Calculator

<!DOCTYPE html>

<html>

<head>

<title> calculator </title>

<meta charset="UTF-8">

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

</head>

<body>

<form method="post" action="servletfile">

NO-1 <input type="text" name="n1">

NO-2 <input type="text" name="n2"> <br><br>

<input type="submit" value="+" name="btn">

<input type="submit" value="-" name="btn">

<input type="submit" value="\*" name="btn">

<input type="submit" value="/" name="btn">

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

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

int b;

b = Integer.parseInt(request.getParameter("n2"));

int c = 0;

String op = request.getParameter("btn");

if (op.equals("+")) {

c = a + b;

} else if (op.equals("-")) {

c = a - b;

} else if (op.equals("\*")) {

c = a \* b;

} else if (op.equals("/")) {

c = a / b;}

out.println("<b>" + a + op + b + " = " + c + "<b>");

**LogIn**

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

Enter username: <input type="text" name="textId"><br>

Enter Password: <input type="text" name="textPass"><br>

<input type="reset">

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

</form>

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

String userpass = request.getParameter("textPass");

if(username.equals("admin") && userpass.equals("12345")){

out.println("<body bgcolor='yellow'>");

out.println("<h1> Welcome!!" + username);

}

else{

out.println("<body bgcolor='red'>");

out.println("<h1> Login failed!!");

}

**1c 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.**

<form action="Registation" method="post">

Enter Username: <input type="text" name="un"><br>

Enter Password: <input type="text" name="up"><br>

Enter Email\_Id: <input type="text" name="ue"><br>

Enter Country : <input type="text" name="uc"><br><br>

<input type="submit" value="Click to registor"><br>

</form>

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

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

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

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

try {

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

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

PreparedStatement pst = con.prepareStatement("insert into tablename values(?,?,?,?)");

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 Succesfullyyyyy");

} catch (ClassNotFoundException | SQLException e) {

out.println(e);

}

**2a.** Using Request Dispatcher

<form action="Login">

Enter User Name: <input type="text" name="uid"><br>

Enter User pass: <input type="text" name="pid"><br>

<input type="reset">

<input type="submit" vaule="click here"><br>

</form>

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

String upass = request.getParameter("pid");

if (uname.equals("admin") && upass.equals("servlet")){

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

ds.forward(request, response);

}else{

out.println("Login Failed");

RequestDispatcher ds = request.getRequestDispatcher("index.html");

ds.include(request, response);

}

2nd servlet file fill \_\_\_\_\_out.println("<h1>Login Successful!!</h1>");

2B. Cookies to store the number of times a user has visited

servlet.

<form action="count">

Enter Your Name <input type="text" name="t1"><br>

<input type="submit" value="Click to Enter "></form>

String name = request.getParameter("t1");

Cookie c1 = new Cookie("count", String.valueOf(count));

int c2 = Integer.parseInt(c1.getValue());

if (c2 == 0) {

out.println("Welcome = " + name);

count++;

} else {

c1 = new Cookie("count", String.valueOf(count));

count++;

out.println("Welcome = " + name + "You have visited the page " + count + " times.");

}

}

@WebServlet(urlPatterns = {"/count"})

public class count extends HttpServlet {

**static int count = 0, c2 = 0; //it goes in starting line of code**

**4a. values obtained from the use of intrinsic objects of various types**

<form action="index.jsp">

Enter your name: <input type="text" name="myname"><br>

Enter your email id: <input type="text" name="mymailid"><br>

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

</form>

<h1>Use of Intrinsic Objects in JSP</h1><h1>Request Object </h1>

Query String <%=request.getQueryString()%><br>

Context Path <%=request.getContextPath()%><br>

Remote Host <%=request.getRemoteHost()%><br>

<h1>Response Object </h1>

Character Encoding Type <%=response.getCharacterEncoding()%><br>

Content Type <%=response.getContentType()%><br>

Locale <%=response.getLocale()%><br>

<h1>Session Object </h1> ID <%=session.getId()%><br>

Creation Time <%=new java.util.Date(session.getCreationTime())%><br>

Last Access Time<%=new java.util.Date(session.getLastAccessedTime())%><br>

**5a.** Create an html page with fields, eno, name, age, desg, salary. Now on submit this data to a JSP page which will update the employee table of database with matching eno.

