Top of Form

//Qfactorial using servlet

<!DOCTYPE html>

<html>

<head>

<title>TODO supply a title</title>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

</head>

<body>

<form method ="get" action ="Factorial">

Enter number: <input type="text" name="n">

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

</form>

</body>

</html>

// Factorial.java

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;

public class Factorial extends HttpServlet {

protected void processRequest(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

response.setContentType("text/html;charset=UTF-8");

try (PrintWriter out = response.getWriter()) {

/\* TODO output your page here. You may use following sample code. \*/

int n =Integer.parseInt(request.getParameter("n"));

int i,f=1;

for(i=1;i<=n;i++){

f=f\*i;

}

out.println(f);

}

}

}

//Q Simple calculator using servlet

//index.html

<!DOCTYPE html>

<html>

<head>

<title>TODO supply a title</title>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

</head>

<body>

<form method ="get" action ="Calculator">

Enter number 1: <input type="text" name="n1">

Enter number 2: <input type="text" name="n2">

<input type="submit" name="b" value="Add">

<input type="submit" name="b" value="Sub">

<input type="submit" name="b" value="Mul">

<input type="submit" name="b" value="Div">

</form>

</body>

</html>

//Calculator.java

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;

public class Calculator extends HttpServlet {

protected void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

response.setContentType("text/html;charset=UTF-8");

try (PrintWriter out = response.getWriter()) {

/\* TODO output your page here. You may use following sample code. \*/

int n1 =Integer.parseInt(request.getParameter("n1"));

int n2 =Integer.parseInt(request.getParameter("n1"));

String s =request.getParameter("b");

switch(s){

case "Add":

out.println("ADD:"+(n1+n2));

break;

case "Sub":

out.println("Sub:"+(n1-n2));

break;

case "Mul":

out.println("Mul:"+(n1\*n2));

break;

case "Div":

out.println((n1/n2)+"Div:");

break;

}

}

}

}

Q3 Request diapatcher interface using servlet login application

Top of Form

<!DOCTYPE html>

<html>

<head>

<title>TODO supply a title</title>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

</head>

<body>

<form method="get" action="test1">

Username : <input type="text" name="n">

Email: <input type="email" name="email">

Password :<input type="password" name="pass1">

Confirm password :<input type="password" name="pass2">

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

</form>

</body>

</html>

//test1.java

import java.io.IOException;

import java.io.PrintWriter;

import javax.servlet.RequestDispatcher;

import javax.servlet.ServletException;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

/\*\*

\*

\* @author Soniya

\*/

public class test1 extends HttpServlet {

/\*\*

\* Processes requests for both HTTP <code>GET</code> and <code>POST</code>

\* methods.

\*

\* @param request servlet request

\* @param response servlet response

\* @throws ServletException if a servlet-specific error occurs

\* @throws IOException if an I/O error occurs

\*/

protected void processRequest(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

response.setContentType("text/html;charset=UTF-8");

try (PrintWriter out = response.getWriter()) {

/\* TODO output your page here. You may use following sample code. \*/

String s1= request.getParameter("n");

String s2=request.getParameter("pass1");

String s3 =request.getParameter("pass2");

if(s2.equals(s3)){

RequestDispatcher rd1=request.getRequestDispatcher("Welcome");

rd1.forward(request,response);

}

else {

RequestDispatcher rd2=request.getRequestDispatcher("Error");

rd2.include(request, response);

}

}

}

}

//Welcome.java

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;

/\*\*

\*

\* @author Soniya

\*/

public class Welcome extends HttpServlet {

/\*\*

\* Processes requests for both HTTP <code>GET</code> and <code>POST</code>

\* methods.

\*

\* @param request servlet request

\* @param response servlet response

\* @throws ServletException if a servlet-specific error occurs

\* @throws IOException if an I/O error occurs

\*/

protected void processRequest(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

response.setContentType("text/html;charset=UTF-8");

try (PrintWriter out = response.getWriter()) {

/\* TODO output your page here. You may use following sample code. \*/

out.println("Welcome");

}

}

}

//Error.java

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;

/\*\*

\*

\* @author Soniya

\*/

public class Error extends HttpServlet {

/\*\*

\* Processes requests for both HTTP <code>GET</code> and <code>POST</code>

\* methods.

