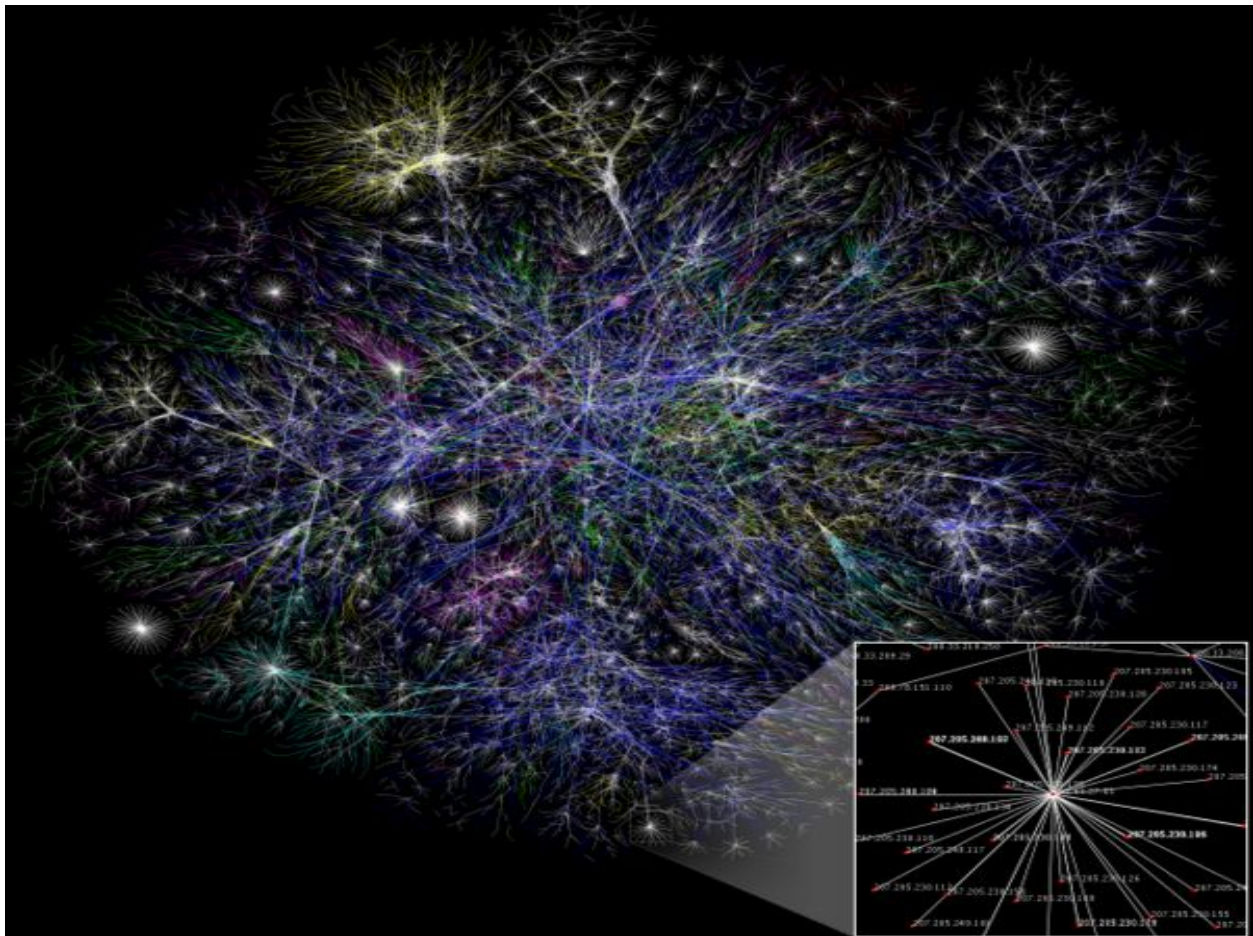


LECTURE SCHEDULE 14

Internet: World Wide Web (WWW), Concepts

Internet

- Network of interconnected computers around the world.
- A network of computer networks which operates world-wide using a common set of communications protocols.
- a computer network consisting of a worldwide network of computer networks that use the TCP/IP network protocols to facilitate data transmission and exchange.
- Visualization of the various routes through a portion of the Internet:



What do we need to get connected to internet?

