Write a program to demonstrate the differences between GET and POST using Servlet?

Servlet code :-

**package** com;

**import** java.io.IOException;

**import** java.io.PrintWriter;

**import** javax.servlet.ServletException;

**import** javax.servlet.http.HttpServlet;

**import** javax.servlet.http.HttpServletRequest;

**import** javax.servlet.http.HttpServletResponse;

/\*\*

\* Servlet implementation class LoginApp

\*/

**public** **class** LoginApp **extends** HttpServlet {

**private** **static** **final** **long** ***serialVersionUID*** = 1L;

/\*\*

\* **@see** HttpServlet#HttpServlet()

\*/

**public** LoginApp() {

**super**();

// **TODO** Auto-generated constructor stub

}

/\*\*

\* **@see** HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)

\*/

**protected** **void** doGet(HttpServletRequest request, HttpServletResponse response) **throws** ServletException, IOException {

// **TODO** Auto-generated method stub

//response.getWriter().append("Served at: ").append(request.getContextPath());

PrintWriter pw = response.getWriter();

String username = request.getParameter("uname");

String password = request.getParameter("password");

**if**(username.equals("mayank") && password.equals("123@")) {

pw.println("Welcome " + username);

pw.println("Successfully login with get method");

}

**else** {

pw.println("You have entered wrong username and password");

}

}

/\*\*

\* **@see** HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)

\*/

**protected** **void** doPost(HttpServletRequest request, HttpServletResponse response) **throws** ServletException, IOException {

// **TODO** Auto-generated method stub

PrintWriter pw = response.getWriter();

String username = request.getParameter("uname");

String password = request.getParameter("password");

**if**(username.equals("mayank") && password.equals("123@")) {

pw.println("Welcome " + username);

pw.println("Successfully login with post method");

}

**else** {

pw.println("You have entered wrong username and password");

}

//doGet(request, response);

}

}

HTML code :-

Login code :-

<!DOCTYPE html>

<html>

<head>

<meta charset=*"ISO-8859-1"*>

<title>Insert title here</title>

</head>

<body>

<h2>Login Page with Get method</h2>

<form action=*"LoginApp"* method=*"get"*>

<label>Name</label>

<input type=*"text"* name=*"uname"*><br/>

<label>Password</label>

<input type=*"password"* name=*"password"*><br>

<input type=*"submit"* value=*"submit"*/>

<input type=*"reset"* value=*"reset"*/>

</form>

<hr>

<hr>

<h2>Login Page with Post method</h2>

<form action=*"LoginApp"* method=*"post"*>

<label>Name</label>

<input type=*"text"* name=*"uname"*><br/>

<label>Password</label>

<input type=*"password"* name=*"password"*><br>

<input type=*"submit"* value=*"submit"*/>

<input type=*"reset"* value=*"reset"*/>

</form>

</body>

</html>

Index.html :-

<!DOCTYPE html>

<html>

<head>

<meta charset=*"ISO-8859-1"*>

<title>Insert title here</title>

</head>

<body>

<a href=*"Demo"*>Click Me</a>

<a href=*"Login.html"*>Login Me</a>

</body>

</html>

Configure a servlet in Eclipse IDE?

1.Open Eclipse

2.Go to the File menu. Choose New -> Dynamic Web Project

3.Enter the project name as FirstPracticeServlet. Click on Next

4.Enter nothing in the next screen and click on Next

5.Check the checkbox Generate web.xml deployment descriptor and click on Finish

Write a program to demonstrate the concept of Generic Servlets. ?

