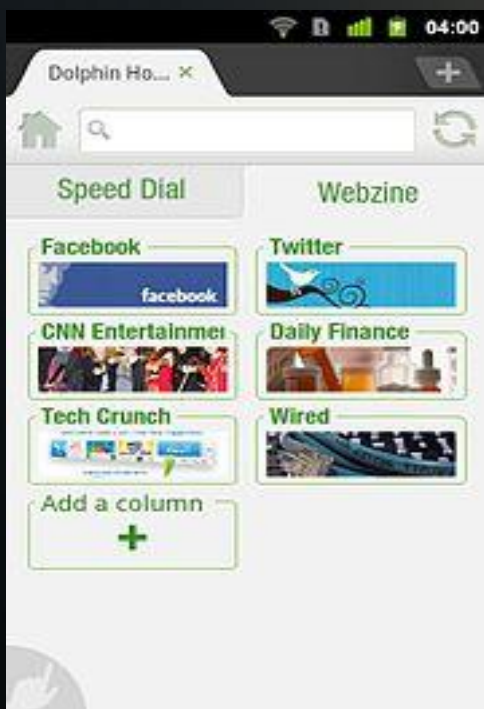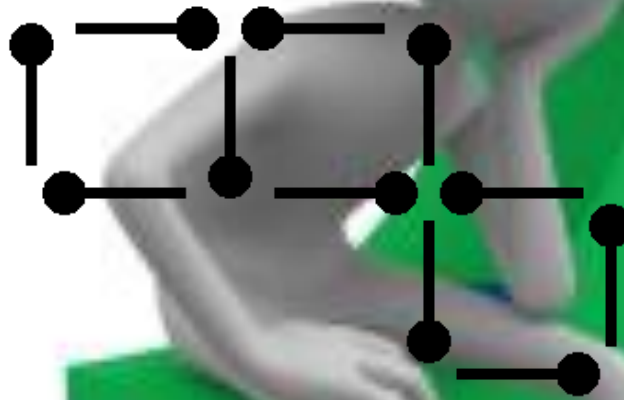
Mind Punch

1. A Perfect Match Puzzle

The Puzzle:

In this diagram 11 matches make 3 squares:

Your challenge is to move 3 matches to show 2 squares.
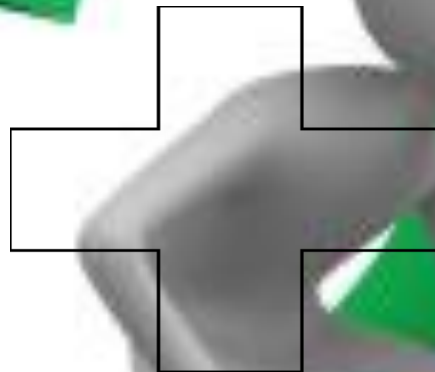
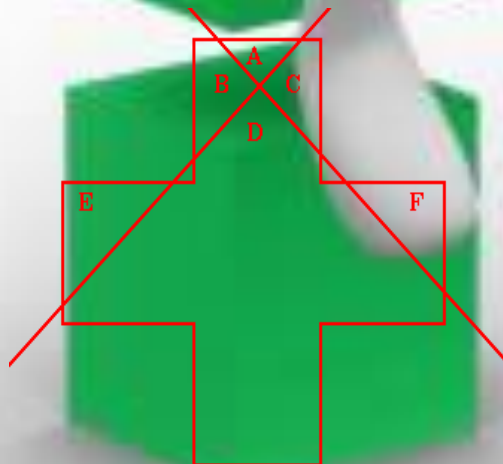*Our Solution:*

2. Cutting Across A Cross Puzzle

The Puzzle:

Here is an ordinary cross. You are allowed to make two straight cuts across it.

How do you cut it to make the most pieces?

Our Solution:

This is one way of making six pieces with two cuts. I couldn't do any better!

TCS (Tata Consultancy Services)
Location: *Luck now, Uttar Pradesh.*

INFOSYS
Location: *Bangalore, Karnataka.*

WIPRO
Location: *Bangalore, Karnataka.*

HP (Hewlett Packard)
Location: *Bangalore, Karnataka.*

CTS (Cognizant Technology Solutions)
Location: *Bangalore, Karnataka.*

IBM (International Business Machines)
Location: *Bangalore, Karnataka.*

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IT TRIVIA

INFORMATION CORNER

1. Digital Network Service.

2. GELOPS.

3. BELL Laboratories.

4. Error detection.

5. Param.

6. Star wars.

7. Ethernet.

8. Photo electric cells.

9. Integrated Service Digital Network.

10. Frames Per Inch.

11. John Mc Carthy.

12. Numeric entries.

13. A File Manager.

14. Slots.

15. Hit.

* Bill Gates' house was designed using a Macintosh computer.

* The first computer mouse was invented by Doug Engelbart in around 1964 and was made of wood.

* The first Windows virus was called Winver 1.4.

The Editorial Board Expresses its

Sincere gratitude to All those who

Are responsible, Either by being

On the stage or behind the screen.