# CMSC 100 – Web Programming
## Introductory Terms

**Ojective**:
At the end of the session, the students should be able to:

*Discuss the definitions of common/introductory terms related to Web Programming*

# What is the "**Web**" in "Web Programming"?

- slang word for "World Wide Web, internet"

*InternetSlang.com*

# World Wide Web

- one set of software services running on the Internet

*http://www.diffen.com/*

# Internet

- global, interconnected network of computing devices.

  This network supports a wide variety of interactions and communications between its devices

  *http://www.diffen.com*

# Internet

- a computer network consisting of a worldwide network of computer networks that use the TCP/IP network protocols to facilitate data transmission and exchange

  *http://wordnetweb.princeton.edu/ perl/webwn?s=internet*

# Web

- is a way of accessing information over the medium of the Internet. It is an information-sharing model that is built on top of the Internet.

- uses the HTTP protocol, only one of the languages spoken over the Internet, to transmit data.

*http://www.webopedia.com*

- **TCP/IP**

  *- Transmission Control Protocol/Internet Protocol*

- **HTTP**

  *- Hypertext Transfer Protocol*

# Protocol

- a system of rules that explain the correct conduct and procedures to be followed in formal situations (*www.merriam-webster.com*)

- in IT, a protocol is the special set of rules that end points in a telecommunication connection use when they communicate (*searchnetworking.techtarget.com*)

# TCP/IP

***IP - Internet Protocol***

- responsible for addressing hosts and for routing datagrams (packets) from a source host to a destination host across one or more IP Networks.

- defines the format of packets and provides an addressing system that has two functions: identifying hosts and providing a logical location service.

*http://en.wikipedia.org/*

# TCP/IP

- TCP - Transmission Control Protocol

- the connection-oriented diagram service introduced by Vint Cerf and Bob Kahn in 1974       *http://en.wikipedia.org*


- *More about TCP on:*

- SPECIFICATION OF INTERNET TRANSMISSION CONTROL PROGRAM, http://tools.ietf.org/html/rfc675
- http://www.cs.bsu.edu/homepages/peb/cs637/layering/TCP.htm

# HTTP (Hypertext Transfer Protocol)

- the foundation of data communication for the World Wide Web.

- an application protocol for distributed, collaborative, hypermedia information systems

- functions as a request-response protocol in the client-server computing model

*http://en.wikipedia.org*

# Client-Server

- describes the relationship of cooperating programs in an application

- the model assigns one of two roles to the computers in a network: Client or server.

# Client-Server

The server component provides a *function* or *service* to one or many clients, which initiate **requests** for such services.

A server is a computer system that selectively shares its resources; a client is a computer or computer program that initiates contact with a server in order to make use of a resource.

# Web Application

- In computing, a web-based application is any application that uses a web browser as a client.

*en.wikipedia.org*

# Web Browser

- a software application for retrieving, presenting and traversing information resources on the World Wide Web. An information resource is identified by a *Uniform Resource Identifier (URI/URL)* and may be a web page, image, video or other piece of content.

*http://en.wikipedia.org*

# Group Discussion/
## *Assignment*

# URL  vs URN vs URI