Introduction to Web Services

Website

- A website is a collection of web pages and related content that is identified by a common domain name and published on at least one web server.
- For example: google.com, youtube.com
- All publicly accessible websites collectively constitute the world wide web.
- Website is broadly of two types:
    - **STATIC WEB SITE :** static web site is used to display information without any interaction with user or web server.
    - **DYNAMIC WEB SITE:** allows user interaction with web site and can communicate with web server again and again.

Web Browser

- A web browser is a software application for accessing information on the World Wide Web.
- Web Browser act as a client to send request to server, once web server process the request and returns the response the same will be displayed on web browser.
- There are many popular web browsers available like : Google Chrome, Firefox, UC Browser, Opera.
- Most of the Web Browser supports Graphical support, Lynx is the text based web browser

Web Servers

- A **web server** is a computer that runs websites
- It's a computer program that distributes **web** pages as they are requisitioned.
- The basic objective of the **web server** is to store, process and deliver **web** pages to the users.
- Web server and client communicate with the help of HTTP protocol.
- Web server returns the requested page to client with response code like 404 (if requested page not found), 200 (if requested page found) etc.

Web Hosting

- Is a service which allows individual or organization to make their web site accessible through world wide web.

- Web site is hosted on special computer called Web servers. If the site is hosted users can access the website from website from anywhere in the world.

- To Host a website, we require DOMAIN NAME, WEB SPACE.

- Web Hosting provides various services like – FTP upload, Email account, web site building tool, databases etc.

Web Scripting

- Without adding web scripting a web site is static.
- Is a programming language for adding dynamic capabilities to world wide web.
- Web scripting can be used for simple action like changing the button color when mouse is over on it or to complex thing like interactive online games.
- Dynamic content can be added to website using scripting. For e.g. if user fills a registration form, it is good practice to validate the entries.
- Web Scripting if of 2 type:
- CLIENT SIDE
- SERVER SIDE

Client Side Scripting

- Client side script executes on the web browser i.e. not interaction with the web server.
- It is generally used for performing action which do not require interaction with the server like: checking text field is empty, password is of certain length, password contains pattern of text, CAPTCHA validation, new password and confirm password is same or not.
- Client side scripting languages are : Java Script, VB Script, Action Script

Server Side Scripting

- This type of scripting execute on the web server i.e. when user clicks on any button or interactive object the request goes to server and executes on server and response comes to web browser.

- Server side scripting is used for the action like validating the username and password, availability of user id, submitting the information to store it in database etc.

- Popular server side scripting language are: ASP(Active Server page), PHP (PHP Hypertext preprocessor), JSP(Java Server Pages)

Web 2.0

- Web 2.0 is the name used to the describe the second generation of the world wide web, where it moved static HTML pages to a more interactive and dynamic web experience.

- Web 2.0 is focused on the ability for people to collaborate and share information online via social media, blogging and Web-based communities.

- Web 2.0 is pronounced web-two-point-o.

- Facebook, Wikipedia, Google Adsense, Twitter,etc are example of Web 2.0

- Popular technologies are: AJAX, JQuery, Silverlight, Flash etc.