

# Web Development

## E-Commerce

- Conduct business
- Sell products and services online
- Communicate with other businesses & customers
- Examples:
  - noon.com
  - Amazon.com

## Purposes of Website

- E-Commerce
- Personal Use
- Information Source

## Web

### Definition

The Web is a **collection of software and protocols** that has been installed on most computers on the internet

## Client and Server

**Clients and Servers** are programs that **communicate** with each other over the **Internet**

- A **Server** runs continuously, waiting to be contacted by a Client
- A **Client** will send a message to a Server requesting the service provided by that server

## Terms Meaning

- ☐ **Web server:** a system on the internet containing one or more web site
- ☐ **Web site:** a collection of one or more web pages
- ☐ **Web pages:** single file with a single file name
- ☐ **Home pages:** first page in website

## Cookies

Used by Web servers to **differentiate users** and to maintain data related to the user during navigation

## Secured Site

https protocol on URL address

## Web Browser

A tool for travelling the Internet

- Client software for viewing WWW pages
- A multimedia interface allowing integration of text, graphics, audio and video

## Web Browser

- ☐ The purpose of a web browser (Chrome, IE, Firefox, Safari) is to read HTML documents and display them
- ☐ The browser does not display the HTML tags, but uses them to determine how to display the document

## URL (Uniform Resource Locator)

**http://** → Communication protocol

**www.w3schools.com** → Web server hosting the page

**/html** → Path to the page on the host server

**html\_intro.asp** → Filename of the page

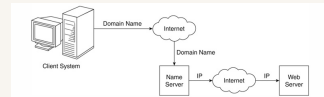
## Domain Names

Domain names are formed by the rules and procedures of the Domain Name System (DNS).

Any name registered in the DNS is a domain name

(uoh.edu.sa) = IP (192.168.8.8)

- First domain is the smallest; last is the largest (UOH)
- Last domain specifies the type of organization (SA)
- DNS servers convert domain to IP



## Internet Protocols

The **Internet Protocol (IP)** is a **set of requirements** for **addressing** and **routing** data on the Internet

## Definitions

The **Internet** is a **collection of computers** and other devices **connected** by equipment that allows them to **communicate** with each other

→ **Internet** is a **network of networks**, linking computers to computers

→ **Internet** is the **transport vehicle** for the **information** stored in files or documents found through or using the internet on another computer

## Internet Protocol (IP) Addresses

- Every node has a unique numeric address
- Form: 32-bit binary number (New standard, IPv6, has 128 bits (1998))
- Organizations are assigned groups of IPs for their computers
- The IP got longer from 32 bits to 128 bits, because of the increase in the number of websites
- Nodes are devices connected to the internet

## FTP/TELNET

FTP: File Transfer Protocol allows us to transfer files between two different computers on the Internet

TELNET: The Internet allows computers to converse with each other over networks