Assignment - 1

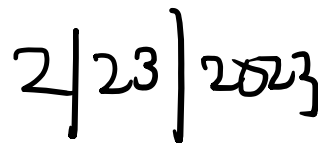| Student Name/ID Number:	Francis Roel L. Abarca / BDSE-0922-113
Unit Number and Title:	ACWD Module 5 – Web Development Foundations
Academic Year:	2022 - 2023
Unit Assessor:	
Project Title:	Development of a Registration Form in JSP with Database
Issue Date:	February 23, 2022
Submission Date:	February 23, 2022
Internal Verifier Name:	
Date:	February 23, 2022

Learner declaration

I certify that the work submitted for this assignment is my own and research sources are fully acknowledged.

Student signature: *[signature]*   Date: 2/23/2023

Purpose of this project

Purpose of this project

To demonstrate your capabilities in the following areas:

- Create a JSP Form
- Save the submitted data to Database

Submission Format

1. Screen capture of Database Table
2. Screen capture of the Form and Thank you Page
3. Screen capture of Database table with data

Project Brief & Guidance

Scenario:

Refer to the Project Scenario for the Module Project

You have been approached by 'ABC Jobs Pte Ltd' as a website developer to develop a community portal for Software Developers. The project will be carried over through Module 3, Module 4, Module 5 and Capstone project. For this module the scope is to Design, Develop, Implement & Document Spring Framework Website.

The Scope of the Project is to design a Community Portal Similar to Linkedin.com. Users will be able to register in the portal using the Registration Page. Users of the portal can search for other users using various parameters such as First Name, Last Name, Company Name, City & Country. Users will be able to view the Public Profile of users after searching them. The portal allow users to login, request for forgotten password and Update their profile information

The scope of the project in this modules is for development of Spring Website.

The scope of the project in this modules is to develop the database.

The overview of the project is as below

There are 2 types of users in this Community portal. They are
1. Software Programmer
2. Administrator

Software Programmer should be able to perform following functions in the portal

1. Allow the programmers to register in the portal, show a thank you page & send a registration confirmation email.
2. Search & Find Other Programmers after login and view their profile.
3. Provide Login Page
4. Provide password retrieval functionality.
5. Update their Profile after logging in.

Following Functionality is part of Database Design & Will be enhanced as features as required in the Capstone Project, Depending on time availability.

6. Send Messages to Each Other on the Portal
7. Create Threads & Post Replies to a Thread
8. Post Job Opportunities in the Portal

Administrator should be able to perform following functions in the portal
1. Administer user data.
2. Send bulk email inviting programmers to register on the community portal

The portal consist of the following Key pages (For Reference)
1. Community Portal Home Page
2. Registration Page
3. Registration Confirmation Page
4. Update Profile Page
5. Search Users Page
6. List Search Results
7. Public Profile Page
8. Registration Confirmation Email
9. Login Page
10. Forget Password Page
11. Design the Forget Password Confirmation Page

Following Functionality is part of Database Design and will not be part of development & Will be enhanced as features are required in the Capstone Project, Depending on time availability.
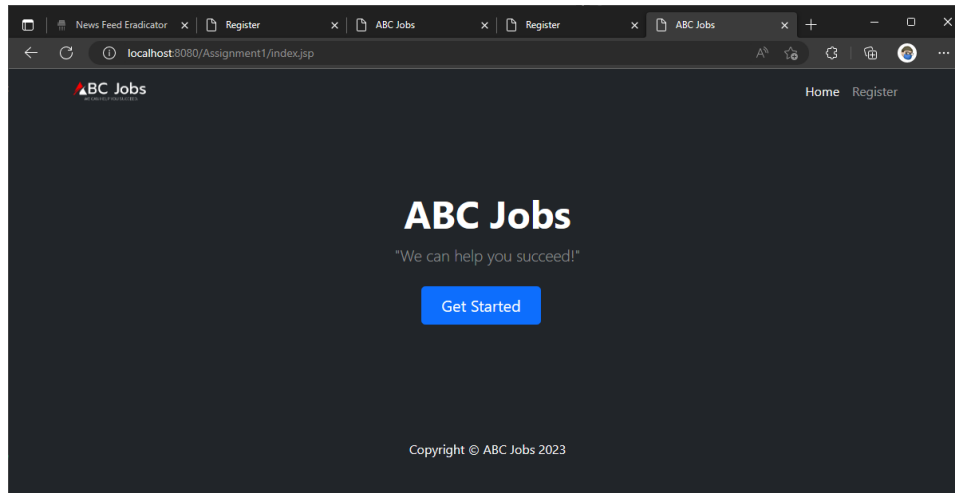12. Send Messages
13. Read Messages
14. Post in Message Board
15. List Message Board
16. Read A Thread
17. Post Job Opportunities
18. List Job Opportunities & Responses

