

Profile Servlet using Session and MySQL

Learning Objective -

To implement Profile Servlet using Http Sessions. The user should be able to login and view their personalized details. To remember the user across multiple pages using sessions.

Programs -

index.html :

```
<!DOCTYPE html>
<html>
<head>
    <title>Login</title>
    <link rel="stylesheet" type="text/css" href="style.css">
</head>
<body class="login-body">
    <div>
        <form method="post" action="/a5/login">
            <div class="login-div">
                <h1>User Login</h1><hr>
                <input type="text" name="uname" id="uname"
placeholder="Username">
                <input type="password" name="pwd" id="pwd"
placeholder="Password">
                <input type="submit" value="Login">
            </div>
        </form>
    </div>
</body>
</html>
```

style.css:

```
* {  
    font-family: Tahoma, Arial, sans-serif;  
}  
  
body {  
    background-color: #00b7c2;  
}  
  
.login-div{  
    display: flex;  
    flex-direction: column;  
    width: 20%;  
    margin: 5% auto;  
    padding: 5%;  
    text-align: center;  
  
    background-color: white;  
    box-shadow: rgba(0, 0, 0, 0.16) 0px 3px 6px, rgba(0, 0, 0, 0.23) 0px 3px 6px;  
  
}  
  
.login-div h1{  
    margin-bottom: 0;  
}  
  
.login-div hr{  
    width: 75%;  
    border: none;  
    border-bottom: 5px solid #00b7c2;  
}  
  
.login-body {  
    background-image:  
    url("http://www.pixelstalk.net/wp-content/uploads/2016/06/Plain-light-blue-backgrou  
nd-1920x1080.jpg");  
}  
  
input {
```

```

        margin: 3%;
        font-size: 1.25rem;
        padding: 2%;
    }

    input[type=submit], button {
        padding: 1% 2%;

        color: white;
        background-color: #00b7c2;
        cursor: pointer;

        font-weight: bolder;

        border: 3px solid #00b7c2;
        border-radius: 0.5em;
    }

    input[type=submit]:hover, button:hover {
        background-color: #87dfd6;
        border: 3px solid #87dfd6;
    }

    input[type=submit] {
        width: 40%;
        align-self: center;
        margin: 5%;
    }

    .logged-in-div, .profile-div {
        width: 50%;
        height: 50vh;
        margin: 5% auto;
        padding: 5%;
        background-color: white;
        box-shadow: rgba(0, 0, 0, 0.16) 0px 3px 6px, rgba(0, 0, 0, 0.23) 0px 3px 6px;
    }

    .navbar {
        display: flex;

```

```
        justify-content: space-between;
    }
```

```
.navbar button {
    margin: 2%;
}
```

```
.navbar a {
    font-weight: bolder;
    text-decoration: none;
    color: white;
}
```

```
table {
    border-collapse: collapse;
    width: 100%;
}
```

```
th, td {
    text-align: left;
    padding: 8px;
}
```

```
tr:nth-child(even) {
    background-color: #87dfd6;
}
```

web.xml:

```
<web-app>
    <servlet>
        <servlet-name>LoginServlet</servlet-name>
        <servlet-class>LoginServlet</servlet-class>
    </servlet>

    <servlet>
        <servlet-name>ProfileServlet</servlet-name>
        <servlet-class>ProfileServlet</servlet-class>
    </servlet>
```

```

<servlet>
    <servlet-name>LogoutServlet</servlet-name>
    <servlet-class>LogoutServlet</servlet-class>
</servlet>

<servlet-mapping>
    <servlet-name>LoginServlet</servlet-name>
    <url-pattern>/login</url-pattern>
</servlet-mapping>

<servlet-mapping>
    <servlet-name>ProfileServlet</servlet-name>
    <url-pattern>/profile</url-pattern>
</servlet-mapping>

<servlet-mapping>
    <servlet-name>LogoutServlet</servlet-name>
    <url-pattern>/logout</url-pattern>
</servlet-mapping>

<welcome-file-list>
    <welcome-file>index.html</welcome-file>
</welcome-file-list>
</web-app>

```

LoginServlet.java :

```

import javax.servlet.http.*;
import javax.servlet.*;
import java.io.*;
import java.util.*;

import java.sql.*;

public class LoginServlet extends HttpServlet{
    public void doPost(HttpServletRequest req, HttpServletResponse res)
    throws ServletException,IOException
    {
        res.setContentType("text/html");
    }
}

