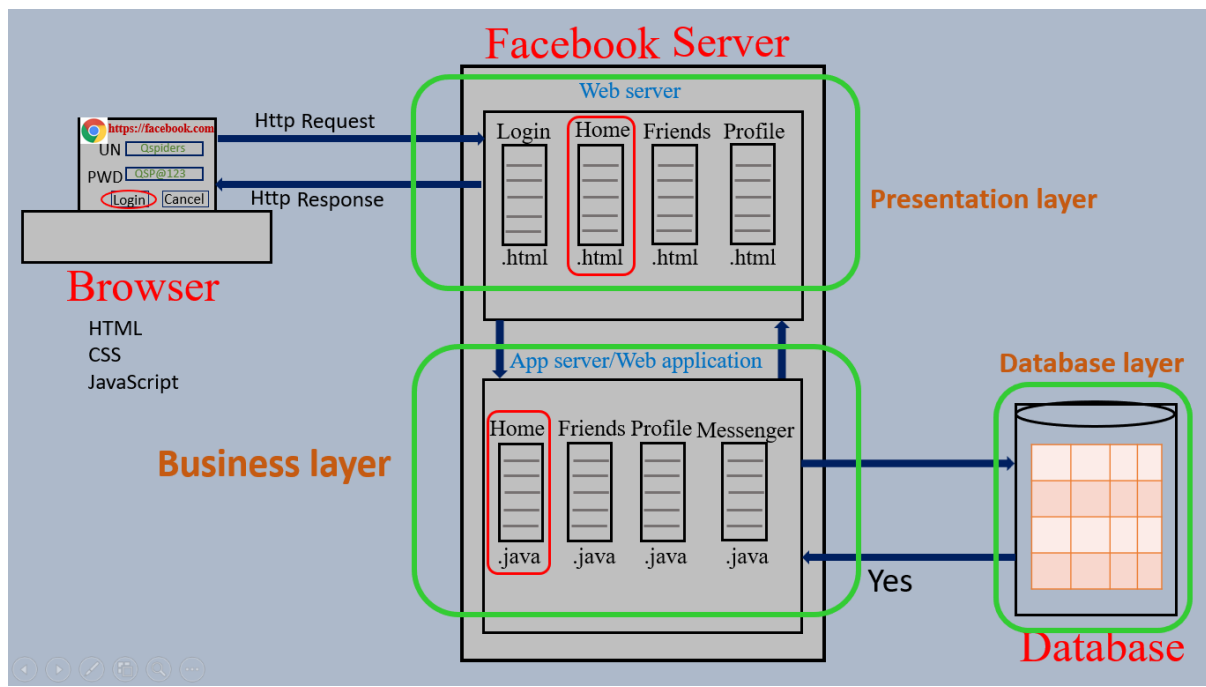# Introduction To Web Application

Web Browser:

- It is a standalone application which is used to access any web application over the network via URL.

- Browser understands only **html, CSS & Javascript** so that it always creates http request and interpret HTTP response given by web server.

- It's the one & only way to access web application.

- Browser always send / receive request via http Protocol.

    Ex: Chrome, IE, safari, Firefox, opera etc.

Http Protocol: It's a set of instruction or rules which acts as a communication media between browser & webserver, http protocol by default understands html language.

Web Server:

- Webserver is an application which runs on Operating System.

- Webserver, as the name implies "Serves requests to a Browser, it helps both web browser & web Application to interact with each other.

- Every App server (web application) is under control of Webserver.

- It receives the request from the browser, communicates with the web application & provides response back to browser.

Few Examples:

- Apache Tomcat

- Microsoft IIS

-

App Server / Web Application:

- Collection of web Resources present within the web application is called as App server.

- App server contains business logic of the source code, html code, Servlet Code, JDBC code.

- Web Resource are always implemented using Servlet or JSP or Spring Boot for JAVA, ASP.net for C#.

Web Resource: Where business logic code is written based on CRS.

Example:

- Apache JBOSS

- IBM WebSphere

- Oracle WebLogic

- Oracle GlassFish

Two types of Web resource:

1. **Static Web resource**: Response present inside the web application before the request.

    Ex: Wikipedia

    Documentation Website

❖ When web application is a collection of static web resource then it is called as **Static Web Application.**
    Note: To develop static Web Application only HTML is enough

2. **Dynamic Web Resource**: Response getting generated at the time of request.

    Ex: Internet Banking

    Vodafone bill

    Gmail

❖ If a web application contains at least one dynamic web resource then it is called as **Dynamic web Application.**

Note: servlet or JSP or Spring boot is mandate to develop dynamic Web application

Data Base:

- It also an application which helps us to store the data in the form of tables.

Example:

- MySql

- MsQsl

- Oracle 10g

- DB2

- Mongo DB

- NoSql

- Sybase

JDBC API:

- It is a collection of APIs, which is used to connect to data base from the java Program.

- Using JDBC, we can store & fetch the data from the database

  EG: mysql-jdbc-connector.jar

     Ojdbc.jar

     Db2-jbdv.jar

Servlet:

- Servlet is a collection J2ee API, it's used to develop dynamic web application

- Servlet also contains web.xml file, which is used for mapping between java & html file

What technology your Application Built on?

  Front end: html-5 or Angular-JS or React JS

  Back End: java + (Spring Boot or Servlet or JSP)

  Data Base: Mysql or Oracle-11g or DB2 or MONGO db

What is URL?

   Uniform resource locator: Used to identify specific web resource inside the web application, URL is one & only way to access any web application via browser.