

Course Title : Web Programming Lab

Assignment Number : BCA(V)/L-057/Assignment/2024-25

Maximum Marks : 50

Weightage : 25% www.ignou.site.com

Last Date of Submission : 31st October, 2024 (for July 2024 session)

: 30th April, 2025 (for January 2025 session)

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Q1.(a) Design and implement a website/web application consisting of three pages having the following layout:

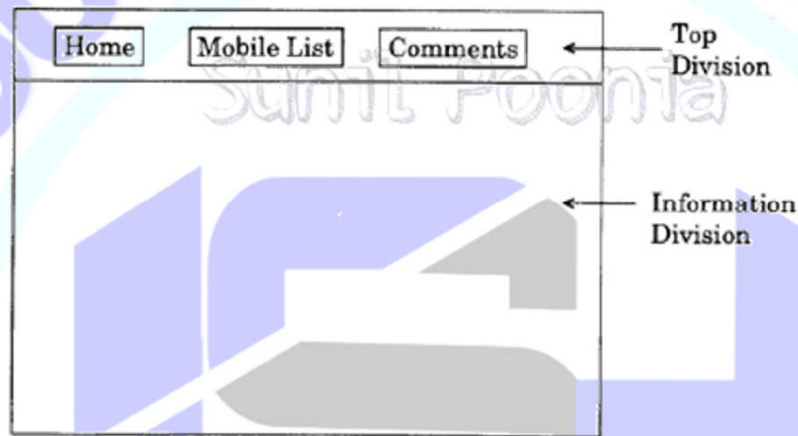


Figure 1 : Layout of Web Pages

Create three pages having the same layout as shown in Figure 1. The Top Division contains the following links:

- Home** : Link to Home Page
- Mobile List** : Link to a Mobile List Page created using JSP
- Comments** : Link to a Comments Page containing a form

The Information Division of the three pages should be as per the following description:

(i) The Home Page should display the name of the mobile store "Mobile for You". It should display the objectives and address of the mobile store.

Ans.

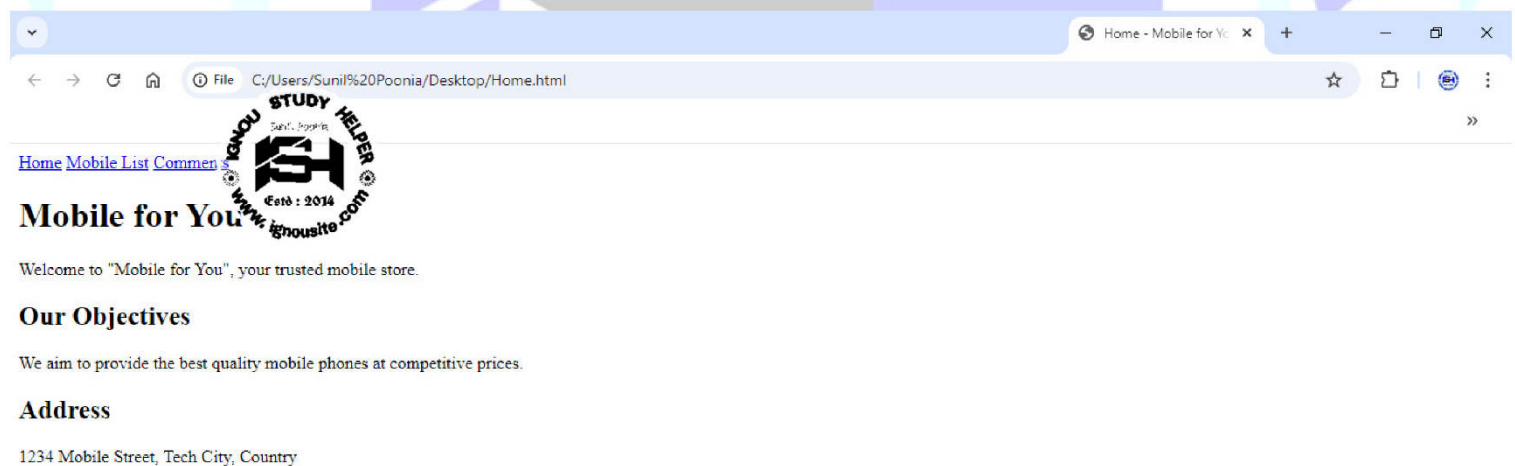
1. Home Page (home.jsp)