Servlet :-

**import java.io.IOException;**

**import** java.io.PrintWriter;

**import** javax.servlet.ServletException;

**import** javax.servlet.annotation.WebServlet;

**import** javax.servlet.http.HttpServlet;

**import** javax.servlet.http.HttpServletRequest;

**import** javax.servlet.http.HttpServletResponse;

/\*\*

**\*** Servlet implementation class NameServlet

\*/

**@WebServlet("/NameServlet")**

**public** **class** NameServlet **extends** HttpServlet {

**private** **static** **final** long serialVersionUID = 1L;

/\*\*

**\*** **@see** HttpServlet**#**HttpServlet()

\*/

**public** NameServlet() {

**super**();

// TODO Auto-generated constructor stub

}

/\*\*

**\*** **@see** HttpServlet**#**doGet(HttpServletRequest request**,** HttpServletResponse response)

\*/

**protected** void doGet(HttpServletRequest request, HttpServletResponse response) **throws** ServletException, **IOException** {

// TODO Auto-generated method stub

**String** fname = request.getParameter("fname");

**String** lname = request.getParameter("lname");

**PrintWriter** out = response.getWriter();

out.println("<html><body>");

out.println("Your full name is " + fname + " " + lname);

out.println("</body></html>");

}

/\*\*

**\*** **@see** HttpServlet**#**doPost(HttpServletRequest request**,** HttpServletResponse response)

\*/

**protected** void doPost(HttpServletRequest request, HttpServletResponse response) **throws** ServletException, **IOException** {

// TODO Auto-generated method stub

doGet(request, response);

}

Write a program to demonstrate the concept of Servlet Classes and Interfaces.?

Servlet :-

**import java.io.\***

**import** javax.servlet.**\***;

**import** javax.servlet.annotation.WebServlet;

/\*\*

**\*** Servlet implementation class InterfaceDemo

\*/

**@WebServlet("/InterfaceDemo")**

**public** **class** InterfaceDemo **implements** Servlet {

ServletConfig config=**null**;

**public** void init(ServletConfig config){

**this**.config=config;

**System**.out.println("Initialization complete");

}

**public** void service(ServletRequest req,ServletResponse res)

**throws** **IOException**,ServletException{

res.setContentType("text/html");

**PrintWriter** pwriter=res.getWriter();

pwriter.print("<html>");

pwriter.print("<body>");

pwriter.print("In the service() method<br>");

pwriter.print("</body>");

pwriter.print("</html>");

}

**public** void destroy(){

**System**.out.println("In destroy() method");

}

**public** ServletConfig getServletConfig(){

**return** config;

}

**public** **String** getServletInfo(){

**return** "This is a sample servlet info";

Write a program to demonstrate a Servlet Filter. ?

Servlet :-

**import java.io.IOException;**

**import** javax.servlet.ServletException;

**import** javax.servlet.annotation.WebServlet;

**import** javax.servlet.http.HttpServlet;

**import** javax.servlet.http.HttpServletRequest;

**import** javax.servlet.http.HttpServletResponse;

/\*\*

**\*** Servlet implementation class AccountProfile

\*/

**@WebServlet("/AccountProfile")**

**public** **class** AccountProfile **extends** HttpServlet {

**private** **static** **final** long serialVersionUID = 1L;

/\*\*

**\*** **@see** HttpServlet**#**HttpServlet()

\*/

**public** AccountProfile() {

**super**();

// TODO Auto-generated constructor stub

}

/\*\*

**\*** **@see** HttpServlet**#**doGet(HttpServletRequest request**,** HttpServletResponse response)

\*/

**protected** void doGet(HttpServletRequest request, HttpServletResponse response) **throws** ServletException, **IOException** {

// TODO Auto-generated method stub

response.getWriter().write("I am in Account Profile after passing through LoginFilter");

}

/\*\*

**\*** **@see** HttpServlet**#**doPost(HttpServletRequest request**,** HttpServletResponse response)

\*/

**protected** void doPost(HttpServletRequest request, HttpServletResponse response) **throws** ServletException, **IOException** {

// TODO Auto-generated method stub

doGet(request, response);

}

}

**import java.io.IOException;**

**import** javax.servlet.ServletException;

**import** javax.servlet.annotation.WebServlet;

**import** javax.servlet.http.HttpServlet;

**import** javax.servlet.http.HttpServletRequest;

**import** javax.servlet.http.HttpServletResponse;

/\*\*

**\*** Servlet implementation class AccountDashboard

\*/

**@WebServlet("/AccountDashboard")**

**public** **class** AccountDashboard **extends** HttpServlet {

**private** **static** **final** long serialVersionUID = 1L;

/\*\*

**\*** **@see** HttpServlet**#**HttpServlet()

\*/

**public** AccountDashboard() {

**super**();

// TODO Auto-generated constructor stub

}

/\*\*

**\*** **@see** HttpServlet**#**doGet(HttpServletRequest request**,** HttpServletResponse response)

\*/

**protected** void doGet(HttpServletRequest request, HttpServletResponse response) **throws** ServletException, **IOException** {

