

**(Established under the Presidency University Act, 2013 of the Karnataka Act 41 of 2013)**

## CSE3146 – Advanced JAVA Programming

## LAB SHEET – 4

**Module 4 – Distributed Programming with servlets and JSP**

**1. Write a JSP that reads parameters from user login page**

**index.html**

<html>

<head>

<title>Login Page</title>

</head>

<body>

<h1 align=center>Login</h1>

<form name="form1" action="loginJsp.jsp" method="post">

<table>

<tr>

<td><b>UserName:</td>

<td><input type=txt name=t1></td>

</tr>

<tr>

<td><b>Password:</td>

<td><input type=password name=t2></td>

</tr>

<tr>

<td><input type=submit value=submit></td>

<td><input type=reset value=cancel></td>

</tr>

</table>

</form>

</body>

</html>

**loginJsp.jsp**

<%@ page import="javax.io.\*"%>

<%@ page import="javax.servlet.\*"%>

<%@ page import="javax.servlet.http.\*"%>

<%@ page import="javax.servlet.jsp.\*"%>

<html>

<head>

<title>Login</title>

</head>

<body>

<%out.println("User Name is:"+request.getParameter("t1"));

out.println("Password is:"+request.getParameter("t2"));

%>

</body>

</html>

**2. Implement the java server page to print factorial value of any integer number, while the input has to be taken from an HTML form.**

**index.html**

<!DOCTYPE html>

<html>

<head>

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

<title>Insert title here</title>

</head>

<body>

<form action="Factorial.jsp">

<h1>Enter the no:<input type="text" name="n"/></h1>

<input type="Submit" value="Submit">

</form>

</body>

</html>

**Factorial.jsp**

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"

pageEncoding="ISO-8859-1"%>

<!DOCTYPE html>

<html>

<head>

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

<title>Insert title here</title>

</head>

<body>

<h1>The Factorial value is:</h1>

<h2>

<%

int n=0,i;

int fact=1;

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

n=Integer.parseInt(ns);

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

{

fact=fact\*i;

}

out.println("Factorial="+fact);

%>

</h2>

</body>

</html>

**3. Implement java server page to insert the Employee details into the database over web and fetch those details using one more JSP page.**

1. Initially the request will go from index.jsp page to Register Servlet page, then if any of the field will be blank means->it will move to error.jsp,otherwise it will move to show.jsp.

2. Copy all the jar files into the lib folder and import the jar files via java build path too.

3.Run index.jsp page

**index.jsp**

<%@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859 1"%>

<!DOCTYPE html>

<html>

<head>

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

<title>Insert title here</title>

</head>

<body>

<h2>Registration Form</h2>

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

<table style="width: 50%">

<tr>

<td>UserName</td>

<td><input type="text" name="username" /></td>

</tr>

<tr>

<td>Password</td>

<td><input type="password" name="password" /></td>

</tr>

<tr>

<td>Address</td>

<td><input type="text" name="address" /></td>

</tr>

</table>

<input type="submit" value="Submit" /></form>

</body>

</html>

**RegisterServ Servlet:**

import java.sql.\*;

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

PrintWriter out = response.getWriter();

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

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

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

try{

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

//creating connection with the database

Connection con=DriverManager.getConnection ("jdbc:mysql://localhost:3306/test","root","root123");

PreparedStatement ps=con.prepareStatement("insert into employee6 values(?,?,?)");

ps.setString(1, username);

ps.setString(2,pass);

ps.setString(3,address);

int i=ps.executeUpdate();

if(username.isEmpty() || pass.isEmpty() || address.isEmpty())

{

RequestDispatcher req = request.getRequestDispatcher("error.jsp");

req.include(request, response);

}

else

{

out.println("You are sucessfully registered");

RequestDispatcher req = request.getRequestDispatcher("show.jsp");

req.forward(request, response);

}

}

catch(Exception se)

{

se.printStackTrace();

}

}

}

**error.jsp**

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"

pageEncoding="ISO-8859-1"%>

<!DOCTYPE html>

<html>

<head>

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

<title>Insert title here</title>

</head>

<body>

<h2>You have not completed the details</h2>

</body>

</html>

**show.jsp**

<%@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1"%>

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

<!DOCTYPE html>

<html>

<head>

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

<title>Insert title here</title>

</head>

<body>

<a><b>Welcome User!!!!</b></a>

<%

try{

Connection con= DriverManager.getConnection("jdbc:mysql://localhost:3306/test","root","root123");

Statement st = con.createStatement();

ResultSet rs = st.executeQuery("select \*from employee6");

out.println("<html><head><title>employee</title></head>");

out.println("<body bgcolor=orange><center>");

out.println("<table border=2>");

out.println("<tr><td>Username</td><td>Password</td><td>Address</td></tr>");

while(rs.next())