This page will display the name of the mobile store, its objectives, and its address.

```
<!-- home.jsp -->
<!DOCTYPE html>
<html lang="en">
<head>
```

```
<title>Home - Mobile for You</title>
<link rel="stylesheet" href="styles.css">
</head>
<body>
  <div class="top-division">
    <a href="home.jsp">Home</a>
    <a href="mobile_list.jsp">Mobile List</a>
    <a href="comments.jsp">Comments</a>
  </div>
  <div class="info-division">
    <h1>Mobile for You</h1>
    <p>Welcome to "Mobile for You", your trusted mobile store.</p>
    <h2>Our Objectives</h2>
    <p>We aim to provide the best quality mobile phones at competitive prices.</p>
    <h2>Address</h2>
    <p>1234 Mobile Street, Tech City, Country</p>
  </div>
</body>
</html>
```

Output:



(ii) The Mobile List Page should be generated by a query to a database "Mobiles" having a single relation Mobile_ram (Mobile_make, RAM_size).

You must use JSP to connect to database and display information as:

Mobile List Make	RAM (GB)
Samsung	2
Apple	4

You must display at least five mobiles in this list.

Ans.

Mobile List Page (mobile_list.jsp)

This page will display the mobile list generated from a database query.

```
<%@ page import="java.sql.*" %>
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Mobile List</title>
  <link rel="stylesheet" href="styles.css">
</head>
<body>
  <!-- Top Division -->
  <div class="top-division">
    <a href="home.jsp">Home</a>
    <a href="mobile_list.jsp">Mobile List</a>
    <a href="comments.jsp">Comments</a>
  </div>

  <!-- Information Division -->
  <div class="info-division">
    <h1>Mobile List</h1>
    <table border="1">
      <tr>
        <th>Mobile Make</th>
        <th>RAM (GB)</th>
      </tr>
    </table>
    <%
      try {
        // Database connection
        Class.forName("com.mysql.cj.jdbc.Driver");
        Connection conn = DriverManager.getConnection("jdbc:mysql://localhost:3306/mobiles", "username", "password");

        // Query to fetch mobile list
        Statement stmt = conn.createStatement();
        ResultSet rs = stmt.executeQuery("SELECT Mobile_make, RAM_size FROM Mobile_ram");
```



```
// Displaying the result in a table
while (rs.next()) {
    String make = rs.getString("Mobile_make");
    int ram = rs.getInt("RAM_size");

    %>
    <tr>
        <td><%= make %></td>
        <td><%= ram %></td>
    </tr>
    <%
        }
        conn.close();
    } catch (Exception e) {
        e.printStackTrace();
    %>
    <tr>
        <td colspan="2">Error fetching data</td>
    </tr>
    <%
        }
    %>
</table>
</div>
</body>
</html>
```

Output:

[Home](#) [Mobile List](#) [Comments](#)

Mobile List

Mobile Make	RAM (GB)
Samsung	2
Apple	4
Realme	6
Redmi	8
Motorola	6



iii) The Comments Page should display a form as shown below : (Please do not write the code for processing or verification of the form)

Comment

Name :

Rate the mobile

Very good ☐

Good ☒

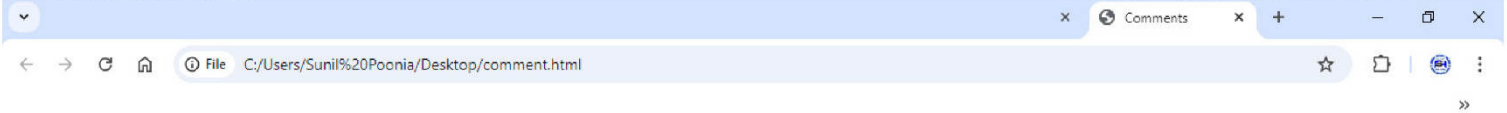
Not so good ☐

Ans.

Comments Page (comments.jsp)

This page will display a form for user comments.

```
<!-- comments.jsp -->
```

[Home](#) [Mobile List](#) [Comments](#)

Comments

Name:

Rate the mobile:

- ☐ Very good
☒ Good
☐ Not so good



(b) Create an external CSS file that ensures that format of all the three pages is as per the layout of Figure 1. The background colour of Link Division should be light green. You may make suitable assumptions, if needed.

Ans.