// TODO Auto-generated method stub

response.getWriter().write("I am in Account Dashboard after passing through LoginFilter");

}

/\*\*

**\*** **@see** HttpServlet**#**doPost(HttpServletRequest request**,** HttpServletResponse response)

\*/

**protected** void doPost(HttpServletRequest request, HttpServletResponse response) **throws** ServletException, **IOException** {

// TODO Auto-generated method stub

doGet(request, response);

}

}

Write a program to demonstrate a Session Tracking using Cookies. ?

**import java.io.\*;**

**import** javax.servlet.**\***;

**import** javax.servlet.annotation.**\***;

**import** javax.servlet.http.**\***;

/\*\*

**\*** Servlet implementation class LoginServlet

\*/

**@WebServlet("/LoginServlet")**

**public** **class** LoginServlet **extends** HttpServlet {

**private** **static** **final** long serialVersionUID = 1L;

/\*\*

**\*** **@see** HttpServlet**#**HttpServlet()

\*/

**public** LoginServlet() {

**super**();

// TODO Auto-generated constructor stub

}

/\*\*

**\*** **@see** HttpServlet**#**doGet(HttpServletRequest request**,** HttpServletResponse response)

\*/

**protected** void doGet(HttpServletRequest request, HttpServletResponse response) **throws** ServletException, **IOException** {

// TODO Auto-generated method stub

Cookie userId = **new** Cookie("userid", request.getParameter("userid"));

response.addCookie(userId);

response.sendRedirect("dashboard");

}

/\*\*

**\*** **@see** HttpServlet**#**doPost(HttpServletRequest request**,** HttpServletResponse response)

\*/

**protected** void doPost(HttpServletRequest request, HttpServletResponse response) **throws** ServletException, **IOException** {

// TODO Auto-generated method stub

doGet(request, response);

}

}

Write a program to demonstrate a Session Tracking using URL Rewrite. ?

**import java.io.\*;**

**import** javax.servlet.**\***;

**import** javax.servlet.annotation.**\***;

**import** javax.servlet.http.**\***;

/\*\*

**\*** Servlet implementation class LoginServlet

\*/

**@WebServlet("/LoginServlet")**

**public** **class** LoginServlet **extends** HttpServlet {

**private** **static** **final** long serialVersionUID = 1L;

/\*\*

**\*** **@see** HttpServlet**#**HttpServlet()

\*/

**public** LoginServlet() {

**super**();

// TODO Auto-generated constructor stub

}

/\*\*

**\*** **@see** HttpServlet**#**doGet(HttpServletRequest request**,** HttpServletResponse response)

\*/

**protected** void doGet(HttpServletRequest request, HttpServletResponse response) **throws** ServletException, **IOException** {

// TODO Auto-generated method stub

**String** userId = request.getParameter("userid");

response.sendRedirect("dashboard?userid=" + userId);

}

/\*\*

**\*** **@see** HttpServlet**#**doPost(HttpServletRequest request**,** HttpServletResponse response)

\*/

**protected** void doPost(HttpServletRequest request, HttpServletResponse response) **throws** ServletException, **IOException** {

// TODO Auto-generated method stub

doGet(request, response);

}

}

Write a program to demonstrate Session Tracking using Hidden Form Fields. ?