<form action="UpdateEmp.jsp" >

Enter Employee Number<input type="text" name="txtEno" ><br>

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

Enter age<input type="text" name="txtAge" ><br>

Enter Salary<input type="text" name="txtSal" ><br>

<input type="reset" ><input type="submit">

</form>

**INBODY**

**<h1>Employee Record Update</h1> <%**

**String eno = request.getParameter("txtEno");**

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

**String age = request.getParameter("txtAge");**

**String sal = request.getParameter("txtSal");**

**try {**

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

**Connection con**

**= DriverManager.getConnection("jdbc:mysql://localhost:3306/logindb", "root", "root");**

**PreparedStatement stmt = con.prepareStatement("select \* from emp where empid=?");**

**stmt.setString(1, eno);**

**ResultSet rs = stmt.executeQuery();**

**if (rs.next()) {**

**out.println("<h1>~~~ Employee " + name + " Exist ~~~ </h1>");**

**PreparedStatement pst1 = con.prepareStatement("update emp set salary=? where empid=?");**

**PreparedStatement pst2 = con.prepareStatement("update emp set age=? where empid=?");**

**pst1.setString(1, sal);**

**pst1.setString(2, eno);**

**pst2.setString(1, age);**

**pst2.setString(2, eno);**

**pst1.executeUpdate();**

**pst2.executeUpdate();**

**} else {**

**out.println("<h1>Employee Record not exist !!!!!</h1>");**

**}**

**} catch (Exception e) {**

**out.println(e);**

**}**

**%>**

**5B jsp page the use of expression language**

Add in body

<h1>Hello World!</h1>

<h2>Expression Language (EL) in JSP</h2>

<!-- Accessing a simple variable using EL -->

<h3>1. Simple Variable</h3>

<%-- Setting an attribute in the request scope --%>

<%

request.setAttribute("userName", "Ritik Sah");

%>

<p>Welcome, ${userName}!</p>

<!-- Accessing session-scoped variable using EL -->

<h3>2. Session Scope Variable</h3>

<%-- Setting an attribute in the session scope --%>

<%

session.setAttribute("sessionVariable", "Session Value");

%>

<p>Session Value: ${sessionVariable}</p>

<!-- Accessing application-scoped variable using EL -->

<h3>3. Application Scope Variable</h3>

<%-- Setting an attribute in the application scope --%>

<%

application.setAttribute("appVariable", "Application Scope Value");

%>

<p>Application Value: ${applicationScope.appVariable}</p>

<!-- Performing arithmetic operations using EL -->

<h3>4. Arithmetic Operations</h3>

<p>10 + 20 = ${10 + 20}</p>

<p>30 \* 2 = ${30 \* 2}</p>

<!-- Logical operators in EL -->

<h3>5. Logical Operators</h3>

<p>Is 10 greater than 5? ${10 > 5}</p>

<!-- Ternary operator in EL -->

<h3>6. Ternary Operator</h3>

<p>${userName == 'Ritik Sah' ? 'Hello Ritik!' : 'Hello Guest!'}</p>

5 **C) Create a JSP application to demonstrate the use of JSTL.**

**Index.html**

<body>

<h1>JSTL TAGS</h1>

<a href="index.jsp">Click here</a>

</body>

**Index.jsp**

<%@ page contentType="text/html; charset=UTF-8" language="java" %>

<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>

<!DOCTYPE html>

<html lang="en"> <head> <meta charset="UTF-8">

<title>JSTL Example</title> </head>

<body> <h1>JSTL Example</h1>

<c:set var="message" value="Hello, JSTL World!" />

<p>${message}</p>

<c:set var="fruits" value="${['Apple', 'Banana', 'Cherry']}" />

<h3>Fruit List:</h3>

<ul>

<c:forEach var="fruit" items="${fruits}">

<li>${fruit}</li>

</c:forEach>

</ul>

<c:if test="${not empty fruits}">

<p>We have some fruits listed!</p>

</c:if>

<h3>Checking the first fruit:</h3>

<c:choose>

<c:when test="${fruits[0] == 'Apple'}">

<p>The first fruit is an Apple.</p>

</c:when>

<c:otherwise>

<p>The first fruit is not an Apple.</p>

</c:otherwise>

</c:choose>

<a href="index.html">Back</a> <!-- Link back to index -->

</body> </html>

**6a. Aim :** Create a Currency Converter application using EJB.(use with seesion file)

<form action="CCServlet" >

Enter Amount <input type="text" name="amt"><br>

Select Conversion Type

<input type="radio" name="type" value="r2d" checked>Rupees to Dollar

<input type="radio" name="type" value="d2r" >Dollor to Rupees<br>

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

</form>

package mybeans;

import javax.ejb.Stateless;

@Stateless

public class CCBean {

public CCBean(){}

public double r2Dollor(double r){ return r/82.53; }

public double d2Rupees(double d){ return d\*82.53;}

}

package mypacks;

import java.io.\*;

import javax.servlet.\*;

import javax.servlet.http.\*;

import javax.ejb.EJB;

import mybeans.CCBean;

public class CCServlet extends HttpServlet {

@EJB CCBean obj;

@Override

public void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

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

PrintWriter out = response.getWriter();

double amt = Double.parseDouble(request.getParameter("amt"));

if(request.getParameter("type").equals("r2d"))

{

out.println("<h1>"+amt+ " Rupees = "+obj.r2Dollor(amt)+" Dollors</h1>");

}

if(request.getParameter("type").equals("d2r"))

{

out.println("<h1>"+amt+ " Dollors = "+obj.d2Rupees(amt)+" Rupees</h1>");

}}}