The scope of this assignment

The scope is to develop the form in JSP, connect to MySQL, Save the values in the database.
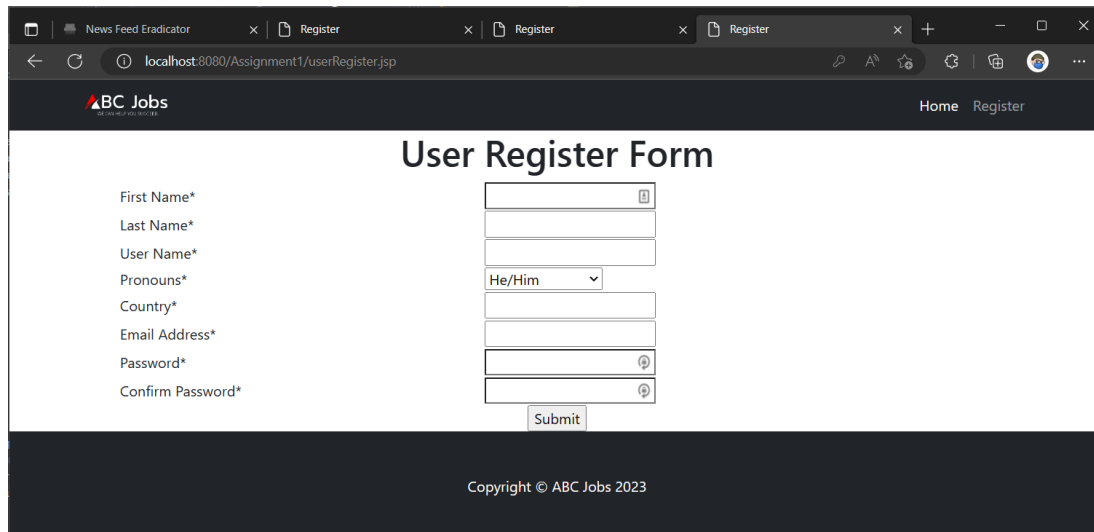
a. Registration Page