\*

\* @param request servlet request

\* @param response servlet response

\* @throws ServletException if a servlet-specific error occurs

\* @throws IOException if an I/O error occurs

\*/

protected void processRequest(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

response.setContentType("text/html;charset=UTF-8");

try (PrintWriter out = response.getWriter()) {

/\* TODO output your page here. You may use following sample code. \*/

out.println("Error");

}

}

}

Q Write a program using servlet to find the gratest among three

//index.html

<html>

<head>

<title>Find the greatest number </title>

</head>

<body>

<marquee>K.J. SOMAIYA COLLEGE OF SCIENCE AND COMMERCE</marquee>

<form method="get" action="greatest" >

Enter the First Number <input type="text" name="n1" >

<br>

Enter the Second Number <input type="text" name="n2" >

<br>

Enter the Third Number<input type="text" name="n3" >

<br>

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

</form>

</body>

</html>

//greatest.java

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;

public class greatest extends HttpServlet {

@Override

protected void doGet(HttpServletRequest req, HttpServletResponse res)

throws ServletException, IOException {

res.setContentType("text/html;charset=UTF-8");

try (PrintWriter pw = res.getWriter()) {

int N1,N2,N3;

N1=Integer.parseInt(req.getParameter("n1"));

N2=Integer.parseInt(req.getParameter("n2"));

N3=Integer.parseInt(req.getParameter("n3"));

if(N1>N2)

{

pw.println("First Number is Greater");

}

else if(N2>N3)

{

pw.println("Second Number is greater");

}

else

{

pw.println("Third number is greater");

}

}

}

}

Q UploadFile program

//index.html

<html>

<body>

<form action="FileUploadServlet" method="post" enctype="multipart/form-data">

Select File to Upload:<input type="file" name="file" id="file">

Destination <input type="text" value="/tmp" name="destination">

<br>

<input type="submit" value="Upload file" name="upload" id="upload">

</form>

</body>

</html>

Top of Form

//FileUploadServlet

import java.io.\*;

import javax.servlet.\*;

import javax.servlet.annotation.MultipartConfig;

import javax.servlet.http.\*;

@MultipartConfig

public class FileUploadServlet extends HttpServlet {

@Override

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

{

res.setContentType("text/html");

PrintWriter out = res.getWriter();

String path=req.getParameter("destination");

Part filePart=req.getPart("file");

String filename=filePart.getSubmittedFileName().toString();

out.print("<br><br><hr> file name: "+filename);

OutputStream os=null;

InputStream is=null;

try {

os=new FileOutputStream(new File(path+File.separator+filename));

is=filePart.getInputStream();

int read=0;

while ((read = is.read()) != -1) {

os.write(read);

}

out.println("<br>file uploaded sucessfully...!!!");

}

catch(FileNotFoundException e){out.print(e);}

} }

Q Download File

//index.html

<html>

<head>

<title>File Download Page</title>

</head>

<body>

<h1>File Download Application</h1>

Click <a href="DownloadServlet?filename=SampleChapter.pdf">Sample Chapter</a>

<br/><br/>

Click <a href="DownloadServlet?filename=TOC.pdf">Table Of Contents</a>

</body>

</html>

//DownloadServlet.java

import java.io.IOException;

import java.io.InputStream;

import java.io.PrintWriter;

import javax.servlet.ServletContext;

import javax.servlet.ServletException;

import javax.servlet.ServletOutputStream;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

public class DownloadServlet extends HttpServlet {

@Override

public void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

response.setContentType("APPLICATION/OCTET-STREAM");

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

ServletContext context = getServletContext();

InputStream is = context.getResourceAsStream("/" + filename);

//ServletOutputStream out = response.getOutputStream(); // any of the two works

PrintWriter out=response.getWriter();

response.setHeader("Content-Disposition","attachment; filename=\"" + filename + "\""); // if comment this statement then it wl ask you about the editor with which you want to open the file

int i;

while ((i=is.read()) != -1) {

out.write(i);

}

is.close();

out.close();

}

}

Q Login and registration using jsp

//index.html

Top of Form

<html>

<body>

<form action="test.jsp" method="get">

Enter name

<input type ="text" name="n"> <br>

Enter password

<input type ="password" name="p1"> <br>

Enter Confirm password

<input type ="password" name="p2"> <br>

<input type="submit" value="Register"><br>

</form>

</body>

</html>

//test.jsp

<%@page contentType="text/html" pageEncoding="UTF-8"%>

<!DOCTYPE html>

<html>

<head>

<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">

<title>JSP Page</title>

</head>

<body>

<% String s1=request.getParameter("p1");

String s2=request.getParameter("p2");

if(s1.equals(s2))

{%>

<jsp:forward page="login.jsp"/>

<%}

else

{ %>

<jsp:forward page="index.html"/>

<%}

%>

}

</body>

</html>

//login.jsp

<%@page contentType="text/html" pageEncoding="UTF-8"%>

<!DOCTYPE html>

<html>

<head>

<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">

<title>JSP Page</title>

</head>

<body>

Welcome ...

</body>

</html>

Q write a simple calculator program using jsp

<!DOCTYPE html>

<!--

To change this license header, choose License Headers in Project Properties.

To change this template file, choose Tools | Templates

and open the template in the editor.

