**PART A-Download and configure eclipse IDE and tomcat server**

1. Download Eclipse and Tomcat zip folder of any version(try choosing latest version)
2. Set runtime environment of tomcat in eclipse

* Windows
* Preferences
* Server
* Runtime environment
* Choose the version of apache
* Then add the path of the tomcat includes all the folders.

1. Add the server

**PART-B**

Let's see the steps, you need to follow to create the first servlet example.

* Create a Dynamic web project
* create a servlet
* add servlet-api.jar file
* Run the servlet

1) Create the dynamic web project:

For creating a dynamic web project

**click on File Menu -> New -> Dynamic web project -> write your project name e.g. first -> Finish**.

### 2) Create the servlet in eclipse IDE:

For creating a servlet, **explore the project by clicking the + icon -> explore the Java Resources -> right click on project or application -> New -> servlet -> write your servlet name e.g. Hello -> uncheck all the checkboxes except doGet() -> next -> Finish**.

3) add jar file in eclipse IDE:

|  |
| --- |
| For adding a jar file, **right click on your project -> Build Path -> Configure Build Path**  **-> click on Libraries tab in Java Build Path -> click on Add External JARs button**  **-> select the servlet-api.jar file under tomcat/lib -> ok.** |

### 4) Start the server and deploy the project:

For starting the server and deploying the project in one step, **Right click on your project -> Run As -> Run on Server -> choose tomcat server -> next -> addAll -> finish.**

**Program 11**

**A web application that takes name and age from an HTML page. If the age is less than 18, it should send a page with “Hello , you are not authorized to visit the site” message, where should be replaced with the entered name. Otherwise it should send “Welcome to this site” message.**

**AIM: To design an application to validate age are less than 18 or more than 18 using SERVLET.**

**index.html:**

<html

<head>

<title>VoterApp</title>

</head>

<body>

<form action= "http://localhost:8080/CheckAge/check" method="get">

<fieldset style="width:20%; background-color:#80ffcc">

<table>

<tr><td>Name</td><td><input type="text" name="name"></td></tr>

<tr><td>Age</td><td><input type="text" name="age"></td></tr>

<tr><td></td>

<td><input type = "submit" value="Check Eligibility"></td></tr>

</table>

</fieldset>

</form>

</body>

</html>

#### VoterSrv.java:

import java.io.\*;

import java.util.\*;

import javax.servlet.\*;

import javax.servlet.http.\*;

public class VoterSrv extends HttpServlet

{

public void service(HttpServletRequest req, HttpServletResponse res) throws IOException,ServletException

{

//set response content type

res.setContentType("text/html");

//get printWrite obj

PrintWriter pw = res.getWriter();

//read form data from page as request parameter

String name = req.getParameter("name");

int age = Integer.parseInt(req.getParameter("age")); if (age>=18)

{

pw.println("<font color='green' size='4'>Welcome "+name+" to this site</font>");

}

else

pw.println("<font color='red' size='4'>Hello "+name+", you are not authorized to visit the site</font>");

//add hyperlink to dynamic page

pw.println("<br><br><a href= 'index.html'>back</a>");

//close the stream

pw.close();

}

}

#### web.xml:

<web-app>

<servlet>

<servlet-name>abc</servlet-name>

<servlet-class>VoterSrv</servlet-class>

</servlet>

<servlet-mapping>

<servlet-name>abc</servlet-name>

<url-pattern>/check</url-pattern>

</servlet-mapping>

</web-app>

**12. A web application that takes a name as input and on submits it shows a hello <name> page where name is taken from the request. It shows the start time at the right top corner of the page and provides a logout button. On clicking this button, it should show a logout page with Thank You <name > message with the duration of usage (hint: Use session to store name and time) USING JSP.**

#### Sessionjsp.html

<html>

<head> <title> SESSION LOGIN </title> </head>

<body>

<center>

<form action="http://localhost:8080/jsp/Session1.jsp" method="get"> Enter Name: <input type="text" name="uname"> <br>

<input type="submit" value="LOGIN" name="register">

</form>

</center>

</body>

</html>

#### Session1.jsp

<%@page language="java" import="java.util.\*" errorPage=""%>

<form method="get" action="http://localhost:8080/jsp/Session2.jsp">

<%

Date d=new Date();

%>

<p align="right"> Time;<%=d.getTime()%></p>

<%

String un=request.getParameter("uname"); session.setAttribute("user",un); session.setAttribute("time",d.getTime());

%>

Hello <%=un%>

<br><br>

<input type="submit" value="logout">

</form>

#### Session2.jsp

<%@page language="java" import="java.util.\*" errorPage=""%>

<%

Date d2=new Date();

String un=(String)session.getAttribute("user"); Long t1=(Long)session.getAttribute("time"); Long t2=d2.getTime();

%>

Thank you <%=un%>

<br><br>

Session duration: <%=(t2-t1)/(60\*60)%> seconds

<% session.invalidate();%>