**import java.io.\*;**

**import** java.io.PrintWriter;

**import** javax.servlet.**\***;

**import** javax.servlet.annotation.**\***;

**import** javax.servlet.http.**\***;

/\*\*

**\*** Servlet implementation class LoginServlet

\*/

**@WebServlet("/LoginServlet")**

**public** **class** LoginServlet **extends** HttpServlet {

**private** **static** **final** long serialVersionUID = 1L;

/\*\*

**\*** **@see** HttpServlet**#**HttpServlet()

\*/

**public** LoginServlet() {

**super**();

// TODO Auto-generated constructor stub

}

/\*\*

**\*** **@see** HttpServlet**#**doGet(HttpServletRequest request**,** HttpServletResponse response)

\*/

**protected** void doGet(HttpServletRequest request, HttpServletResponse response) **throws** ServletException, **IOException** {

// TODO Auto-generated method stub

**PrintWriter** out = response.getWriter();

out.println("<html><body>");

**String** userId = request.getParameter("userid");

//creating a new hidden form field

out.println("<form action='dashboard' method='post'>");

out.println("<input type='hidden' name='userid' id='userid' value='"+userId+"'>");

out.println("<input type='submit' value='submit' >");

out.println("</form>");

out.println("<script>document.forms[0].submit();</script>");

}

/\*\*

**\*** **@see** HttpServlet**#**doPost(HttpServletRequest request**,** HttpServletResponse response)

\*/

**protected** void doPost(HttpServletRequest request, HttpServletResponse response) **throws** ServletException, **IOException** {

// TODO Auto-generated method stub

doGet(request, response);

}

}

Write a program to demonstrate Session Tracking using an HTTP Session. ?

**import java.io.\*;**

**import** javax.servlet.**\***;

**import** javax.servlet.annotation.**\***;

**import** javax.servlet.http.**\***;

/\*\*

**\*** Servlet implementation class LoginServlet

\*/

**@WebServlet("/LoginServlet")**

**public** **class** LoginServlet **extends** HttpServlet {

**private** **static** **final** long serialVersionUID = 1L;

/\*\*

**\*** **@see** HttpServlet**#**HttpServlet()

\*/

**public** LoginServlet() {

**super**();

// TODO Auto-generated constructor stub

}

/\*\*

**\*** **@see** HttpServlet**#**doGet(HttpServletRequest request**,** HttpServletResponse response)

\*/

**protected** void doGet(HttpServletRequest request, HttpServletResponse response) **throws** ServletException, **IOException** {

// TODO Auto-generated method stub

**String** userId = request.getParameter("userid");

HttpSession session=request.getSession();

session.setAttribute("userid", userId);

response.sendRedirect("dashboard");

}

/\*\*

**\*** **@see** HttpServlet**#**doPost(HttpServletRequest request**,** HttpServletResponse response)

\*/

**protected** void doPost(HttpServletRequest request, HttpServletResponse response) **throws** ServletException, **IOException** {

// TODO Auto-generated method stub

doGet(request, response);

}

}

Write a program to demonstrate Session Login and Logout. ?

**import java.io.\*;**

**import** javax.servlet.**\***;

**import** javax.servlet.annotation.**\***;

**import** javax.servlet.http.**\***;

/\*\*

**\*** Servlet implementation class LoginServlet

\*/

**@WebServlet("/LoginServlet")**

**public** **class** LoginServlet **extends** HttpServlet {

**private** **static** **final** long serialVersionUID = 1L;

/\*\*

**\*** **@see** HttpServlet**#**HttpServlet()

\*/

**public** LoginServlet() {

**super**();

// TODO Auto-generated constructor stub

}

/\*\*

**\*** **@see** HttpServlet**#**doGet(HttpServletRequest request**,** HttpServletResponse response)

\*/

**protected** void doGet(HttpServletRequest request, HttpServletResponse response) **throws** ServletException, **IOException** {

// TODO Auto-generated method stub

**String** userId = request.getParameter("userid");

HttpSession session=request.getSession();

session.setAttribute("userid", userId);

response.sendRedirect("dashboard");

}

/\*\*

**\*** **@see** HttpServlet**#**doPost(HttpServletRequest request**,** HttpServletResponse response)

\*/

**protected** void doPost(HttpServletRequest request, HttpServletResponse response) **throws** ServletException, **IOException** {

// TODO Auto-generated method stub

doGet(request, response);

}

}