Computer Science 2210/0478 (Notes) Chapter: 5



Topic: Internet & WWW

Difference between the internet and the world wide web

The Internet

- Infrastructure: The Internet is a vast network of networks. It's the underlying infrastructure that connects computers and other devices across the world, allowing them to communicate with each other. This connectivity is facilitated by a series of standardized protocols (such as TCP/IP), which ensure that devices on different networks can understand each other.
- Functions Beyond the Web: While the World Wide Web is one of the most familiar aspects of the Internet, the Internet itself supports a wide array of services beyond the Web, including email (through protocols like SMTP and IMAP), file transfers (FTP), instant messaging, voice and video communications (VoIP), and much more.
- Physical Components: The physical components of the Internet include routers, servers, fiber-optic cables, wireless connections, and satellite links. These elements work together to transmit data across the globe, from one device to another, often traversing multiple networks and countries.

The World Wide Web

- Collection of Websites and Web Pages: The World Wide Web is a service that operates on the Internet. It is a system of interlinked hypertext documents accessed via the Internet. With a web browser, users can click on links to navigate from one web page or document to another, hence the term "web."
- Accessed Through Browsers: Websites on the WWW are accessed through web browsers like Chrome, Firefox, Safari, etc., using the HTTP protocol (or its secure version, HTTPS). These websites are hosted on servers that are connected to the Internet.
- Web Technologies: The Web is built on foundational technologies such as HTML (HyperText Markup Language), which structures content, CSS (Cascading Style Sheets) for styling, and JavaScript for interactivity. These technologies allow for the creation of complex, dynamic, and interactive web pages.

In summary, while the Internet is the vast, physical and digital network that facilitates global connectivity, the World Wide Web is a system of information and content that is accessed via the Internet. The Web is essentially one of the many services provided through the infrastructure of the Internet, making it possible for people to share, consume, and interact with content in a myriad of ways.











www.zakonweb.com