Home Page

Source Code

Registration Page

Source Code


```jsp
userRegister.jsp ×
1  <%@ page language="java" contentType="text/html; charset=ISO-8859-1"
2      pageEncoding="ISO-8859-1"%>
3  <!DOCTYPE html>
4  <html lang="en">
5  <head>
6      <meta charset="utf-8" />
7      <meta
8       name="viewport"
9       content="width=device-width, initial-scale=1, shrink-to-fit=no"
10     />
11     <meta name="description" content="" />
12     <meta name="author" content="" />
13     <title>Register</title>
14     <!-- Favicon-->
15     <link rel="icon" type="image/x-icon" href="assets/favicon.ico" />
16     <!-- Bootstrap icons-->
17     <link
18       href="https://cdn.jsdelivr.net/npm/bootstrap-icons@1.4.1/font/bootstrap-icons.css"
19       rel="stylesheet"
20     />
21     <!-- Core theme CSS (includes Bootstrap)-->
22     <link href="css/styles.css" rel="stylesheet" />
23  </head>
24  <body>
25
26     <!-- Responsive navbar-->
27     <nav class="navbar navbar-expand-lg navbar-dark bg-dark">
28       <div class="container px-5">
29         <img
30           src="https://media.discordapp.net/attachments/751840315614167104/1077804817059168307/abcjobslogolight.png?width=881&height=250"
31           width="100"
32           height="30"
33           class="d-inline-block align-top"
34           alt=""
35         />
36         <button
37           class="navbar-toggler"
38           type="button"
39           data-bs-toggle="collapse"
40           data-bs-target="#navbarSupportedContent"
41           aria-controls="navbarSupportedContent"
42           aria-expanded="false"
43           aria-label="Toggle navigation"
44         >
45           <span class="navbar-toggler-icon"></span>
46         </button>
47         <div class="collapse navbar-collapse" id="navbarSupportedContent">
48           <ul class="navbar-nav ms-auto mb-2 mb-lg-0">
49             <li class="nav-item">
50               <a class="nav-link active" aria-current="page" href="index.jsp">Home</a>
51             </li>
52             <li class="nav-item"><a class="nav-link" href="userRegister.jsp">Register</a></li>
53           </ul>
54         </div>
55       </div>
56     </nav>
57
```

```
58     <div align="center">
59         <h1>User Register Form</h1>
60         <form id="myForm" action="userRegister-import.jsp" onsubmit="return validateForm()" method="post">
61             <table style="width: 80%">
62                 <tr>
63                     <td>First Name*</td>
64                     <td><input type="text" name="firstName" required /></td>
65                 </tr>
66                 <tr>
67                     <td>Last Name*</td>
68                     <td><input type="text" name="lastName" required /></td>
69                 </tr>
70                 <tr>
71                     <td>User Name*</td>
72                     <td><input type="text" name="userName" required /></td>
73                 </tr>
74                 <tr>
75                     <td>Pronouns*</td>
76                     <td><select name="pronouns" required>
77                         <option value="He/Him">He/Him</option>
78                         <option value="She/Her">She/Her</option>
79                         <option value="They/Them">They/Them</option>
80                         <option value="Rather Not Say">Rather Not Say</option>
81                     </select></td>
82                 </tr>
83                 <tr>
84                     <td>Country*</td>
85                     <td><input type="text" name="country" required></td>
86                 </tr>
87                 <tr>
88                     <td>Email Address*</td>
89                     <td><input type="text" name="email" required pattern="[a-z0-9._$+-]+@[a-z0-9.-]+\.[a-z]{2,}$"></td>
90                 </tr>
91                 <tr>
92                     <td>Password*</td>
93                     <td><input type="password" name="password" required></td>
94                 </tr>
95                 <tr>
96                     <td>Confirm Password*</td>
97                     <td><input type="password" name="confirmPassword" required></td>
98                 </tr>
99             </table>
100            <input type="submit" value="Submit" />
101        </form>
102    </div>
103
104    <!-- Footer-->
105    <footer class="py-5 bg-dark">
106        <div class="container px-5">
107            <p class="m-0 text-center text-white">
108                Copyright &copy; ABC Jobs 2023
109            </p>
110        </div>
111    </footer>
112    <!-- Bootstrap core JS-->
113    <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.bundle.min.js"></script>
114    <!-- Core theme JS-->
115    <script src="js/scripts.js"></script>
116    <script src="https://cdn.startbootstrap.com/sb-forms-latest.js"></script>
117    <script>
118        function validateForm() {
119            var password = document.forms['myForm']['password'].value;
120            var confirmPassword = document.forms['myForm']['confirmPassword'].value;
121            if (password != confirmPassword) {
122                alert('Passwords do not match.');
123                return false;
124            }
125        }
126    </script>
127  </body>
128 </body>
129 </html>
```
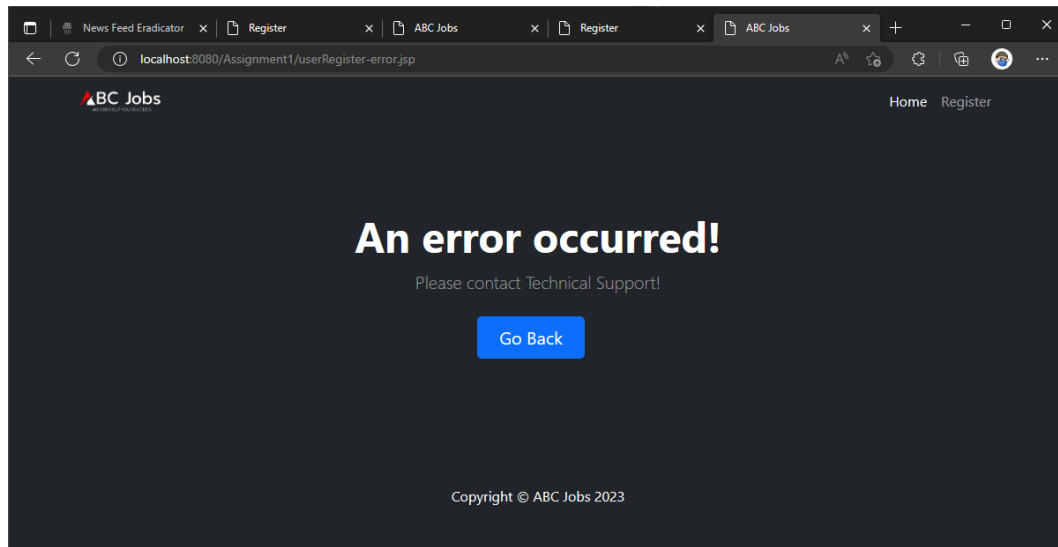
UserRegister-import.jsp

```
userRegister-import.jsp  ×
1  <%@page import="com.yeems214.dao.UserRegisterDao"%>
2  <jsp:useBean id="u" class="com.yeems214.bean.UserRegister"></jsp:useBean>
3  <jsp:setProperty property="*" name="u"/>
4
5  <%
6  int i=UserRegisterDao.save(u);
7  if(i>0){
8  response.sendRedirect("userRegister-success.jsp");
9  }else{
10 response.sendRedirect("userRegister-error.jsp");
11 }
12 %>
```
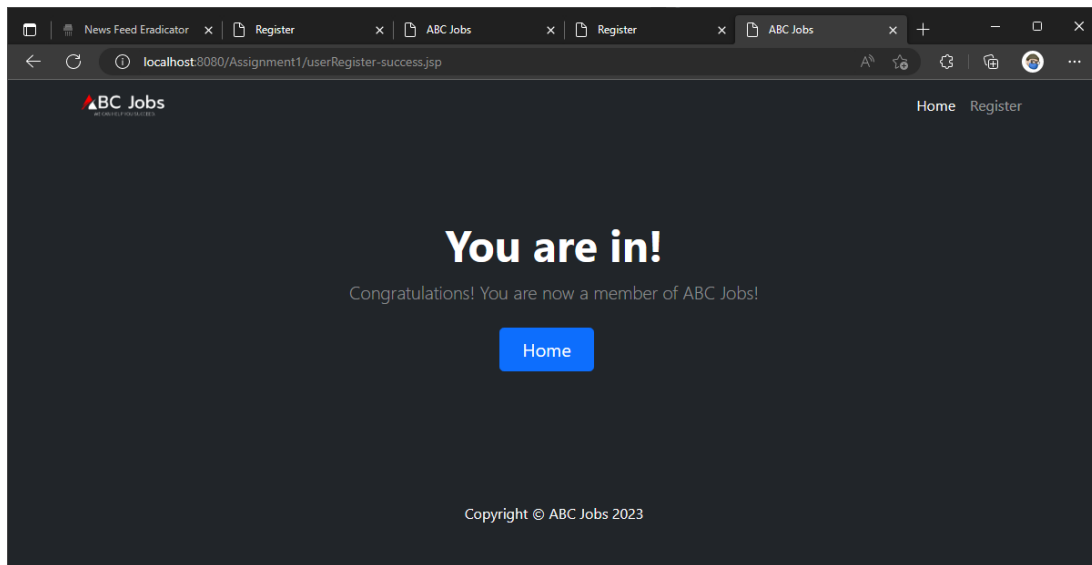
Registration Error Page

