Servlets:

Reading the Form Data –

getParameter() – returns String

getParameterNames() – returns enum of string

getParameterValues() – returns arrays of string

Login.HTML

<!DOCTYPE html>

<html>

<head>

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

<title>Insert title here</title>

<style type=*"text/css"*>

**body** {

background-color: *cyan*;;

}

**div** {

width: *200px*;

height: *300px*;

border: *1px solid black*;

padding: *10px*;

position: *relative*;

left: *550px*;

top: *200px*;

background-color: *orange*;

border-radius: *20px*;

}

</style>

</head>

<body>

<div>

<h4 style="text-align: *center*;">Welcome to gmail</h4>

<form action=*"/SampleApp/My1stServlet"* method=*"post"*>

<table>

<tr>

<td><input type=*"text"* name=*"user"*

placeholder=*"enter your username"*></td>

</tr>

<tr>

</tr>

<tr>

</tr>

<tr>

<td><input type=*"password"* name=*"pwd"*

placeholder=*"enter your password"*></td>

</tr>

<tr>

</tr>

<tr>

</tr>

<tr>

<td>Hobbies :</td>

</tr>

<tr>

<td><input type=*"checkbox"* name=*"box1"* value= *"Shopping"*> Shopping</td>

</tr>

<tr>

<td><input type=*"checkbox"* name=*"box1"* value= *"Parties"*>Parties</td>

</tr>

<tr>

<td><input type=*"checkbox"* name=*"box1"* value= *"Fishing"*> Fishing</td>

</tr>

<tr>

<td>Gender :</td>

</tr>

<tr>

<td><input type=*"radio"* name=*"r1"* value=*"Male"*>Male</td>

</tr>

<tr>

<td><input type=*"radio"* name=*"r1"* value=*"Female"*>Female</td>

</tr>

<tr>

<td>

<button style="position: *relative*; left: *60px*">Login</button>

</td>

</tr>

</table>

</form>

</div>

</body>

</html>

Get parameters by values:

import java.io.IOException;

import java.io.PrintWriter;

import java.util.Date;

import java.util.Iterator;

import java.util.List;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

@WebServlet("/My1stServlet")

public class My1stServlet extends HttpServlet {

@Override

protected void doGet(HttpServletRequest req, HttpServletResponse resp) throws ServletException, IOException {

// resp.setContentType("text/html");

// PrintWriter out = resp.getWriter();

// out.println("Welcome to my first servlet page!!" + "<br/>");

// out.println("Username : "+ req.getParameter("user")+ "</br>");

// out.println("Password : "+ req.getParameter("pwd")+ "</br>");

//

//

//

//

//

// Date date = new Date();

// resp.setIntHeader("Refresh", 4);

// out.println("Date :" + date + "</br>");

//

// resp.sendRedirect("http://www.google.com");

}

@Override

protected void doPost(HttpServletRequest req, HttpServletResponse resp) throws ServletException, IOException {

resp.setContentType("text/html");

PrintWriter out = resp.getWriter();

out.println("Welcome to my first servlet page!!" + "<br/>");

out.println("Username : " + req.getParameter("user") + "</br>");

out.println("Password : " + req.getParameter("pwd") + "</br>");

String [] hobbies = req.getParameterValues("box1");

for (int i = 0 ; i< hobbies.length ; i++) {

out.println(hobbies[i]);

}

String []gender = req.getParameterValues("r1");

for (int i = 0; i< gender.length ; i++) {

out.println(gender[i]);

}

}

}

resp.setContentType("text/html");

// PrintWriter out = resp.getWriter();

Date date = new Date();

resp.setIntHeader("Refresh", 4);

out.println("Date :" + date + "</br>");

EXAMPLE OF REDIRECT:

Servlet Redirection –

1. Happens @ browser-side
2. URL changes
3. Redirects makes request to contain “GET”, so always doGet() is invoked
4. Slower in operation
5. It has more than one request-response cycle
6. Always invoke sendRedirect() method on response object

Browser --------🡪/RedirectDemo (S1)

<---------

Google.com

resp.sendRedirect("http://www.google.com"); should be in the get().

Servlet Forward

1. Happens at server-side
2. URL doesn’t change
3. It has only one request/response cycle
4. Faster in operation
5. Works only for internal URL
6. It involves corresponding doXXX() method @ the destination

Example of Forward:

**import** java.io.IOException;

**import** java.io.PrintWriter;

**import** javax.servlet.RequestDispatcher;

**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 ForwardDemo

\*/

@WebServlet("/ForwardDemo")

**public** **class** ForwardDemo **extends** HttpServlet {

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

/\*\*

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

\*/

**public** ForwardDemo() {

**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());

}

/\*\*

\* **@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);

response.setContentType("text/html");

PrintWriter writer = response.getWriter();

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

String pass = request.getParameter("pwd");

**if**(name.equals("Nilim") && pass.equals("qwerty")) {

//forward to another servlet

RequestDispatcher dispatcher = request.getRequestDispatcher("WelcomeServlet");

dispatcher.forward(request, response);

}

**else** {

//include the login page

writer.println("Invalid credentials!! Please try again");

RequestDispatcher dispatcher = request.getRequestDispatcher("Login.html");

dispatcher.include(request, response);

}

}

}

WELCOME 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 WelcomeServlet

\*/

@WebServlet("/WelcomeServlet")

**public** **class** WelcomeServlet **extends** HttpServlet {

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

/\*\*

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

\*/

**public** WelcomeServlet() {

**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());

}

/\*\*

\* **@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);

response.setContentType("text/html");

PrintWriter printWriter = response.getWriter();

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

printWriter.println("Hi " + uname + " !!" );

printWriter.println("Welcome to the Servlet home page!");

}

}

Servlet include

Inclusion on static and dynamic resources is possible using RequestDispatcher object

RequestDispatcher r = request.getRequestDispatcher(url);

r.include(request,response);