**JFSD: A-Z of Back-end and Database Development**

**Day 9 : 10 Aug 24**

JEE : Java Enterprise Edition

Using JEE we can create server side programming language.

Using core java or jse (Java Standard edition) we can create console base or desktop application.

https://[www.google.com](http://www.google.com) -🡪 URL

req(http/https)---------------🡪

Client Server

🡨---res(http/https)----------

Html/html5

Css/css3

Or bootstrap

JavaScript

jQuery

Angular or React JS

Server Side technologies

JEE 🡪 Servlet, JSP (Java Server Page) and EJB (Enterprise Java Bean)

Spring Framework/ Spring boot

Asp.net

Php

Python with Django

Node JS with Express JS

To run servlet or jsp or ejb program we need server.

Application point of you server are divided into two types.

1. Web server : tomcat (Apache company ), jee server
2. Application server : web logic, jboss, web sphere

Servlet or JSP or EJB doesn’t contain main method. Server is responsible to run the application. Server contains container. Container is a part of server which also known as engine which is responsible to execute servlet or jsp or ejb application.

If server is type of web server which contains only one type of container ie web container. Which is responsible to execute servlet and jsp program. This type of server we use in development mode.

If serve is type of application server which can contains different types of container like web container, ejb container, jms container etc. those container responsible to execute servlet, jsp, ejb, jms etc. application server provided few extra service like connection pooling, thread management, resource management, security features etc.

This type of server is use in production mode.

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

To create the servlet we need package

javax.servlet.\*; servlet is package which contains set of classes and interfaces.

Servlet : Servlet is an interface which contains set of methods and those method are abstract.

5 methods

init it call only once to do initialization whenever client send the request

service : this method call again and again which is use to receive request from client and give the response back to client

destroy : this method all at last when application close or any client accessing our application.

getServletInfo

getServletConfig

1st approach to create servlet program

class MyServlet implements Servlet {

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 methods except service method.

2nd approach to create servlet program

Class MyServlet extends GenericServlet {

Need to override only one method ie service method

}

3rd approach to create servlet program

HttpServlet :it is a type of servlet program which internally extends GenericServlet and provided body for service method. it provided few extra method in the form of doXXX like doGet, doPost, doPut, doDelete etc.

Class MyServlet extends HttpServlet {

We need to provide the body doGet or doPost etc.

}

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

Servlet provided one of the api ie RequestDispatcher

It is an interface which provided set of methods which help to navigate from one page to another page (servlet, html or jsp).

Syntax to create RequestDispatcher interface reference.

RequestDispatcher rd = request.getRequestDispatcher(“path”);

Path

If target page is servlet then path must be target servlet page URL pattern by default class name. please check in web.xml file or annotation.

If target is html or jsp page then url pattern is pageName.html or pageName.jsp.

rd.forward(request,response); we can see the output of only target page.

rd.include(request,reponse); we can see the output of source + target page as one page.