```

```
PrintWriter pw=res.getWriter();
pw.println("<html><head><title>Home</title><link rel='stylesheet' type='text/css'
href='./style.css'></head><body>");
```

```
String uname = req.getParameter("uname");
String pwd = req.getParameter("pwd");
```

```
try {
    final String url = "jdbc:mysql://localhost:3306/profile";
    final String user = "root";
    final String password = "vanathi21";
```

```
Connection con = DriverManager.getConnection(url, user, password);
```

```
Statement stmt = con.createStatement();
String sql;
sql = "SELECT * FROM login_details WHERE username=\""+uname+"\"";
ResultSet rs = stmt.executeQuery(sql);
```

```
while(rs.next())
{
    String pass = rs.getString("password");
    if(pass.equals(pwd))
    {
        pw.println("<div class='logged-in-div'><h1>Welcome,
"+uname+"</h1><hr><p>Click the link below to view your profile in detail! </p><a
href=\"/a5/profile\">View Profile</a></div>");
```

```
HttpSession session = req.getSession();
session.setAttribute("user", uname);
}
else
    res.sendRedirect("index.html");
}
```

```
stmt.close();
con.close();
```

```
}
catch (Exception e){
```

```

        pw.println("Error occurred"+e);
        e.printStackTrace();
    }
    pw.println("</body></html>");
    pw.close();
}
}

```

ProfileServlet.java :

```

import javax.servlet.http.*;
import javax.servlet.*;
import java.io.*;
import java.util.*;

import java.sql.*;

public class ProfileServlet extends HttpServlet{
    public void doGet(HttpServletRequest req, HttpServletResponse res)
        throws ServletException,IOException
    {
        res.setContentType("text/html");
        PrintWriter pw=res.getWriter();
        pw.println("<html><head><title>Profile</title><link rel='stylesheet' type='text/css'
href='./style.css'></head><body>");

        HttpSession session = req.getSession();
        String uname = (String)session.getAttribute("user");

        pw.println("<div class='profile-div'><div class='navbar'><h1>Welcome to your
Profile Page, "+uname+"</h1><button><a
href=\"./a5/logout\">Logout</a></button></div><hr>");

        try {
            final String url = "jdbc:mysql://localhost:3306/profile";
            final String user = "root";
            final String password = "vanathi21";

```

```

Connection con = DriverManager.getConnection(url, user, password);

Statement stmt = con.createStatement();
String sql;
sql = "SELECT * FROM user_details WHERE username=\""+uname+"\"";
ResultSet rs = stmt.executeQuery(sql);

pw.println("<table><tbody>");

while(rs.next())
{
    String name = rs.getString("name");
    String email = rs.getString("email");
    int age = rs.getInt("age");
    String gender = rs.getString("gender");
    String address = rs.getString("address");
    String dob = rs.getString("dob");

    pw.println("<tr><th>Name</th><td>"+name+"</td></tr>");
    pw.println("<tr><th>Email ID</th><td>"+email+"</td></tr>");
    pw.println("<tr><th>Age</th><td>"+age+"</td></tr>");
    pw.println("<tr><th>Gender</th><td>"+gender+"</td></tr>");
    pw.println("<tr><th>Address</th><td>"+address+"</td></tr>");
    pw.println("<tr><th>Date of Birth</th><td>"+dob+"</td></tr>");
}

pw.println("</tbody></table>");

stmt.close();
con.close();

}
catch (Exception e){
    pw.println("Error occured"+e);
    e.printStackTrace();
}
pw.println("</div></body></html>");
pw.close();
}