- Getting on the Internet requires:
 - Computer
 - Modem
 - Telephone Line
 - Internet Service Provider (ISP)
 - Communication Software

Modem and Telephone Line

- Modem is a communications device that allows us to communicate with another computer through telephone lines.
- Modem is abbreviation of modulator/demodulator.
- Telephone services, such as
 - ISDN,
 - 56K leased lines, and
 - T-1 connections
- offer connections to the Internet at considerably faster connection speeds.



Internet Service Provider (ISP)

- An Internet Service Provider (ISP) is a company that allow you to use their internet connection for a price.
- When you register with an ISP the followings are given:
 - Username

- A unique name that identifies you.
- Password
 - A secret code that prevents other people from using your account.

Some Popular Internet Service Providers

- AT&T WorldNet
- Microsoft Network
- America Online
- In India:
 - VSNL (Videsh Sanchar Nigam Limited)
 - MTNL (Mahanagar Telecom Nigam Limited)
 - BSNL (Bharat Sanchar Nigam Limited)
 - Satyam Onlile

Communication Software

- Computer needs communicate
- on software to allow you to get connected to, and interact with, the Internet.
- Communication software is of two types:
 - Software that Helps Establish Basic Internet Connectivity
 - Software that helps to browse, access e-mail etc.

World Wide Web

"The World Wide Web is the universe of network-accessible information, an embodiment of human knowledge."



- Tim Berners-Lee, a scientist at CERN (The European Organization for Nuclear Research (French: Organisation Européenne pour la Recherche Nucléaire), invented the World Wide Web (WWW) in 1989.
- The Web was originally conceived and developed to meet the demand for automatic information sharing between scientists working in different universities and institutes all over the world.



- The basic idea of the WWW was to merge the technologies of personal computers, computer networking and hypertext into a powerful and easy to use global information system.
- The World Wide Web, abbreviated as WWW and commonly known as The Web, is a system of interlinked hypertext documents contained on the Internet.
- With a web browser, one can view web pages that may contain text, images, videos, and other multimedia and navigate between them by using hyperlinks.

Hypertext

- Hypertext is text displayed on a computer or other electronic device with references (hyperlinks) to other text that the reader can immediately access, usually by a mouse click or keypress sequence.
- Apart from running text, hypertext may contain tables, images and other presentational devices. Hypertext is the underlying concept defining the structure of the World Wide Web, making it an easy-to-use and flexible format to share information over the Internet.

Web Browser

- A web browser is a software application for retrieving, presenting, and traversing information resources on the World Wide Web. An information resource is identified by a Uniform Resource Locator (URL) and may be a web page, image, video, or other piece of content.
- Example of Web Browser:
 - Mosaic
 - Internet Explorer
 - Netscape Navigator

- Mozilla Firefox

Web Page and Websites

- W3 contains several millions of pages of information. Each of these pages is called a Web Page.
- A webpage or web page is a document or resource of information that is suitable for the World Wide Web and can be accessed through a web browser and displayed on a computer screen.
- A web page can contain text, pictures, sound, animation and video.
- A group of related web pages that are linked together form a Web Site.
- The first page of a web site is called the Home Page.
- The Home Page shown below is the Home Page of the official website of Tamil Nadu Agriculture University.

Tnau Home - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Refresh Mail Print Send To Favorites People


Address <http://www.tnau.ac.in/> Go

Tamilnadu Agricultural University


transforming the lives of farmers ...

Tnau Home	Academics	Admissions	Student Resources	Technologies	Outreach	News & Events
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Tnau++



TNAU AGRITECH PORTAL
Tamilnadu Agricultural University, Coimbatore



Dynamic Market Information

Universal Resource Locator

- Each web page has a unique address called Universal Resource Locator (URL).
- Contains unique information about the server and the path on the server to find and retrieve the information



Example: http://www.usd.edu/trio/tut/start/url.html	
http://	protocol – rules through which transmission takes place over the internet.
www.usd.edu/	server name - computer domain name
trio/tut/start/	pathname to the directory you are requesting
url.html	filename you are requesting

Search Engine

- A web search engine is designed to search for information on the World Wide Web. The search results are usually presented in a list of results and are commonly called hits.
- Few examples of web search engines are:

Google.com



Ask.com



Yahoo.com



Bing.com



TripleMe.com



Shopzilla.com

