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

<!DOCTYPE html>

<**html**>

<**head**>

<**meta** charset="UTF-8">

<**title**>GET vs POST Demo</**title**>

</**head**>

<**body**>

<**a** href="gethandler?name=John+Doe&address=145+Lake+Avenue">Do a Servlet GET</**a**><**br**><**br**>

<**form** name=frm method=post action="posthandler">

Name <**input** name="name" id="name" maxlenght=50><**br**>

Address <**input** name="address" id="address" maxlength=100><**br**>

<**button**>Submit</**button**>

</**form**>

</**body**>

</**html**>

GET :-

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

**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;

**import** javax.servlet.http.HttpSession;

/\*\*

**\*** Servlet implementation class GetHandler

\*/

**@WebServlet("/GetHandler")**

**public** **class** GetHandler **extends** HttpServlet {

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

/\*\*

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

\*/

**public** GetHandler() {

**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** name = request.getParameter("name");

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

out.println("Name=" + name + "<br>Address=" + address);

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);

}

}

POST :-

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

**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 PostHandler

\*/

**@WebServlet("/PostHandler")**

**public** **class** PostHandler **extends** HttpServlet {

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

/\*\*

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

\*/

**public** PostHandler() {

**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

}

/\*\*

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

\*/

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

// TODO Auto-generated method stub

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

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

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

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

out.println("Name=" + name + "<br>Address=" + address);

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

}

WEB-INF :-

<?xml version="1.0" encoding="UTF-8"?>

<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://xmlns.jcp.org/xml/ns/javaee" xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee http://xmlns.jcp.org/xml/ns/javaee/web-app\_4\_0.xsd" id="WebApp\_ID" version="4.0">

<display-name>LoginLogout</display-name>

<welcome-file-list>

<welcome-file>index.html</welcome-file>

<welcome-file>index.htm</welcome-file>

<welcome-file>index.jsp</welcome-file>

<welcome-file>default.html</welcome-file>

<welcome-file>default.htm</welcome-file>

<welcome-file>default.jsp</welcome-file>

</welcome-file-list>

<servlet>

<servlet-name>GetHandler</servlet-name>

<servlet-class>GetHandler</servlet-class>

</servlet>

<servlet>

<servlet-name>PostHandler</servlet-name>

<servlet-class>PostHandler</servlet-class>

</servlet>

<servlet-mapping>

<servlet-name>GetHandler</servlet-name>

<url-pattern>/gethandler</url-pattern>

</servlet-mapping>

<servlet-mapping>

<servlet-name>PostHandler</servlet-name>

<url-pattern>/posthandler</url-pattern>

</servlet-mapping>

</web-app>

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);

}

}