

## Phase 2

### Day 5

Using cascade property through primary table ie Trainer object we can do specific operation to secondary table ie Student.

```
@OneToMany(cascade = CascadeType.ALL)
```

### Auto increment :

ORM tool or Hibernate allow us to create the tables automatically base upon some property set in Hiberante.cfg.xml file.

In one project many employee can be work : one to many relationship

One employee has one address : one to one relationship

Projects

Pid (auto\_increment), pname

List<Employees> listOfEmployee

Employees

Empid (pk), empname, salary

Address address

Address

Addid (PK)

City

State

Create table projects(pid int primary key auto\_increment, pname varchar(10));

Web Application

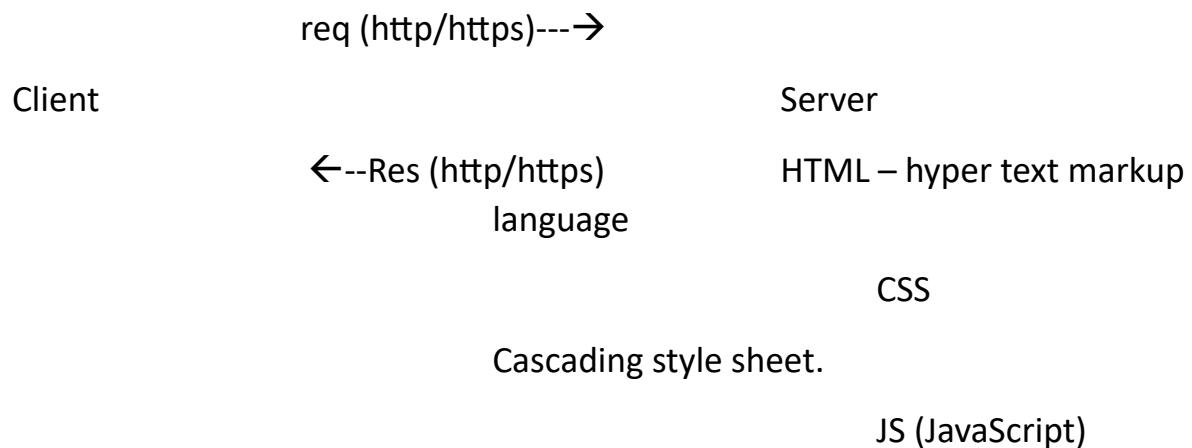
JDBC and Hibernate done

Servlet and JSP

## JEE : Java Enterprise Edition

Using JEE we can create web application using java technologies.

<https://www.google.com> --- URL



### Server side technologies

JEE (Servlet, JSP and EJB)

Asp.net

Php

CGI

Node JS

Python

To run these server side technologies we need server.

Because Inside Servlet, JSP or EJB no main method.

Application point of view server is mainly divided into two types.

1. **Web Server** : Tomcat part Apache etc.
2. Application Server : Web Logic, Jboss, Glashfish etc.

If server is type of web server which contains only one type of container.

Contains even also known as engine or run time environment. Web Server contains web container which is responsible to execute servlet and jsp program. Web server are light weighted server. Generally we use in development mode. They are generally open source.

If server is type of application server which can contains more than one different types of container. Like web container, ejb container, jms container etc. application server are heavy weighted. Generally they are paid version. Application server we use in production environment.

We will download web server ie tomcat 9.x / 10.x

**Servlet** : Servlet is normal java program which help to create dynamic web page on server side.

Servlet API.

servlet : java provided pre defined package is servlet. This package is part of `javax.servlet.*`;

**Servlet:** Servlet is an interface part of servlet package. This interface contains totally 5 methods.

`javax.servlet.Servlet;`

<b>init</b>	only once get called at beginning
<b>service</b>	again and again whenever client send request
<b>destroy</b>	at last to destroy the object

life cycle method.

getServletInfo

getServletConfig

### 1<sup>st</sup> Option

class MyServlet implements Servlet {

we need to override all 5 methods mandatory.

}

**GenericServlet** : it is a type of abstract class which internally implements Servlet interface and provided body for 4 method except service method.

### 2<sup>nd</sup> options

class MyServlet extends GenericServlet {

we need to provide the body for service method mandatory. Other methods optional

}

**HttpServlet** : it is a type of abstract class which internally extends GenericServlet and provided body for service method. It also provide few extra method in the form of doXXX like doGet, doPost etc.

### 3<sup>rd</sup> option :

class MyServlet extends HttpServlet {

service or doGet or doPost method which help to provide service for client.

}

<http://localhost:8080/ProjectName/UrlMappingOrPattern>