```
 1 <!DOCTYPE html>
 2 <html lang="en">
 3 <head>
 4     <meta charset="UTF-8">
 5     <title>Welcome</title>
 6     <link rel="stylesheet" href="css/main.css">
 7 </head>
 8 <body>
 9     <h1>Welcome to my website</h1>
10     <span>Please</span>
11     <form action="enter" method="post">
12         <input type="hidden" name="fromPage" value="idxSignUp">
13         <input type="submit" value="SignUp">
14     </form>
15     <span>or</span>
16     <form action="enter" method="post">
17         <input type="hidden" name="fromPage" value="idxLogin">
18         <input type="submit" value="Login">
19     </form>
20     <span>to have access to my website.</span>
21 </body>
22 </html>
```

```jsp
 1 <%--
 2   Created by IntelliJ IDEA.
 3   User: mhm85
 4   Date: 9/30/2019
 5   Time: 2:16 PM
 6   To change this template use File | Settings | File Templates.
 7 --%>
 8 <%@ page contentType="text/html;charset=UTF-8" language="java" %>
 9 <html>
10 <head>
11     <title>Log In</title>
12     <link rel="stylesheet" href="css/main.css">
13 </head>
14 <body>
15     <h1>Log in</h1>
16     <br>
17     <br>
18     <form action="enter" method="post">
19         <input type="hidden" name="fromPage" value="login">
20         <label>Username </label><input type="text" name="username"
   required><br>
21         <label>Password </label><input type="password" name="password"
   required><br>
22         <br>
23         <input type="submit" value="LoggingIn">
24     </form>
25 </body>
26 </html>
27
```

```jsp
1 <%--
2   Created by IntelliJ IDEA.
3   User: mhm85
4   Date: 9/30/2019
5   Time: 2:13 PM
6   To change this template use File | Settings | File Templates.
7 --%>
8 <%@ page contentType="text/html;charset=UTF-8" language="java" %>
9 <html>
10 <head>
11    <title>Sign Up</title>
12    <link rel="stylesheet" href="css/main.css">
13 </head>
14 <body>
15    <h1>Sign Up providing the following information</h1>
16    <br>
17    <br>
18    <form action="enter" method="post">
19        <input type="hidden" name="fromPage" value="signUp">
20        <label>Username </label><input type="text" name="username"
   required><br>
21        <label>Password </label><input type="password" name="password"
    required><br>
22        <br>
23        <input type="submit" value="Submit">
24    </form>
25 </body>
26 </html>
27
```

```jsp
 1 <%--
 2   Created by IntelliJ IDEA.
 3   User: mhm85
 4   Date: 9/30/2019
 5   Time: 2:18 PM
 6   To change this template use File | Settings | File Templates.
 7 --%>
 8 <%@ page contentType="text/html;charset=UTF-8" language="java" %>
 9 <html>
10 <head>
11     <title>Success</title>
12     <link rel="stylesheet" href="css/main.css">
13 </head>
14 <body>
15     <h1>Successful Login Page</h1>
16     <p>${user.username} with ${user.password}</p>
17 </body>
18 </html>
19
```

```css
 1 body {
 2     border: 2px solid black;
 3     margin: auto;
 4     width: 30%;
 5     height: 250px;
 6 }
 7
 8 span {
 9     display: inline;
10 }
```

```xml
1 <?xml version="1.0" encoding="UTF-8"?>
2 <web-app xmlns="http://xmlns.jcp.org/xml/ns/javaee"
3          xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
4          xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee http
  ://xmlns.jcp.org/xml/ns/javaee/web-app_4_0.xsd"
5          version="4.0">
6
7      <servlet>
8          <servlet-name>AuthServlet</servlet-name>
9          <servlet-class>AuthServlet</servlet-class>
10     </servlet>
11
12     <servlet-mapping>
13         <servlet-name>AuthServlet</servlet-name>
14         <url-pattern>/enter</url-pattern>
15     </servlet-mapping>
16
17 </web-app>
```

```java
 1 import java.io.Serializable;
 2
 3 public class User implements Serializable {
 4     private String username;
 5     private String password;
 6
 7     public User() {
 8     }
 9
10     public User(String username, String password) {
11         this.username = username;
12         this.password = password;
13     }
14
15     public String getUsername() {
16         return username;
17     }
18
19     public void setUsername(String username) {
20         this.username = username;
21     }
22
23     public String getPassword() {
24         return password;
25     }
26
27     public void setPassword(String password) {
28         this.password = password;
29     }
30 }
31
```

```java
 1 import javax.servlet.ServletException;
 2 import javax.servlet.annotation.WebServlet;
 3 import javax.servlet.http.HttpServlet;
 4 import javax.servlet.http.HttpServletRequest;
 5 import javax.servlet.http.HttpServletResponse;
 6 import java.io.IOException;
 7 import java.util.ArrayList;
 8
 9 @WebServlet(name = "AuthServlet")
10 public class AuthServlet extends HttpServlet {
11
12     @Override
13     protected void doPost(HttpServletRequest request,
   HttpServletResponse response) throws ServletException, IOException {
14         ArrayList<User> arrLstUsers = new ArrayList<>();
15         arrLstUsers.add(new User("joe.smith", "1234"));
16         arrLstUsers.add(new User("harold.arnold", "1111"));
17         arrLstUsers.add(new User("sally.johnson", "9999"));
18
19         String fromPage = request.getParameter("fromPage");
20         String url = "/index.html";
21
22         if (fromPage == null) {
23             fromPage = "home";
24         }
25
26         if (fromPage.equals("home")) {
27             url = "/index.html";
28         }
29         else if (fromPage.equals("idxSignUp")) {
30             url = "/signup.jsp";
31         }
32         else if (fromPage.equals("idxLogin")) {
33             url = "/login.jsp";
34         }
35         else if (fromPage.equals("signUp")) {
36             User user = new User();
37             user.setUsername(request.getParameter("username"));
38             user.setPassword(request.getParameter("password"));
39
40             if (checkIfExists(arrLstUsers, user)) {
41                 url = "/login.jsp";
42             }
43             else {
44                 arrLstUsers.add(user);
```

```java
45                  url = "/index.html";
46              }
47          }
48          else if (fromPage.equals("login")) {
49              User user = new User();
50              user.setUsername(request.getParameter("username"));
51              user.setPassword(request.getParameter("password"));
52
53              if (checkIfExists(arrLstUsers, user)) {
54                  request.setAttribute("user", user);
55                  url = "/success.jsp";
56              }
57              else {
58                  url = "/signup.jsp";
59              }
60          }
61
62      getServletContext().getRequestDispatcher(url).forward(request,
    response);
63      }
64
65      @Override
66      protected void doGet(HttpServletRequest request,
    HttpServletResponse response) throws ServletException, IOException {
67          doPost(request, response);
68      }
69
70      private boolean checkIfExists(ArrayList<User> aList, User u1) {
71          boolean exists = false;
72          int count = 0;
73
74          while (exists == false && count < aList.size()) {
75              if (aList.get(count).getUsername().equals(u1.getUsername()
    )) {
76                  exists = true;
77              }
78              count++;
79          }
80
81          return exists;
82      }
83 }
84
```