```



```
}
```

LogoutServlet.java :

```
import javax.servlet.http.*;
import javax.servlet.*;
import java.io.*;
import java.util.*;

public class LogoutServlet extends HttpServlet{
    public void doGet(HttpServletRequest req, HttpServletResponse res)
        throws ServletException,IOException
    {
        res.setContentType("text/html");
        PrintWriter pw=res.getWriter();
        pw.println("<html><head><title>Logout</title><link rel='stylesheet' type='text/css'
href='./style.css'></head><body style='text-align: center;'>");

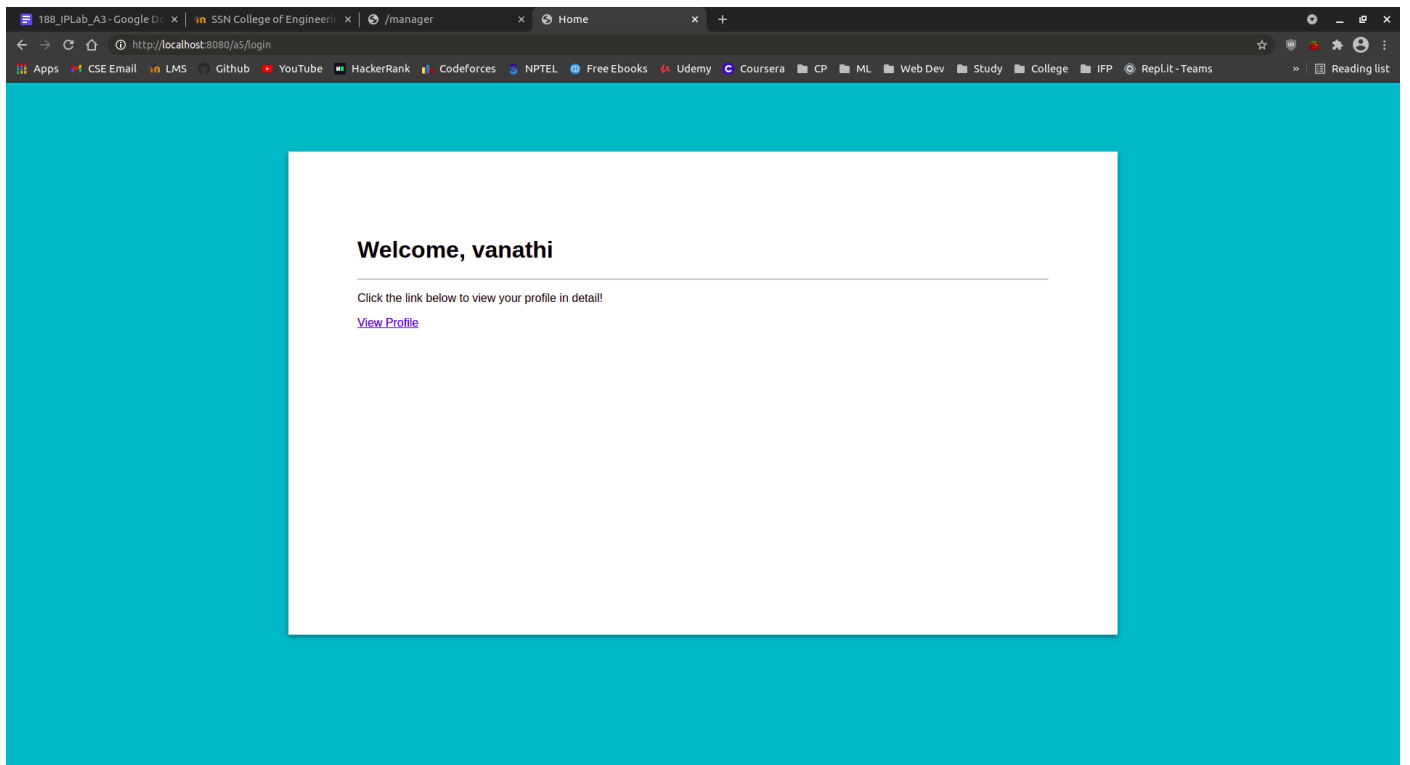
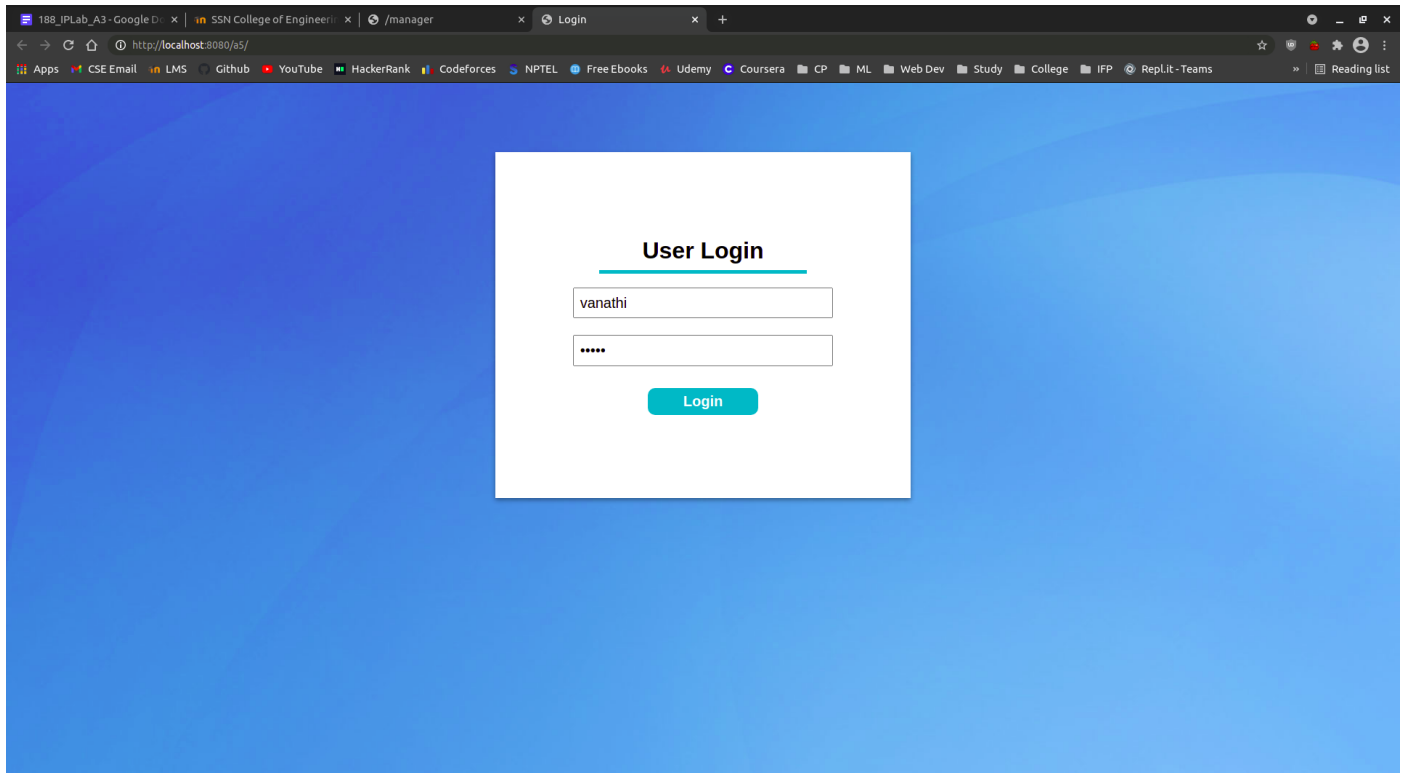
        HttpSession session = req.getSession();