CSS (styles.css)

```
/* styles.css */
body {
    margin: 0;
    font-family: Arial, sans-serif;
}

.top-division {
    background-color: lightgreen;
    padding: 10px;
    display: flex;
    gap: 20px;
    border-bottom: 1px solid #ddd;
}

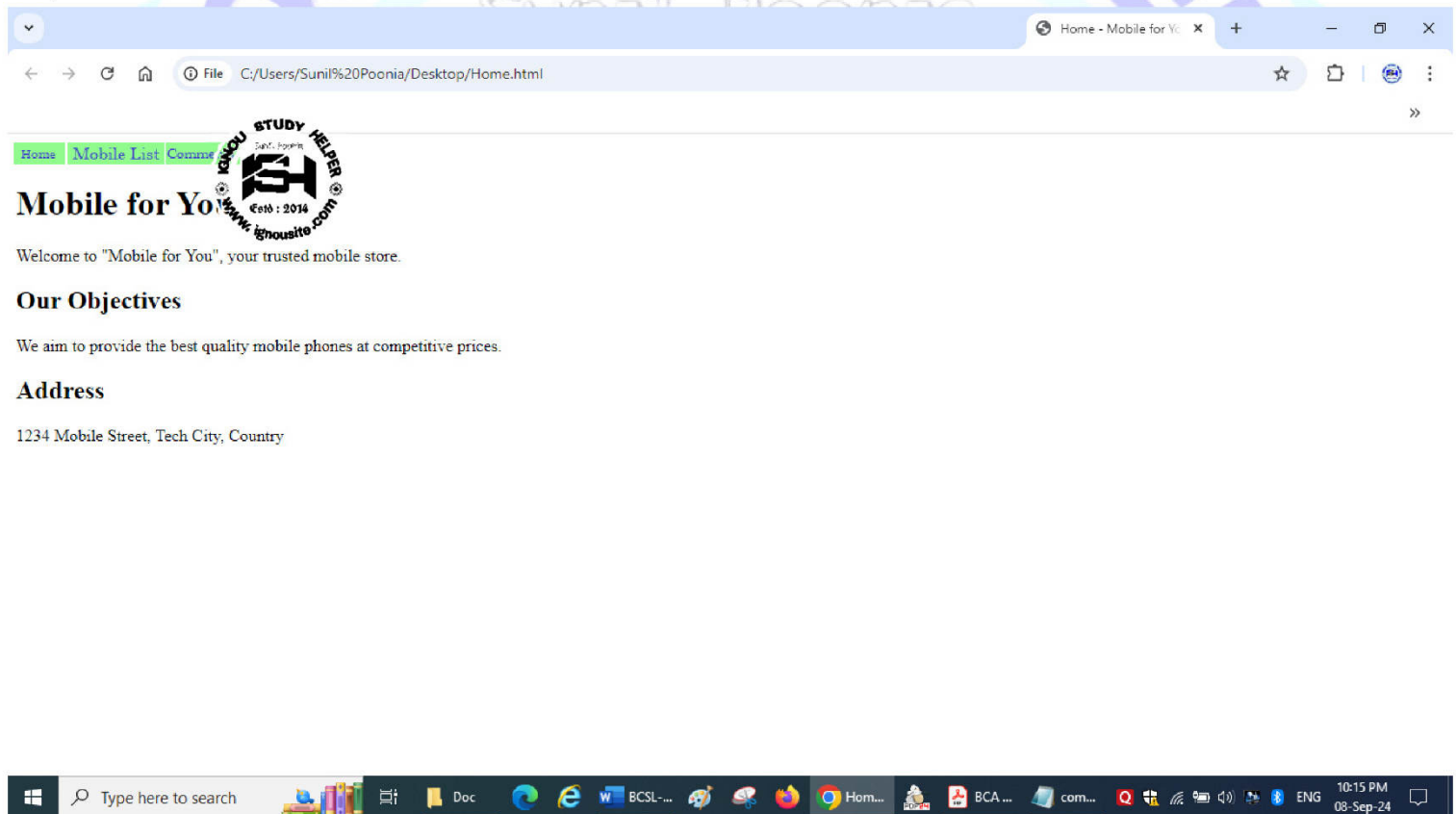
.top-division a {
    text-decoration: none;
    color: #333;
```



```
.top-division a:hover {
    background-color: #ddd;
}

.info-division {
    padding: 20px;
}
```

Output:





[Home](#) [Mobile List](#) [Comments](#)

Mobile List

Mobile Make	RAM (GB)
Samsung	2
Apple	4
Realme	6
Redmi	8
Motorola	6



[Home](#) [Mobile List](#) [Comments](#)

Comments

Name:

Rate the mobile

- ☐ Very good
☒ Good
☐ Not so good

