**Advance java**

**static page** **to make dynamic**

**RESPOND**

**oracle**

**creating table insert data update data delete data**

**HTML CSS JAVA SCRIPT**

**USERNAME**

**PASSWORD**

**SERVLET**

**It is a server side programming language**

**logic to validate username and password**

Request Request

**PRESENTATION LAYER MIDDLEWARE BACKEND \FRONTEND**

**EXAMPLE:**

**Bank project if it is correct it will redirect to some page**

**airline reservation if it is wrong it will ask to login again**

**online ticket booking**

**BANK**

**SERVER**

**DATABASE AND WEBLOGIC SERVER**

**FRONTEND: we give the input from html page**

**we do some designs using css**

**we do validation using java script**

**MIDDLEWARE: we write business logic here i.e. servlet**

**ATM**

**(client-1)**

**ATM**

**(client-3)**

**BACKEND: we do data manipulation in database i.e. oracle**

**ATM**

**(client-2)**

**The frontend and middleware are deployed in a server**

**i.e. weblogic server. the server will be always running**

**it provides security.**

**IN OUR CASE : Database , server and client reside in the same system , so we call it as LOCALHOST.**

**TYPES OF ARCHITECTURE**

* **1-tier architecture (single system )**
* **2-tier architecture (server ,client )**
* **3-tier architecture (application server, database server, client)**
* **n-tier architecture (internet where we have huge network we dont no how many servers are in between the clients. servers are increased as load is increased or customers or consumers increased.**

**1-tier architecture :**

**the simplest architecture of Database in which the client, server, and Database all reside on the same machine. A simple one tier architecture example would be anytime you install a Database in your system and access it to practice SQL queries.**

**2-tier architecture :**

**in this architecture the presentation layer runs on a client (PC, Mobile, Tablet, etc.), and data is stored on a server called the second tier. Two tier architecture provides added security to the DBMS as it is not exposed to the end-user directly. It also provides direct and faster communication**

**3-tier architecture :**

**the most popular client server architecture in DBMS in which the development and maintenance of functional processes, logic, data access, data storage, and user interface is done independently as separate modules. Three Tier architecture contains a presentation layer, an application layer, and a database server.3-Tier database Architecture design is an extension of the 2-tier client-server architecture.**

**n-tier architecture:**

 **N**-**tier architecture** **is also called multi**-**tier architecture** **because the software is engineered to have the processing, data management, and presentation functions physically and logically separated**

**SYSTEM REQUIREMENTS:**

* **Oracle Software**
* **Eclipse Software**
* **Platform811 Software**

**Installation of Oracle:**