        session.invalidate();

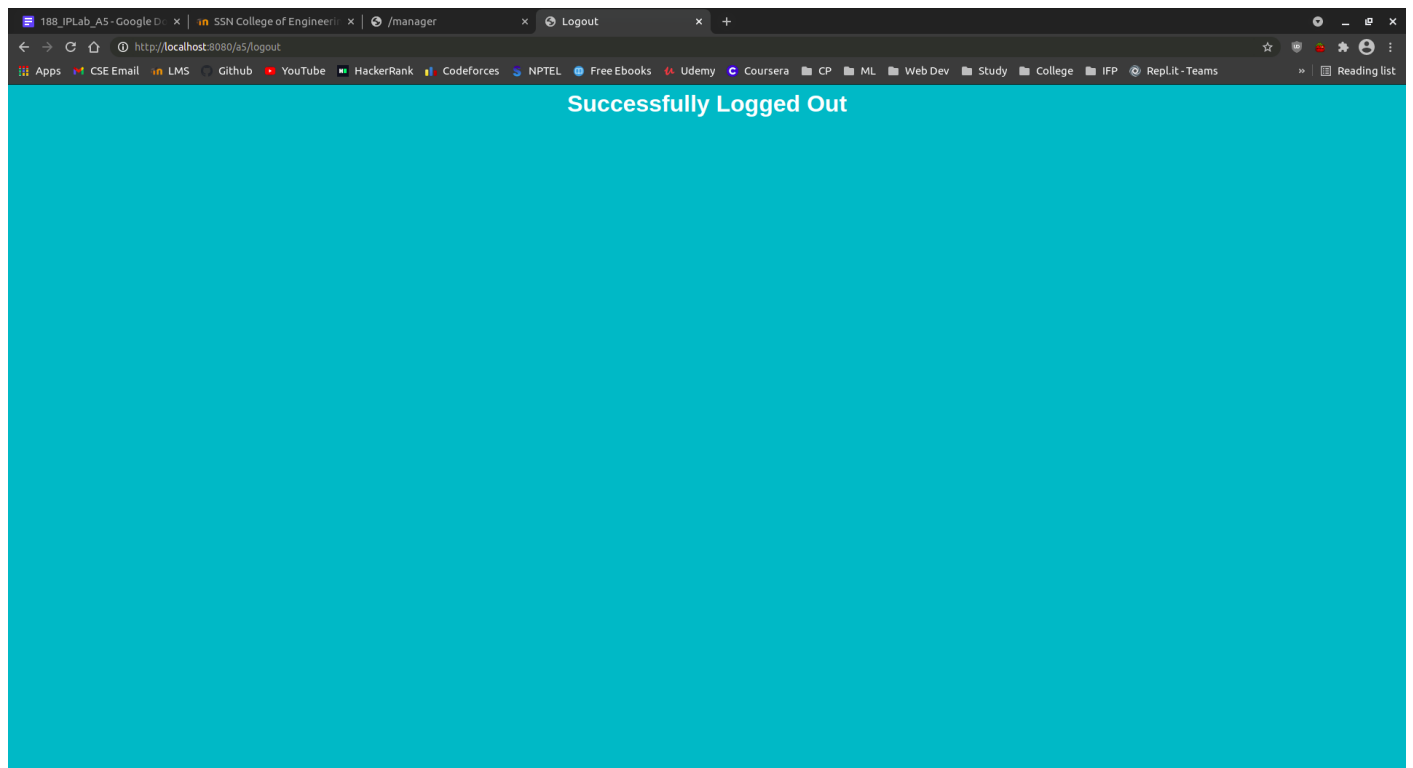
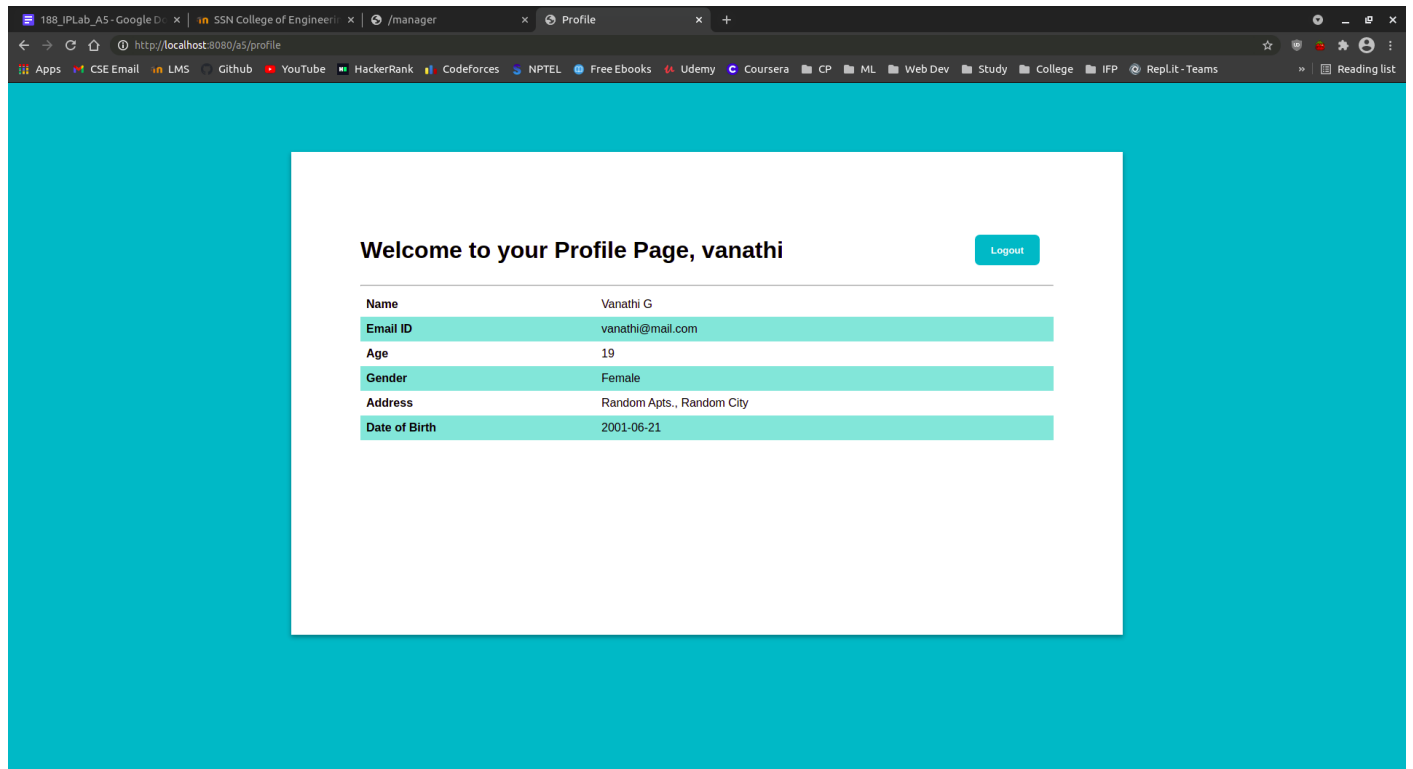
        pw.println("<h1 style='color: white'>Successfully Logged Out</h1>");

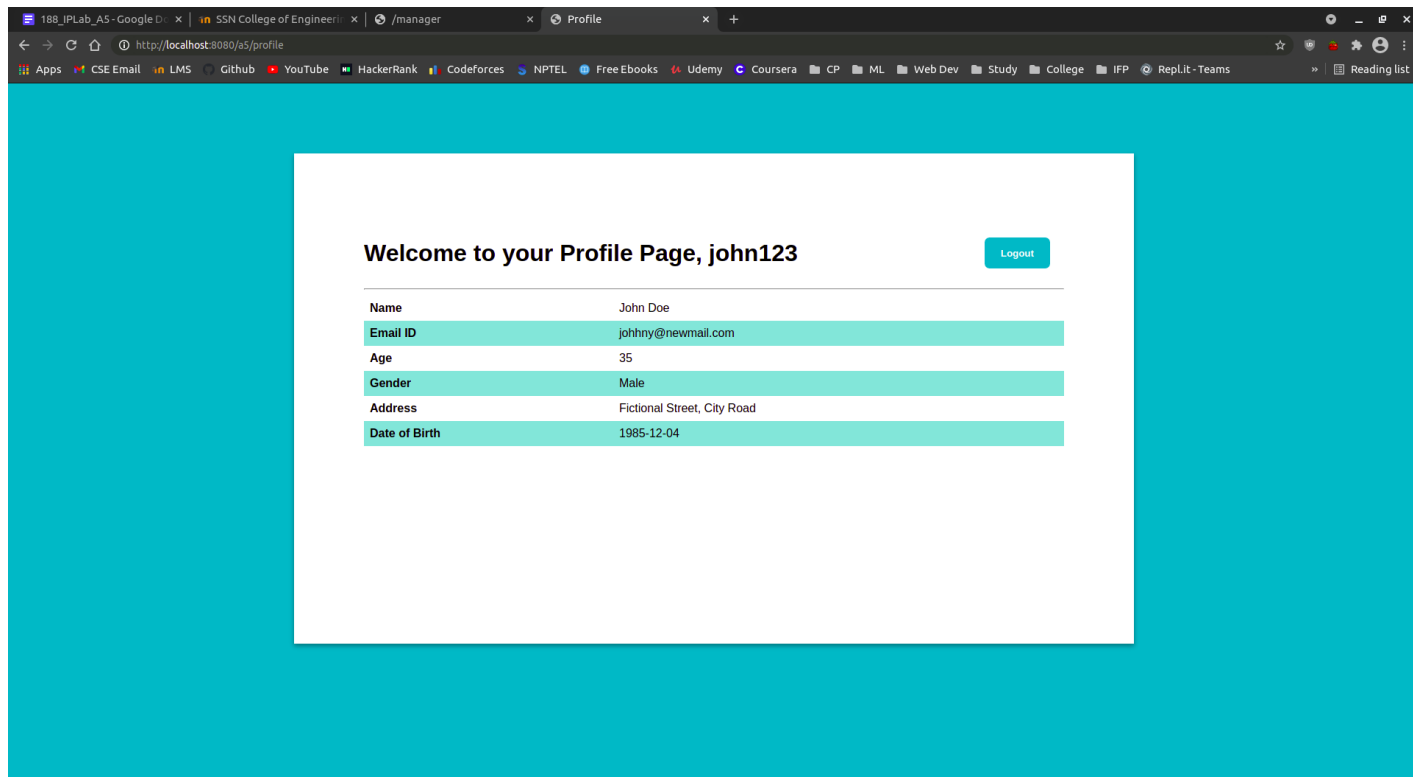
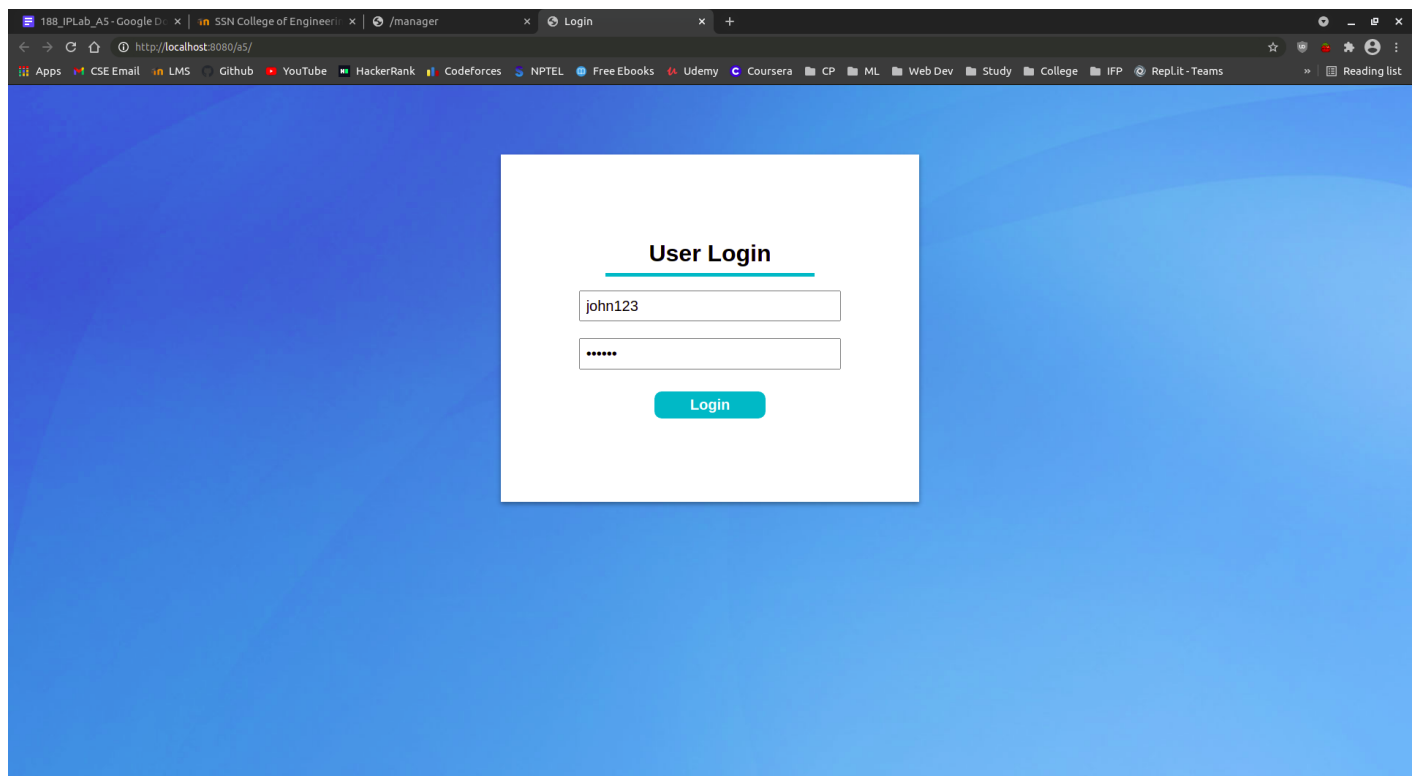
        pw.println("</body></html>");
        pw.close();

    }
}
```

OUTPUTS -







Learning Outcomes -

1. I successfully designed a website that lets a user login and view their profile page.
2. I learnt how to use the HttpSession object and all the methods associated with it. I was able to create a session to keep track of the user across multiple pages.
3. I also successfully created a connection to the database and was able to retrieve the user's information from it using the username stored in the session object.
4. I was also able to store the login details such as username and password of users in the database and fetch them during authentication.
5. Overall, it was a good learning experience about sessions and MySql queries.