-->

<html>

<head>

<title>TODO supply a title</title>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

</head>

<body>

<form method ="get" action ="newjsp.jsp">

Enter number 1: <input type="text" name="n1">

Enter number 2: <input type="text" name="n2">

<input type="submit" name="b" value="Add">

<input type="submit" name="b" value="Sub">

<input type="submit" name="b" value="Mul">

<input type="submit" name="b" value="Div">

</form>

</body>

</html>

//newjsp.jsp

Top of Form

<%--

Document : Calculator

Created on : Oct 15, 2019, 3:53:56 AM

Author : Soniya

--%>

<%@page contentType="text/html" pageEncoding="UTF-8"%>

<!DOCTYPE html>

<html>

<head>

<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">

<title>JSP Page</title>

</head>

<body>

<%

int n1 =Integer.parseInt(request.getParameter("n1"));

int n2 =Integer.parseInt(request.getParameter("n1"));

String s =request.getParameter("b");

if(s.equals("Add")){

out.println("addition:"+(n1+n2));

}

else if(s.equals("Sub")){

out.println("Subtraction" +(n1-n2));

} else if(s.equals("Mul")){

out.println("Multiplication:"+(n1\*n2));

} else{

out.println("Division:"+(n1/n2));

}

%>

</body>

</html>

1. Create a registration and login JSP application to register and authenticate the user based on username and password using JDBC.

//index.html

<!DOCTYPE html>

<!--

To change this license header, choose License Headers in Project Properties.

To change this template file, choose Tools | Templates

and open the template in the editor.

-->

<title>New User Registration Page</title>

</head><body><form action="Register.jsp" >

<h1> New User Registration Page</h1>Enter User Name

<input type="text" name="txtName" ><br>Enter Password

<input type="password" name="txtPass1" >

<br>Re-Enter Password<input type="password" name="txtPass2" >

<br>Enter Email<input type="text" name="txtEmail" >

<br>Enter Country Name <input type="text" name="txtCon" >

<br><input type="reset" ><input type="submit" value="REGISTER" >

</form></body></html>

//Register.jsp

<%@page import="java.sql.\*"%>

//<%@page %>

<%@page contentType="text/html" pageEncoding="UTF-8"%>

<!DOCTYPE html>

<html><body><h1>Registration JSP Page</h1>

<%String uname=request.getParameter("txtName");

String pass1 = request.getParameter("txtPass1");

String pass2 = request.getParameter("txtPass2");

String email = request.getParameter("txtEmail");

String city = request.getParameter("txtCon");

if(pass1.equals(pass2))

{try{Class.forName("com.mysql.jdbc.Driver");

Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/mysql","root","12345");

PreparedStatement stmt = con.prepareStatement("insert into student values (?,?,?,?)");

stmt.setString(1, uname);

stmt.setString(2, pass1);

stmt.setString(3, email);

stmt.setString(4, city);

int row = stmt.executeUpdate();

if(row==1) { out.println("Registration Successful"); }

else { out.println("Registration FFFFFAAAIIILLLL !!!!");%>

<jsp:include page="index.html" ></jsp:include>

<% }}

catch(Exception e){out.println(e);

}}else {out.println("<h1>Password Mismatch</h1>");

%>

<jsp:include page="index.html" ></jsp:include>

<% }%></body></html>

/\*

\* To change this license header, choose License Headers in Project Properties.

\* To change this template file, choose Tools | Templates

\* and open the template in the editor.

\*/

1. Create a registration servlet in Java using JDBC. Accept the details such as Username, Password, Email, and Country from the user using HTML Form and store the registration details in the database.

//index.html

<!DOCTYPE html>

<!--

To change this license header, choose License Headers in Project Properties.

To change this template file, choose Tools | Templates

and open the template in the editor.

-->

<html>

<head>

<title>Registration</title>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

</head>

<body>

<form method="get" action="test">

Email:<input type="email" name="email">

<br>

<br>

Username:<input type="text" name="user">

<br>

<br>

Password:<input type="password" name="pass">

<br>

<br>

<label>

Country:<input type="text" name="country">

</label>

<br>

<br>

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

</body>

</html>

//test.java

import java.io.IOException;

import java.io.PrintWriter;

import java.sql.DriverManager;

import javax.servlet.ServletException;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import java.sql.\*;

/\*\*

\*

\* @author admin

\*/

public class test extends HttpServlet {

/\*\*

\* Processes requests for both HTTP <code>GET</code> and <code>POST</code>

\* methods.

\*

\* @param request servlet request

\* @param response servlet response

\* @throws ServletException if a servlet-specific error occurs

\* @throws IOException if an I/O error occurs

\*/

public void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

response.setContentType("text/html;charset=UTF-8");

PrintWriter out=response.getWriter();

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

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

String em=request.getParameter("email");

String co=request.getParameter("country");

try{

Class.forName("com.mysql.jdbc.Driver");

Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/mysql", "root", "12345");

PreparedStatement pst=con.prepareStatement("insert into data value(?,?,?,?)");

pst.setString(1, id);

pst.setString(2, ps);

pst.setString(3, em);

pst.setString(4, co);

int row=pst.executeUpdate();

out.println("<h1>"+row+"Inserted successfully");

con.close();

pst.close();

}

catch(Exception e){out.println(e);}

}

}