{

out.println("<tr><td>"+rs.getString(1)+"</td>");

out.println("<td>"+rs.getString(2)+"</td>");

out.println("<td>"+rs.getString(3)+"</td></tr>");

}

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

}

catch(Exception se)

{

se.printStackTrace();

} %>

</body>

</html>

**4. Implement java server page to access User JavaBean from a JSP page.**

**index.jsp**

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"

pageEncoding="ISO-8859-1"%>

<!DOCTYPE html>

<html>

<head>

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

<title>Insert title here</title>

</head>

<body>

<form action="Register.jsp">

Name:<input type="text" name="uname" onclick="this.value=''"/><br/>

Email<input type="text" name="uemail" onclick="this.value=''"/><br/>

Password<input type="password" name="upass" onclick="this.value=''"/><br/>

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

</form>

</body>

</html>

**User.java**

package bean;

public class User {

private String uname,upass,uemail;

public String getUname() {

return uname;

}

public void setUname(String uname) {

this.uname = uname;

}

public String getUpass() {

return upass;

}

public void setUpass(String upass) {

this.upass = upass;

}

public String getUemail() {

return uemail;

}

public void setUemail(String uemail) {

this.uemail = uemail;

}

}

**RegisterDAO.java**

package bean;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.PreparedStatement;

public class RegisterDAO {

public static int register(User u){

int status=0;

try{

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

Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/test","root","root123");

PreparedStatement ps=con.prepareStatement("insert into user values(?,?,?)");

ps.setString(1,u.getUname());

ps.setString(2,u.getUemail());

ps.setString(3,u.getUpass());

status=ps.executeUpdate();

}catch(Exception e){}

return status;

}

}

**Register.jsp**

**Using bean property, we are calling User.java and RegisterDAO.java**

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"

pageEncoding="ISO-8859-1"%>

<%@page import="bean.RegisterDAO"%>

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

<jsp:useBean id="obj" class="bean.User"/>

<!DOCTYPE html>

<html>

<head>

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

<title>Insert title here</title>

</head>

<body>

<jsp:setProperty property="\*" name="obj"/>

<h1>Retrieve data from database in jsp</h1>

<table border="1">

<tr>

<td><h3> Name</h3></td>

<td><h3>Email</h3></td>

<td><h3>Password</h3></td>

</tr>

<% int status=RegisterDAO.register(obj);

if(status>0)

out.print("You are successfully registered");

try{

Connection con= DriverManager.getConnection("jdbc:mysql://localhost:3306/test","root","root123");

Statement st=con.createStatement();

String sql ="select \* from user";

ResultSet rs =st.executeQuery(sql);

while(rs.next()){

%>

<tr>

<td><%=rs.getString("uname") %></td>

<td><%=rs.getString("uemail") %></td>

<td><%=rs.getString("upass") %></td>

</tr>

<%

}

con.close();

} catch (Exception e) {

e.printStackTrace();

}

%>

</table>

</body>

</html>

## 

## Record Writing

**Note: Submit the record on or before the due date.**

**Both Soft and Hard copies are required to be submitted.**

# RECORD WRITING INSTRUCTIONS

1. Solve the programming exercise using any IDE (Laptop / Mobile) or using any online compiler.
   1. Students can use online compiler or any preferable platform for the execution.
   2. Mobile users, kindly install JStudio - ide for java https://play.google.com/store/apps/details?id=com.qamar.ide.java&hl=en. This instruction is already given for solving your lab programs. If you haven’t done, please do install, and test the app as soon as possible.
2. While solving your programming exercise, write the code in A4 sheet paper/Record. While writing on the paper, please add these info. “Presidency University” “Department of CSE” “Odd semester 2021- 2022” “MODULE - 3" “Course code : CSE 3146”, Course name : Advanced Java Programming, ID: , NAME: , SEC: , Date: \_
   1. While coding (the soft copy) & writing in the paper/record, all your **CLASS NAME** and the **METHOD NAME** must be appended with your **LAST FOUR DIGIT student ID**. This is mandatory, even while WRITING in the paper/record.

class **sample0161** {

void **Method0161**(parameterlist) {

//method body

}

**For example: If your Registration number is 2021CSE0161 then**

* 1. Take a screenshot of **your program & the output** from your mobile/laptop.
  2. Take a photo of the handwritten program.
  3. Put together (**4. A,B,C**) , **combine as one pdf**, with the file name as your student **registration number(ex. 2021CSE0161.pdf)**, and upload the file in Camu.
  4. The document must be uploaded within the specified time in Camu.

Kindly follow the instructions very carefully so that your submission will be valid.