UserRegister-error.jsp

Thank You page

Source Code

UserRegister.java Source Code

```java
package com.yeems214.bean;

public class UserRegister {

    private String FirstName, LastName, UserName, pronouns, country, email, password;

    public String getFirstName() {
        return FirstName;
    }
    public void setFirstName(String firstName) {
        this.FirstName = firstName;
    }
    public String getLastName() {
        return LastName;
    }
    public void setLastName(String lastName) {
        this.LastName = lastName;
    }

    public String getUserName() {
        return UserName;
    }
    public void setUserName(String userName) {
        this.UserName = userName;
    }

    public String getPronouns() {
        return pronouns;
    }

    public void setPronouns(String pronouns) {
        this.pronouns = pronouns;
    }

    public String getCountry() {
        return country;
    }
    public void setCountry(String country) {
        this.country = country;
    }

    public String getEmail() {
        return email;
    }
    public void setEmail(String email) {
        this.email = email;
    }

    public String getPassword() {
        return password;
    }
    public void setPassword(String password) {
        this.password = password;
    }

}
```

UserRegisterDao.java Source Code

```java
package com.yeems214.dao;

import java.sql.*;

public class UserRegisterDao {
    public static Connection getConnection() {
        Connection con = null;
        try {
            Class.forName("com.mysql.cj.jdbc.Driver");
            con = DriverManager.getConnection("jdbc:mysql://localhost:3306/communityportal", "root", "roelfrancis100");
        } catch (Exception e) {
            System.out.println("An Error Occured!");
            System.out.println(e);
        }
        return con;
    }
    public static int save(UserRegister u) {
        int status = 0;
        try {
            Connection con = getConnection();
            PreparedStatement ps = con.prepareStatement("INSERT INTO user (FirstName, LastName, UserName, pronouns, country, email, `password`) VALUES(?,?,?,?,?,?,?)");
            ps.setString(1,u.getFirstName());
            ps.setString(2,u.getLastName());
            ps.setString(3,u.getUserName());
            ps.setString(4,u.getPronouns());
            ps.setString(5,u.getCountry());
            ps.setString(6,u.getEmail());
            ps.setString(7,u.getPassword());
            status = ps.executeUpdate();
        } catch (Exception e) {
            System.out.println("An Error Occured!");
            System.out.println(e);
        } return status;
    }
}
```

b. Database Structure

c. Data Insertion
Before:

After: