

Ex No: 1**EMBEDDING MAP WITH HOTSPOTS AND LINKS****Date:****Aim**

To create a webpage with to embed a map along with hotspot and links.

Procedure

1. Start
2. Create the basic HTML structure using `<head>` and `<body>` tags.
3. Fix the hotspots on the image using `<area>` tag.
4. Map the hotspots fixed with links to corresponding pages.
5. Stop.

Code**//map.html**

```

<!DOCTYPE html>
<html lang="en">
<head>
<title>Image Map</title>
<style>
body{
display: flex;
justify-content: center;
align-items: center;
background-color: darkgray;
padding:20px;
flex-direction: column;
}
img{
height: 700px;
width: 700px;
}
h1{
color: darkblue;
}
</style>
</head>
<body>
<h1>INDIA MAP</h1>
<map id="indiamap" name="indiamap">
<area href="Tamilnadu.html" shape="rect" coords="186,221,597,619" alt="Tamilnadu"/>
<area href="Kerala.html" shape="circle" coords="163,615,40" alt="Kerala"/>
<area href="Karnataka.html" shape="circle" coords="147,533,40" alt="Karnataka"/>
</map>

</body>

```

//Tamilnadu.html

```

<!DOCTYPE html>
<html lang="en">
<head>
<title>Image Map</title>

```

```

<style>
body{
display: flex;
justify-content: center;
align-items: center;
flex-direction: column;
padding:40px;
background-color: bisque;
}
h1 {
font-size:70px;
color:brown;
}
p{
font-size:30px;
color:darkblue;
}
</style>
</head>
<body>
<h1>Tamil Nadu</h1>
<p>Tamil Nadu is the southernmost state of India. The tenth largest Indian state by area and the sixth
largest by population, Tamil Nadu is the home of the Tamil people, who speak the Tamil language,
one of the longest surviving classical languages and serves as its official language. The capital and
largest city is Chennai.<br/><br/></p>
</body>
</html>
//Karnataka.html
<!DOCTYPE html>
<html lang="en">
<head>
<title>Image Map</title>
<style>
body{
display: flex;
justify-content: center;
align-items: center;
flex-direction: column;
padding:40px;
background-color: rgb(237, 167, 242);
}
h1 {
font-size:70px;
color:rgb(65, 3, 59);
}
p{
font-size:30px;
color:rgb(139, 0, 104);
}
</style>
</head>
<body>
<h1>Karnataka</h1>

```

<p>Karnataka (/kərˈnɑːtəkə/; ISO: Karnāṭaka, Kannada: [kəɾˈnaːʈəkə], also known as Karunāḍu), is a state in the southwestern region of India. It was formed as Mysore State on 1 November 1956, with the passage of the States Reorganisation Act, and renamed Karnataka in 1973. The state was part of the Carnatic region in </p>

</body>

</html>

//Kerala.html

<!DOCTYPE html>

<html lang="en">

<head>

<title>Image Map</title>

</head>

<body>

<h1>Kerala</h1>

<p>Kerala, officially Keralam[15] ,is a state on the Malabar Coast of India.[16] It was formed on 1 November 1956, following the passage of the States Reorganisation Act, by combining Malayalam-speaking regions of the erstwhile regions of Cochin, Malabar, South Canara, and Travancore.[17][18] Spread over 38,863 km2 (15,005 sq mi), Kerala is the 21st largest Indian state by area.

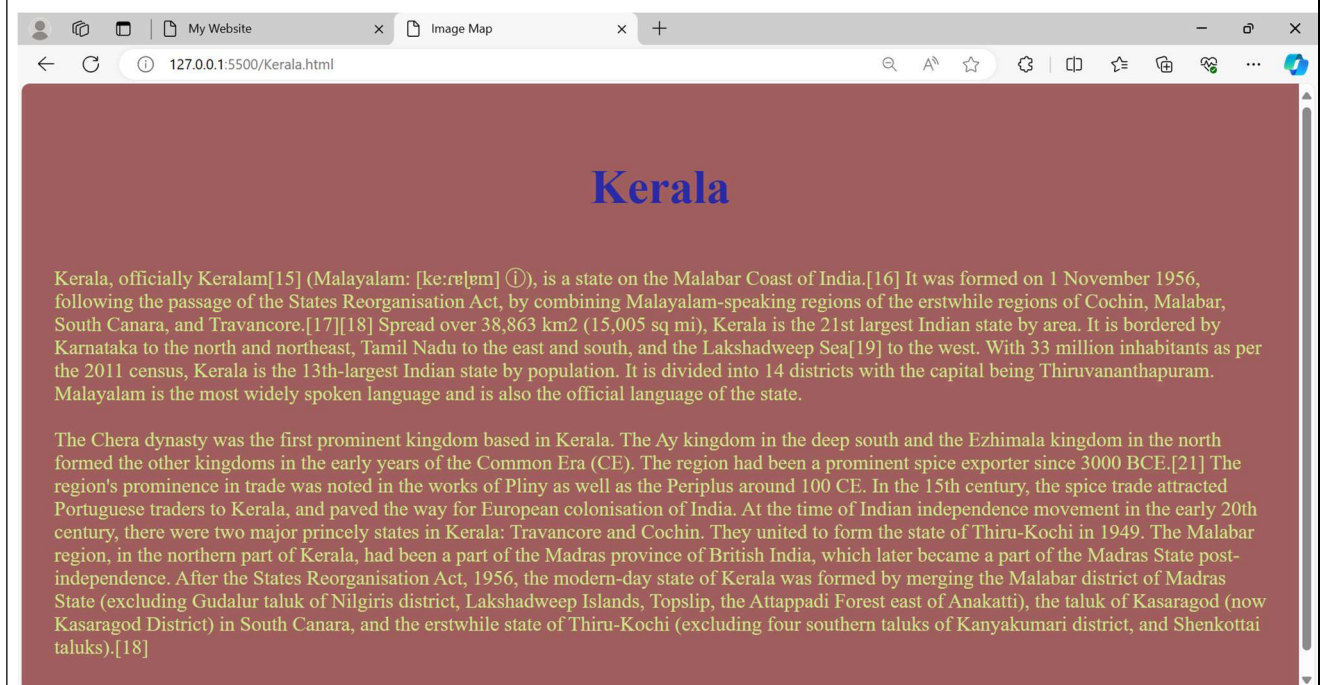
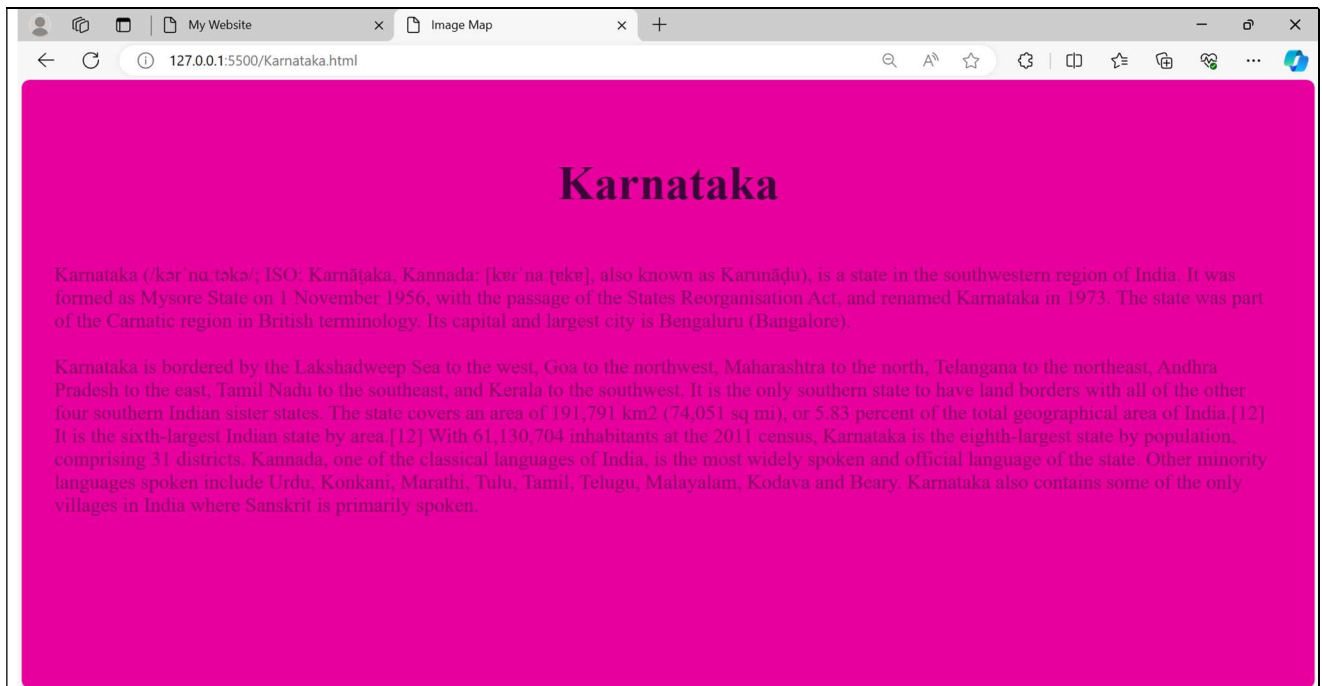
</p>

</body>

</html>

Output





Result

Thus a webpage to embed map along with hotspot and links has been created.

Ex No: 2 WEBPAGE USING EMBEDDED, EXTERNAL AND INLINE CSS**Date:****Aim**

To create a webpage using embedded, external and inline CSS.

Procedure

- 1.Start
- 2.Provide inline CSS style for the header using style attribute.
- 3.Style the home page navigation bar using external CSS file, adding it using the <link> tag.
- 4.Aligning the content of the About Us page using embedded style, provided inside the <style> tag.
- 5.Stop.

Code**//home.html**

```

<!DOCTYPE html>
<html lang="en">
<head>
<title> Furnitures</title>
<link rel="stylesheet" href="style.css"/>
<link rel="stylesheet"
href="https://fonts.googleapis.com/css?family=Sofia|Trirong&effect=neon|outline|emboss|shadow-
multiple">
<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/5.15.4/css/all.min.css" integrity="sha512-
1ycn6IcaQQ40/MKBW2W4Rhis/DbILU74C1vSrLJxCq57o941Ym01SwNsOMqvEBFlcgUa6xLiP
Y/NS5R+E6ztJQ==" crossorigin="anonymous" referrerpolicy="no-referrer" />
<style>
@import url('https://fonts.googleapis.com/css2?family=Dancing+Script:wght@500&display=swap');
.home h1 {
color:white;
font-size:60px;
font-family:"Trirong",serif;
margin-bottom: 0px;
}
.home p{
color:white;
font-size: 18px;
font-family: "Dancing Script";
margin-top: 0px;
}
.about-card{
font-family: 'Gill Sans', 'Gill Sans MT', Calibri, 'Trebuchet MS', sans-serif;
font-weight: 300;
font-size:25px;
}
</style>
</head>

```

```

<body>
<nav>

<ul style="padding-right: 40px;">
<li><a href="#Home">Home</a></li>
<li><a href="#About">About</a></li>
<li><a href="#Shop">Shop</a></li>
<li><a href="#arrivals">New Arrivals</a></li>
<li><a href="#contact">Contact</a></li>
</ul>
</nav>
<div class="home" id="Home">
<h1 class="font-effect-emboss">DAFIL FURNITURES</h1>
<p>Bring new magic to your home with our wide range of collectiobn</p>
</div>
<section id="About">
<div class="about-card">
<h1 style="font-size: 30px;color: rgb(35, 141, 141);margin-bottom: 1px;">About Us</h1>
<p>Our passion for crafting furniture that soothingly blends with strong aesthetics, stems from the gap we saw in the Indian market, motivating us to offer options that breathe easy and elevate your space. Branching out from the fast paced, mass produced and machine made industry, we are grounded by our respect for slow living and sustainability.</p>
</div>

</div>
</section>
<section id="Shop">
<h1 style="text-align: center;font-size: 40px; color: rgb(223, 204, 33);">Shop from our Elite Range of Furnitures </h1>
<div class="card-container">
<div class="shop-card">

<p>Get 40% on our sofa collections</p>
<a href="">Check Now </a>
</div>
<div class="shop-card">

<p>Get 40% on our sofa collections</p>
<a href="">Check Now </a>
</div>
<div class="shop-card">

<p>Get 40% on our sofa collections</p>
<a href="">Check Now </a>
</div>
<div class="shop-card">

<p>Get 40% on our sofa collections</p>
<a href="">Check Now </a>
</div>
<div class="shop-card">

<p>Get 40% on our sofa collections</p>
<a href="">Check Now </a>
</div>

```

```

</div>
</div>
</section>
<section id="arrivals">
<h1>NEW ARRIVALS !!</h1>
<div class="card-container">
<div class="shop-card">

<p>Honey Wood Dressing Table</p>
<a href="">Check Now </a>
</div>
<div class="shop-card">

<p>Office Desk</p>
<a href="">Check Now </a>
</div>
<div class="shop-card">

<p>Dreamer Car Bed</p>
<a href="">Check Now </a>
</div>
</div>
</div>
</section>
<section id="contact">
<h1 style="font-size: 60px;text-align: center;color: darkorange;">Contact Us</h1>
<div class="contact-card">
<div class="card1">
<p><i class="fas fa-map-marker"><span>Delhi</span></i></p>
<p><i class="fas fa-phone-alt"><span>+91 89034567212</span></i></p>

</div>
<div class="card2">
<form action="">
<label for="fname">First Name</label>

<input type="text" id="fname" name="firstname" placeholder="Your name..">
<label for="lname">Last Name</label>
<input type="text" id="lname" name="lastname" placeholder="Your last name..">
<label for="country">Country</label>
<select id="country" name="country">
<option value="australia">India</option>
<option value="canada">USA</option>
</select>
<label for="subject">Subject</label>
<textarea id="subject" name="subject" placeholder="Write something.."
style="height:170px"></textarea>
<input type="submit" value="Submit">
</form>
</div>
</div>
</section>

</body>
</html>

```

```

//style.css
@import
url('https://fonts.googleapis.com/css2?family=Kanit:ital,wght@0,200;0,300;0,400;0,500;1,200;1,300
&family=Poppins:ital,wght@0,100;0,200;0,300;0,400;0,500;0,600;0,700;0,800;0,900;1,100;1,200;1,
300;1,400;1,500;1,600;1,700;1,800;1,900&family=Ysabeau+Infant:ital,wght@0,300;0,400;1,100&di
splay=swap');
body{
margin: 0px;
font-family: 'Lucida Sans', 'Lucida Sans Regular', 'Lucida Grande', 'Lucida Sans Unicode', Geneva,
Verdana, sans-serif;
}
nav{
background-color: rgb(9, 102, 114);
display: flex;
justify-content: space-between;
align-items: center;
padding: 3px;
font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
position: fixed;
top: 0px;
width: 100%;
}
nav ul{
display: flex;
list-style-type: none;
}
nav a{
color:rgb(240, 238, 223);
text-decoration: none;
padding-right: 20px;
font-size:22px;
}
nav a:hover{
color:darksalmon;
}
.home{
background:url("bg.jpg");
display: flex;
flex-direction: column;
justify-content: center;
align-items: center;
height: 100vh;
background-size: cover;
}
#About{
background-color: rgb(166, 195, 220);
display: flex;
flex-direction: row;
padding:30px;
margin-top:80px;
}

.about-card{

```



```

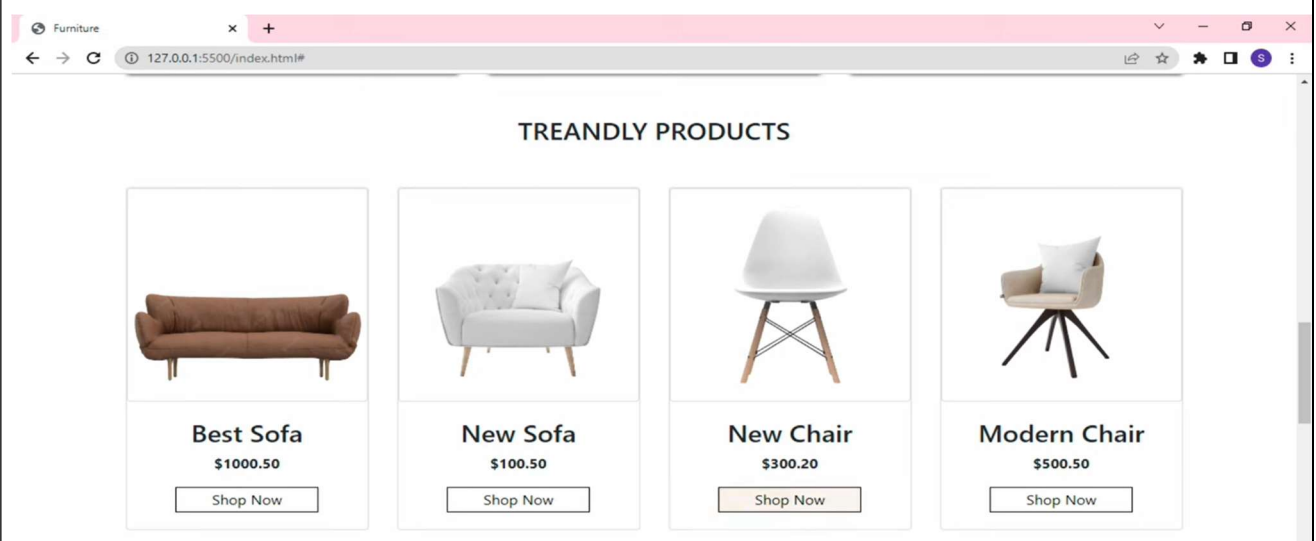
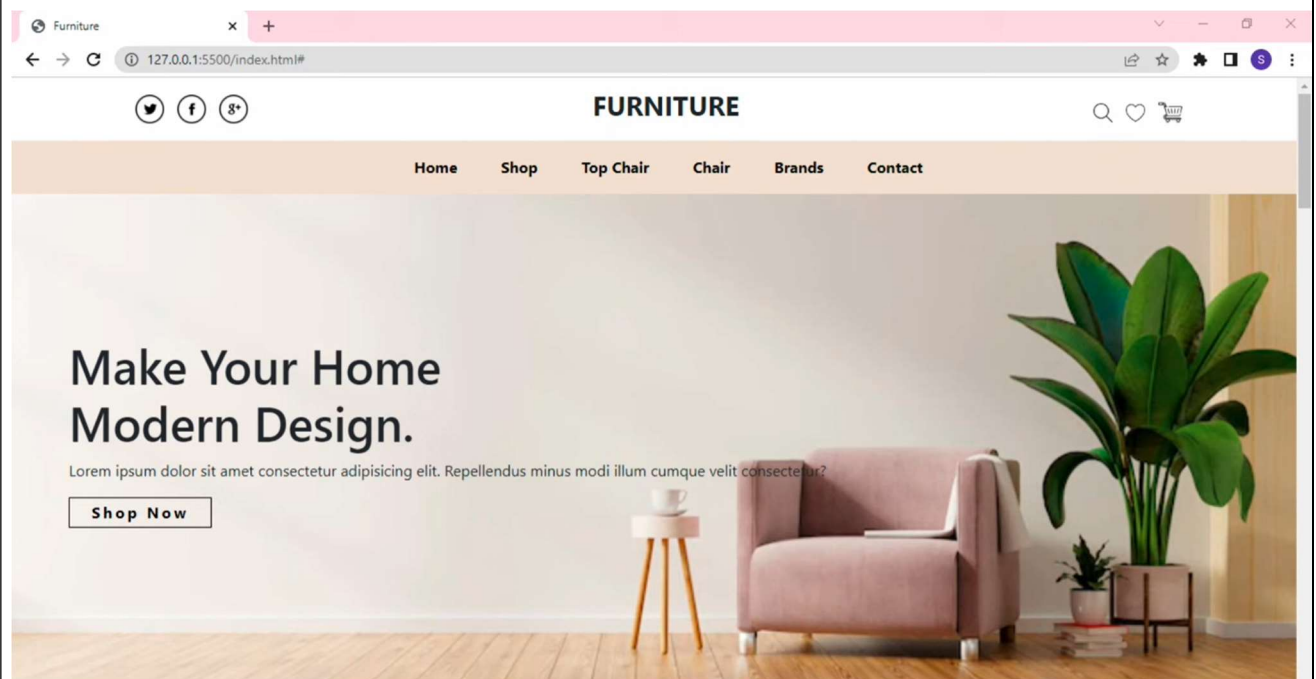
display: flex;
flex-direction: column;
width: 50%;
padding-right: 10px;
}
.carousel-inner .carousel-caption a {
font-size: 30px;
margin-top: 5px;
color: blue;
text-decoration: none;
font-weight: 500;
}
#contact {
margin-top: 60px;
background-color: rgb(2, 90, 105);
padding: 40px;
}
.contact-card {
display: flex;
flex-direction: row;
justify-content: space-between;
align-items: center;
margin-top: 20px;
}
}
.card1 {
width: 40%;
background-color: rgb(255, 255, 255);
opacity: 0.8;
border-radius: 40px;
padding: 30px;
box-shadow: inset;
margin-right: 40px;
display: flex;
flex-direction: column;
justify-content: flex-start;
}
}
.card1 i {
font-size: 50px;
margin-bottom: 8px;
}
}
.card1 span {
margin-left: 10px;
}
}
.card2 {
width: 60%;
background-color: white;
border-radius: 40px;
padding: 30px;
}
}
input[type=text], select, textarea {
width: 100%;
padding: 12px;
border: 1px solid #ccc;

```

```
margin-top: 6px;
margin-bottom: 16px;
}
```

```
input[type=submit] {
background-color: #04AA6D;
color: white;
padding: 12px 20px;
border: none;
cursor: pointer;
}
```

Output



ABOUT



Lorem ipsum dolor sit, amet consectetur adipisicing elit. Laborum, saepe possimus quo, quasi animi natus nulla beatae neque soluta pariatur id ducimus eum, sed quis enim minima? Fugiat delectus quo optio nemo voluptatem ullam officiis neque exercitationem tenetur eum corporis quas in esse blanditiis, quasi animi nam eos! Tempora deleniti eligendi magni ex voluptatum ut dicta nemo et consequuntur distinctio quae atque porro inventore assumenda, nihil odio iusto accusamus libero error nam aut, at praesentium cum reiciendis. Possimus consequatur obcaecati at illum in dolores earum vero ipsum. Ipsam vitae adipisci corrupti totam vel consequuntur fugiat. Perferendis fuga doloremque tempora, in eos, voluptates iure, optio qui modi ex ea saepe. Eum perspiciatis, voluptates fugiat nesciunt corrupti minima aliquam repellat, ea quasi natus, recusandae aut nobis modi. Commodi, alias reiciendis reprehenderit hic soluta consectetur corporis accusantium placeat, totam minima nostrum magnam dolorum aut dolore, sapiente ea. Magni est quo ipsam nisi iste.

[Read More...](#)

Result

Thus the webpage using inline, external and embedded CSS has been created.

Ex No:3**REGISTRATION PAGE WITH VALIDATIONS****Date:****Aim**

To create a registration page with validations using JavaScript.

Procedure

- 1.Start
- 2.Create an html file with necessary form elements and error message divisions.
- 3.Apply styles to the form using CSS
- 4.Create JS functions to validate each field like validateName(),validateEmail(),validatePassword(), on losing focus using onblur()
- 5.Use the onsubmit attribute to call these validation functions in the form tag.
- 6.Test the registration page.

Code**//register.html**

```

<!DOCTYPE html>
<html lang="en">
<head>
<title>Subscriber Registration</title>
<link rel="stylesheet" href="style.css"/>
</head>
<body>
<div class="form-bg">
<form action="" id="form" onsubmit="return validateform()">
<h1 style="text-align: center; color: rgb(102, 62, 3);font-size: 25px;">REGISTRATION
FORM</h1>
<div class="input-cards">
<label for="name">Name</label>
<input type="text" id="name" name="name" onblur="validatename()">
<span id="nameer" class="error"></span>
</div>
<div class="input-cards">
<label for="phn">Contact Number</label>
<input type="number" id="phn" name="phn" onblur="validatephn()">
<span id="phner" class="error"></span>
</div>
<div class="input-cards">
<label for="gender">Gender</label>
<select id="gender" onblur="validategender()">
<option disabled="disabled" selected="selected" value="">Select any one</option>
<option value="male">Male</option>
<option value="female">Female</option>
</select>

```

```

<span id="gener" class="error"></span>
</div>
<div class="input-cards">
<label for="email">Email ID</label>
<input type="text" id="email" name="email" onblur="validateemail()">
<span id="emailer" class="error"></span>
</div>
<div class="input-cards">
<label for="pwd">Password</label>
<input type="password" id="pwd" name="pwd" onblur="validatepwd()">
<span id="pwder" class="error"></span>
</div>
<div class="input-cards-terms">
<input type="checkbox" id="terms" value="terms" onchange="validateterms()"/>
<label for="terms">I accept the terms and conditions, and understood the privacy policy.</label>
<span id="termser" class="error"></span>
</div>
<button type="submit" onclick="validate()">Register</button>
</form>
</div>
<script src="validate.js"></script>
</body>
</html>
//validate.js
var phnRG = /^[0,1]{0-9}{3}[]]{0,1}[-s\.] {0,1}[0-9]{3}[-s\.] {0,1}[0-9]{4}$/;
var emailRG = /^[a-zA-Z0-9.!#$%&'*/+=?^_`{}~]+@[a-zA-Z0-9-]+(?:\.[a-zA-Z0-9-]+)*$/;
var nameRG= /^[A-Za-z]{3,20}$/;
var pwdRG= /^(?=.*[a-z])(?=.*[A-Z])(?=.*\d)(?=.*[@$!%*?&])[A-Za-z\d@$!%*?&]{6}$/;

function validateform() {
var checkname=validatename();
var checkemail=validateemail();
var checkphn=validatephn();
var checkpwd=validatepwd();
var checkterms=validateterms();
var checkgender=validategender();
var isvalid=checkname && checkemail&&checkphn&&checkpwd&&checkterms&&checkgender;
if(isvalid){
alert("Submitted Successfully!!");
}
else{
alert("Please fill all the fields");
}
return isvalid;
}

function validatename(){
let name=document.getElementById("name").value;
let nameer=document.getElementById("nameer");
if (name === "") {

```

```

nameer.textContent= "Name is required";
return false;
}
else if(!nameRG.test(name)){
nameer.textContent = "Invalid name";
return false;
}
else{
nameer.textContent="";
return true;
}
}

function validatephn(){
let phn=document.getElementById("phn").value;
let phner=document.getElementById("phner");
if (phn === "") {
phner.textContent= "Phone number is required";
return false;
}
else if(!phnRG.test(phn)){
phner.textContent = "Invalid Phone number";
return false;
}
else{
phner.textContent="";
return true;
}
}

function validateemail(){
let email=document.getElementById("email").value;
let emailer=document.getElementById("emailer");
if (email === "") {
emailer.textContent= "Email is required";
return false;
}
else if(!emailRG.test(email)){
emailer.textContent = "Invalid email";
return false;
}
else{
emailer.textContent="";
return true;
}
}

function validategender(){
var gender = document.getElementById("gender").value;
let gener=document.getElementById("gener");

```

```

if (gender=="") {
gener.textContent= "Gender is required";
return false;
}
else{
gener.textContent="";
return true;
}
}
function validatepwd(){
let pwd=document.getElementById("pwd").value;
let pwder=document.getElementById("pwder");

if (pwd === "") {
pwder.textContent= "Password is required";
return false;
}
else if (!pwdRG.test(pwd)) {
pwder.textContent = "Password must contain atleast on uppercase,lowercase,digit,special symbol";
return false;
}
else if(pwd.length<6 || pwd.length>6){
pwder.textContent="Password must be 6 characters";
return false;
}
else{
pwder.textContent="";
return true;
}
}
function validateterms() {
var terms = document.getElementById("terms").checked;
let termser=document.getElementById("termser");
if(!terms){
termser.textContent="Accept the terms & policy to proceed.";
}
else{
termser.textContent="";
}
return terms;
}
//style.css
body{
margin: 0px;
background-image: linear-gradient(to bottom right,rgb(206, 114, 9),rgba(49, 36, 12, 0.37));
background-repeat: no-repeat;
min-height: 100vh;
display: flex;
justify-content: center;
align-items: center;

```

```
font-family: 'Lucida Sans', 'Lucida Sans Regular', 'Lucida Grande', 'Lucida Sans Unicode', Geneva,
Verdana, sans-serif;
}
```

```
.form-bg{
width:600px;
border-radius: 30px;
padding: 40px;
background: rgba(255, 255, 255, 0.2);
border-radius: 16px;
box-shadow: 0 4px 30px rgba(0, 0, 0, 0.1);
backdrop-filter: blur(5px);
-webkit-backdrop-filter: blur(5px);
border: 1px solid rgba(255, 255, 255, 0.3);
}
```

Output

Register

Username

Email

Password

Confirm Password

Submit

Register

Username

Username is required

Email

Email is required

Password

Password is required

Confirm Password

Please confirm your password

Submit

Register

Username

Email

Password

Confirm Password

Password does not match

Register

Result

Thus a registration page with validations using JavaScript has been created.

Ex No:4 (a)**LIBRARY MANAGEMENT SYSTEM****Date:****Aim**

To develop a Library Management System and connect with database using JSP.

Procedure

- 1.Start
- 2.Create a Library database and create a table Books in the database, using MySQL
- 3.Write the code for index page and addbooks.html
- 4.Write the jsp code for database connection using jdbc driver and queries to insert record,

Display records and delete records as following: insert.jsp,viewbooks.jsp,delete.jsp.

- 5.Run the application in the server.

Code**//home.html**

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>LIBRARY MANAGEMENT SYSTEM</title>
<link rel="stylesheet" href="style.css">
</head>
<body>
<div class="wrapper">
<div class="sidebar">
<div class="profile">

<h3>ADMIN</h3>
<p>ABC Library</p>
<ul>
<li>
<a href="#" class="active">
<span class="item">Home</span>
</a>
</li>
<li>
<a href="addbook.html">
<span class="item">Add Book</span>
</a>
</li>
<li>
<a href="viewbooks.jsp">
<span class="item">View Book</span>
</a>
</li>
</ul>
</div>
</div>
</div>
```

```

<a href="#">
<span class="item">Delete Book</span>
</a>
</li>
<li>
<a href="#">
<span class="item">Update Book</span>
</a>
</li>
</ul>
</div>
</div>
</div>
<div class="home-section">
<h1 style="font-size:60px;color: rgb(105, 3, 58);margin-left: 350px;">THE BOOKSHELF
LIBRARY</h1>

</div>
</body>
</html>

//addbooks.html
<!DOCTYPE html>
<html lang="en">
<head>
<title>LIBRARY MANAGEMENT SYSTEM</title>
<link rel="stylesheet" href="style.css">
</head>
<body>
<h1 style="color: darkmagenta; font-size: 40px;">ADD BOOKS <span><a href="home.html">
&larr; Back</a></span></h1>

<form method="post" action="insert.jsp">
<table>
<tr>
<th>Book ID</th>
<th>Title</th>
<th>Author</th>
<th>Publisher</th>
<th>Edition</th>
<th>Price</th>
</tr>
<tr>
<td><input type="text" name="bid" id="bid"></td>
<td><input type="text" name="title" id="title"></td>
<td><input type="text" name="author" id="author"></td>
<td><input type="text" name="publisher" id="publisher"></td>
<td><input type="date" name="edition" id="edition"></td>
<td><input type="number" name="price" id="price"></td>
</tr>

```

```

</table>
<div class="btn">
<input type="submit" class="addbtn" value="Add">
</div>
</form>

</body>
</html>

//insert.jsp
<%@ page import="java.sql.*, javax.naming.*, javax.sql.*, java.util.Date,
java.text.SimpleDateFormat" %>
<%@ page contentType="text/html; charset=UTF-8" language="java" %>

<!DOCTYPE html>
<html>
<head>
<title>Insert Book</title>
<script>
function showAlert(message) {
alert(message);
window.location.href='addbook.html'; // Go back to the previous page
}
</script>
</head>
<body>

<h2>Insert Book</h2>

<%
// Retrieve form parameters
String bookid = request.getParameter("bid");
String title = request.getParameter("title");
String author = request.getParameter("author");
String publication = request.getParameter("publisher");
String editionStr = request.getParameter("edition");
String priceStr = request.getParameter("price");

// Check if all parameters are not null and not empty
if (bookid != null && !bookid.isEmpty() &&
title != null && !title.isEmpty() &&
author != null && !author.isEmpty() &&
publication != null && !publication.isEmpty() &&
editionStr != null && !editionStr.isEmpty() &&
priceStr != null && !priceStr.isEmpty()) {

try {
// Parse edition date and price
SimpleDateFormat dateFormat = new SimpleDateFormat("yyyy-MM-dd");
Date edition = dateFormat.parse(editionStr);

```

```

double price = Double.parseDouble(priceStr);

// Get database connection
Context initContext = new InitialContext();
Context envContext = (Context)initContext.lookup("java:/comp/env");
DataSource ds = (DataSource)envContext.lookup("jdbc/LibraryDB");
Connection conn = ds.getConnection();

// Prepare SQL statement to insert book
String sql = "INSERT INTO books (Book_ID, Title, Author, Publication, Edition, Price) VALUES (?, ?, ?, ?, ?, ?)";
PreparedStatement pstmt = conn.prepareStatement(sql);
pstmt.setString(1, bookid);
pstmt.setString(2, title);
pstmt.setString(3, author);
pstmt.setString(4, publication);
pstmt.setDate(5, new java.sql.Date(edition.getTime()));
pstmt.setDouble(6, price);

// Execute the insert statement
int rowsAffected = pstmt.executeUpdate();

// Close resources
pstmt.close();
conn.close();

out.println("<script>showAlert('Book inserted successfully');</script>");

} catch (Exception e) {
e.printStackTrace();
out.println("<script>showAlert('Error inserting book');</script>");
}
} else {
out.println("<script>showAlert('One or more parameters are missing');</script>");
}
%>
</body>
</html>

//viewbooks.jsp
<%@ page import="java.sql.*" %>
<%@ page import="javax.naming.*, javax.sql.*" %>
<%@ page contentType="text/html; charset=UTF-8" language="java" %>

<!DOCTYPE html>
<html>
<head>
<title>Books Information</title>
<link rel="stylesheet" href="style.css">

</style>

```

```

</head>
<body class="viewbooks">
<h1 style="color: darkmagenta; font-size: 40px;">BOOKS INFORMATION <span><a
href="home.html"> &larr; Back</a></span></h1>

<table>
<tr>
<th>Book ID</th>
<th>Title</th>
<th>Author</th>
<th>Publication</th>
<th>Edition</th>
<th>Price</th>
</tr>
<%
try {
// Get database connection
Context initContext = new InitialContext();
Context envContext = (Context)initContext.lookup("java:/comp/env");
DataSource ds = (DataSource)envContext.lookup("jdbc/LibraryDB");
Connection conn = ds.getConnection();

// Create SQL statement
Statement stmt = conn.createStatement();
String sql = "SELECT Book_ID, Title, Author, Publication, Edition, Price FROM books";
ResultSet rs = stmt.executeQuery(sql);

// Iterate through the result set and display records
while (rs.next()) {
String bookId = rs.getString("Book_ID");
String title = rs.getString("Title");
String author = rs.getString("Author");
String publication = rs.getString("Publication");
String edition = rs.getString("Edition");
String price = rs.getString("Price");
%>
<tr>
<td><%= bookId %></td>
<td><%= title %></td>
<td><%= author %></td>
<td><%= publication %></td>
<td><%= edition %></td>
<td><%= price %></td>
<td><button class="delete-btn" onclick="deleteBook('<%= bookId %>')">Delete</button></td>
</tr>
<%
}
rs.close();
stmt.close();
conn.close();

```

```

} catch (Exception e) {
e.printStackTrace();
}
%>
</table>
<script>
function deleteBook(bookId){
if (confirm('Are you sure you want to delete this book?')) {
window.location.href = 'delete.jsp?bookId='+bookId; // Replace deleteBook.jsp with your actual
delete servlet or JSP
}
}
}
</script>
</body>
</html>

```

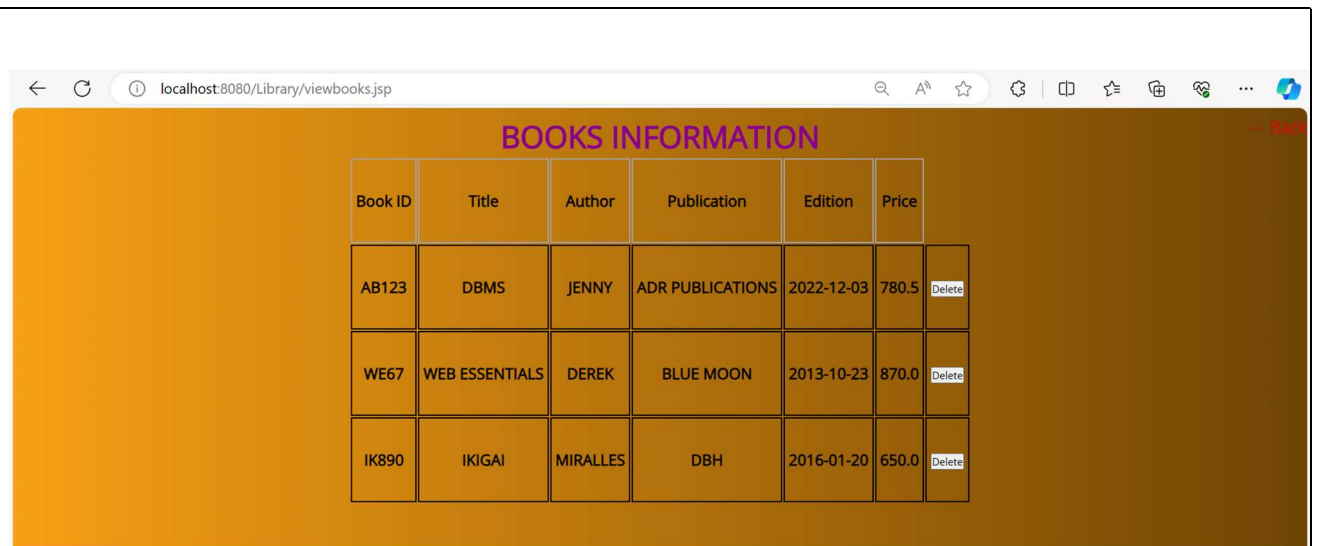
Output

The image shows two screenshots of a web application running on localhost:8080.

The top screenshot shows the 'ADMIN' interface for 'ABC Library'. It features a sidebar with a user profile icon and the text 'ADMIN ABC Library'. The sidebar contains a 'Home' link and a list of buttons: 'Add Book', 'View Book', 'Delete Book', and 'Update Book'. The main content area is a solid orange color.

The bottom screenshot shows the 'ADD BOOKS' form. The title 'ADD BOOKS' is displayed in purple. Below the title is a table with six columns: 'Book ID', 'Title', 'Author', 'Publisher', 'Edition', and 'Price'. The table contains one row of data with the following values: '4646', 'XYZ', 'ABC', 'PQR', '05/09/2024', and '900'. Below the table is a large orange button labeled 'Add'.

Book ID	Title	Author	Publisher	Edition	Price
4646	XYZ	ABC	PQR	05/09/2024	900



BOOKS INFORMATION

Book ID	Title	Author	Publication	Edition	Price	
AB123	DBMS	JENNY	ADR PUBLICATIONS	2022-12-03	780.5	Delete
WE67	WEB ESSENTIALS	DEREK	BLUE MOON	2013-10-23	870.0	Delete
IK890	IKIGAI	MIRALLES	DBH	2016-01-20	650.0	Delete

Result

Thus the Library management system has been developed using HTML, CSS.

Ex No:4(b)**BANKING APPLICATION****Date:****Aim**

To create a bank application using Java Servlet, HTML and CSS.

Procedure

1. Create a database called BANK in the MySQL Admin in Xampp and give the connectivity details in the config.php page.
2. Create a table ACCOUNT in the database and insert the columns Act_number, Customer_name, Act_Type, Balance
3. Create pages add.html consisting of the form to give data to join, add.php that performs the action of adding it to sql, search.php to search data, view.php to see details of the accounts.
4. Include the config.php page to all other pages.
5. Start the xampp server and test the website.

Code**//add_act.php**

<?php

// Establish database connection

\$servername = "localhost";

\$username = "root";

\$password = "";

\$database = "bank";

\$conn= new mysqli(\$servername, \$username, \$password, \$database);

// Check connection

if (\$conn->connect_error) {

die("Connection failed: " . \$conn->connect_error);

}

// Process form submission

if (\$_SERVER["REQUEST_METHOD"] == "POST") {

\$accountNumber = intval(\$_POST["accountNumber"]); // Convert to integer

\$customerName = \$_POST["customerName"];

\$accountType = \$_POST["accountType"];

\$balance = doubleval(\$_POST["balance"]); // Convert to double

// Prepare SQL statement

\$sql = "INSERT INTO account (act_no, customer_name, act_type, balance) VALUES (?, ?, ?, ?)";

\$stmt = \$conn->prepare(\$sql);

\$stmt->bind_param("issd", \$accountNumber, \$customerName, \$accountType, \$balance); // 'i' for integer, 's' for string, 'd' for double

// Execute SQL statement

if (\$stmt->execute() === TRUE) {

echo "New account added successfully";

} else {

echo "Error: " . \$sql . "
" . \$conn->error;

}

// Close statement and database connection

\$stmt->close();

```

$conn->close();
}
?>
<!DOCTYPE html>
<html>
<head>
<title>Add Account</title>
</head>
<body>
<h1>Add New Account</h1>
<form action="<?php echo htmlspecialchars($_SERVER["PHP_SELF"]); ?>" method="post">
<label>Account Number:</label>
<input type="number" name="accountNumber" required><br><br>
<label>Customer Name:</label>
<input type="text" name="customerName" required><br><br>
<label>Account Type:</label>
<input type="text" name="accountType" required><br><br>
<label>Balance:</label>
<input type="number" step="0.01" name="balance" required><br><br> <!-- Use 'step' attribute for
decimal numbers -->
<input type="submit" value="Submit">
</form>
</body>
</html>
//view.php
<?php
// Establish database connection
$servername = "localhost";
$username = "root";
$password = "";
$dbname = "bank";

$conn = new mysqli($servername, $username, $password, $dbname);

// Check connection
if ($conn->connect_error) {
die("Connection failed: " . $conn->connect_error);
}
// Retrieve account data from the database
$sql = "SELECT * FROM account";
$result = $conn->query($sql);
?>
<!DOCTYPE html>
<html>
<head>
<title>View Accounts</title>
</head>

<body>

<h1 align="center" style="font-size:40px;color:crimson">View Accounts</h1>

```

```

<table>

<tr>

<th>Account Number</th>
<th>Customer Name</th>
<th>Account Type</th>
<th>Balance</th>

</tr>

<?php
// Output data of each row
if ($result->num_rows > 0) {
while($row = $result->fetch_assoc()) {
echo "<tr>";
echo "<td>" . $row["act_no"] . "</td>";
echo "<td>" . $row["customer_name"] . "</td>";
echo "<td>" . $row["act_type"] . "</td>";
echo "<td>" . $row["balance"] . "</td>";
echo "</tr>";
}
} else {
echo "<tr><td colspan='4'>No accounts found</td></tr>";
}
?>

</table>

<a href="add_act.php"><- Back</a>

</body>

</html>

<?php
// Close database connection
$conn->close();

?>

```

Output

The first screenshot shows the 'View Accounts' page. It features a table with the following data:

Account Number	Customer Name	Account Type	Balance
1256	Sai	Savings	10000.00
7867	Lisa	Current	67000.70

Below the table is a link: [<- Back](#)

The second screenshot shows the 'Add New Account' form. It contains four input fields labeled 'Account Number:', 'Customer Name:', 'Account Type:', and 'Balance:'. Below these fields is a green 'Submit' button.

The third screenshot shows the 'Search Account' page. It has a search form with the label 'Search by Account Number:' and a text input field containing '7867'. Below the input field is a 'Search' button. Underneath the search form is a section titled 'Account Details' containing a table with the following data:

Account Number	Customer Name	Account Type	Balance
7867	Lisa	Current	67000.7

Result

Thus banking application has been created using PHP, MySQL, HTML and CSS.

Ex No: 5**EMPLOYEE MANAGEMENT SYSTEM USING PHP****Date :****Aim**

To create an employee management system using PHP, MySQL, HTML and CSS.

Procedure

1. Create a database in the MySQL Admin in Xampp and give the connectivity details in the config.php page.
2. Create a table employee in the database and insert the columns ID,Name,Designation,DOJ,Salary,Department.
3. Create pages add.html consisting of the form to give data to join, add.php that performs the action of adding it to sql, delete.php to delete data, edit.php to update details of the employee.
4. Include the config.php page to all other pages.
5. Start the xampp server and test the website.

Code**//add.html**

```

<html>
<head>
<title>Add Employee Details</title>
<link rel="stylesheet" href="style.css">
<style>
  form{
    display: flex;
    flex-direction: column;
    justify-content: center;
    align-items: center;
    box-shadow: inset;
  }
  form table td{
    color: darkcyan;
  }
  input{
    height: 40px;
    width: 300px;
    font-size: 25px;
  }
  .btn{
    height:60px;
    background-color: chartreuse;
    font-size:25px;
  }
  a{
    font-size:30px;
  }
</style>
</head>

```

```

<body>
<h1 align="center" style="color:brown; font-size:40px;">Add Employee Details</h1>
<hr/>
<a href="index.html">Home</a>
<form action="add.php" method="post" name="form1">
<table width="80%" border="0" class="styled-table">
<tr>
<td>Employee Id</td>
<td><input type="text" name="empid"></td>
</tr>
<tr>
<td>Name</td>
<td><input type="text" name="ename"></td>
</tr>
<tr>
<td>Designation</td>
<td><input type="text" name="desig"></td>
</tr>
<tr>
<td>Department</td>
<td><input type="text" name="dept"></td>
</tr>
<tr>
<td>DOJ</td>
<td><input type="date" name="doj"></td>
</tr>
<tr>
<td>Salary</td>
<td><input type="number" name="salary"></td>
</tr>
<tr>
<td colspan="2" align="center"><input type="submit" name="Submit" class="btn"
value="Add"></td>
</tr>
</table>
</form>
</body>
</html>

```

//add.php

```

<html>
<head>
<title>Add Employee Details</title>
</head>
<body>
<?php
//including the database connection file
include_once("config.php");
$empid = $_POST['empid'];

```

```

$name = $_POST['ename'];
$desig = $_POST['desig'];
$dept = $_POST['dept'];
$doj = $_POST['doj'];
$salary = $_POST['salary'];
if(isset($_POST['Submit'])) {
//insert data to database
$result = mysqli_query($mysqli, "INSERT INTO employee values ('$sempid',
'$ename','$desig','$dept','$doj','$salary')");
//display success message
echo "<h1 align='center'>Add Employee Details</h1>";
echo "<hr />";
echo "<font color='green' font-size:'40px' text-align='center'>Data added successfully.";
echo "<br/><a href='view.php'>View Result</a>";
}
?>
</body>
</html>

```

//delete.php

```

<?php
//including the database connection file
include("config.php");
//getting id of the data from url
$sempid = $_GET['empid'];
//deleting the row from table
$result = mysqli_query($mysqli, "DELETE FROM employee WHERE ID='$sempid'");
//redirecting to the display page (index.php in our case)
header("Location:view.php");
?>

```

//edit.php

```

<?php
// including the database connection file
include_once("config.php");
if(isset($_POST['update']))
{
$sempid = $_POST['empid'];
$ename = $_POST['ename'];
$desig = $_POST['desig'];
$dept = $_POST['dept'];
$doj = $_POST['doj'];
$salary = $_POST['salary'];
//updating the table
$result = mysqli_query($mysqli, "UPDATE employee SET Name='$ename',
Designation='$desig',Department='$dept',DOJ='$doj',Salary=$salary WHERE
ID='$sempid'");

//redirectig to the display page. In our case, it is index.php
header("Location:view.php");
}

```

```

?>
<?php
echo "<h1 align='center'>Edit Employee Details</h1>";
echo "<hr />";
//getting id from url
$empid = $_GET['empid'];
//selecting data associated with this particular eid
$result = mysqli_query($mysqli, "SELECT * FROM employee WHERE
ID='$empid'");
while($res = mysqli_fetch_array($result))
{
$empid = $res['ID'];
$name = $res['Name'];
$desig = $res['Designation'];
$dept = $res['Department'];
$doj = $res['DOJ'];
$salary = $res['Salary'];
}
?>
<html>
<head>
<title>Edit Employee Details</title>
<link rel="stylesheet" href="style.css">
<style>
    form{
        display: flex;
        flex-direction: column;
        justify-content: center;
        align-items: center;
        box-shadow: inset;
    }
    form table td{
        color: darkcyan;
    }
    h1{
        color:brown; font-size:40px;
    }
    a{
        font-size:30px;
    }
</style>
</head>
<body>
    <nav>
        <a href="index.html">Home</a>
        | <a href="view.php">Back</a>
    </nav>

<br/><br/>
<form name="empform" method="post" action="edit.php">

```



```

<table border="0"class="styled-table">
<tr>
<td>Name</td>
<td><input type="text" name="ename" value="<?php echo $ename;?>"></td>
</tr>
<tr>
<td>
<td>Designation</td>
<td><input type="text" name="desig" value="<?php echo $desig;?>"></td>
</tr>
<tr>
<td>Department</td>
<td><input type="text" name="dept" value="<?php echo $dept;?>"></td>
</tr>
<td>DOJ</td>
<td><input type="date" name="doj" value="<?php echo $doj;?>"></td>
</tr>
<tr>
<td>Salary</td>
<td><input type="text" name="salary" value="<?php echo $salary;?>"></td>
</tr>
<tr>
<td><input type="hidden" name="empid" value="<?php echo $_GET['empid'];?>"></td>
<td><input type="submit" name="update" value="Update" class="btn"></td>
</tr>
</table>
</form>
</body>
</html>

```

Output

The screenshot shows a web browser window with the address bar displaying 'localhost/EX6/add.html'. The page has a light orange background. At the top, there is a header 'Add Employee Details' in bold red text. Below the header, there is a 'Home' link in purple. The main content area contains a form with the following fields:

- Employee Id: A text input field.
- Name: A text input field.
- Designation: A text input field.
- Department: A text input field.
- DOJ: A date input field with a calendar icon and the placeholder 'mm/dd/yyyy'.
- Salary: A text input field.

At the bottom of the form, there is a green button labeled 'Add'.

localhost/EX6/add.php

Add Employee Details

Data added successfully.
[View Result](#)

localhost/EX6/view.php

Employee Details

[Home](#)

Employee Id.	Name	Designation	Department	DOJ	Salary	Edit / Delete
SL34	Ahan	Manager	Sales	2014-10-08	55000.000	Edit Delete
MK45	Moses	Manager	Marketing	2010-06-16	80000.000	Edit Delete
ME78	Karan	Editor	Media	2018-12-05	56900.000	Edit Delete
AC78	Ishki	Accountant	Accounts	2016-11-29	43000.800	Edit Delete
789	Kiran	Accountant	ACcounts	2024-05-01	14000.000	Edit Delete

Result

Thus employee management system using PHP has been created.

Ex No: 6**BOOTSTRAP – WEB PAGE****Date :****Aim**

Program to develop an attractive web pages using Bootstrap.

Procedure

1. Ensuring you get a responsive Bootstrap website is as simple as placing the correct metatag inside the head of your web pages:

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

2. The above meta tag is quite self-explanatory in nature. We're setting the width of the pageto the width of the device and initially scaling it to 1 — its default size.

3. Apart from this, you're good to go: Bootstrap is responsive by default.

```
<link href="vendor/bootstrap/css/bootstrap.min.css" rel="stylesheet">
```

```
<link href="https://fonts.googleapis.com/css?family=Saira+Extra+Condensed:500,700" rel="stylesheet">
```

```
<link href="https://fonts.googleapis.com/css?family=Muli:400,400i,800,800i"rel="stylesheet">
```

Code

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Dafil Furnitures</title>
<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css" rel="stylesheet"
integrity="sha384-
1BmE4kWBq78iYhF1dvKuhfTAU6auU8tT94WrHftjDbrCEXSU1oBoqyl2QvZ6jIW3"
crossorigin="anonymous">
<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.bundle.min.js"
integrity="sha384-
ka7Sk0GlIn4gmtz2MlQnikT1wXgYsOg+OMhuP+IIRH9sENBO0LRn5q+8nbTov4+1p"
crossorigin="anonymous"></script>
<link rel="stylesheet" href="style.css">
</head>
<body>
<nav class="navbar navbar-expand-lg navbar-dark bg-dark">
<div class="container-fluid">
<a class="navbar-brand" href="#">

<span style="color:aquamarine;font-weight: 600;font-family: Briem Hand;">Dafil
Furnitures</span>
</a>
```

```

<button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-
target="#navbarSupportedContent" aria-controls="navbarSupportedContent" aria-expanded="false"
aria-label="Toggle navigation">
<span class="navbar-toggler-icon"></span>
</button>
<div class="collapse navbar-collapse" id="navbarSupportedContent" style="margin-left: 10px;">
<ul class="navbar-nav me-auto mb-2 mb-lg-0">
<li class="nav-item">
<a class="nav-link active" aria-current="page" href="#">Home</a>
</li>
<li class="nav-item">
<a class="nav-link" href="about.html">About</a>
</li>
<li class="nav-item dropdown">
<a class="nav-link dropdown-toggle" href="#" id="navbarDropdown" role="button" data-bs-
toggle="dropdown" aria-expanded="false">
Shop
</a>
<ul class="dropdown-menu" aria-labelledby="navbarDropdown">
<li><a class="dropdown-item" href="#">Office</a></li>
<li><a class="dropdown-item" href="#">Furniture</a></li>
<li><a class="dropdown-item" href="#">Home Decor</a></li>
</ul>
</li>
<li class="nav-item">
<a class="nav-link" href="#">New Arrivals</a>
</li>
<li class="nav-item">
<a class="nav-link" href="#">Contact</a>
</li>
</ul>
<form class="d-flex">
<input class="form-control me-2" type="search" placeholder="Search" aria-label="Search">
<button class="btn bg-success btn-outline-success" style="color: white;"
type="submit">Search</button>
</form>
</div>
</div>
</nav>
<div class="container home">
<div class="px-4 py-5 my-5 text-center">
<h1 class="display-5 fw-bold"> FURNITURES</h1>
<div class="col-lg-6 mx-auto">
<p class="lead mb-4">Bring new magic to your home with our wide range of collections.</p>
<div class="d-grid gap-2 d-sm-flex justify-content-sm-center">
<button type="button" class="btn btn-secondary btn-lg px-4 gap-3" fdprocessedid="9nzvmu">Read
More</button>
<button type="button" class="btn btn-outline-primary btn-lg px-4" style="color:aquamarine"
fdprocessedid="el08wi">Shop</button>
</div>
</div>
</div>
</div>

```

```

</body>
</html>
//about.html
<div class="container d-flex flex-row justify-content-center">
<div class="row col-md-6" style="padding-right: 3px;margin-right: 3px;">
<h1 style="margin-top: 22px;">About Us</h1>
<p style="padding-top:0;margin-top: 0;text-align: justify;">Our passion for crafting furniture that
soothingly blends with strong aesthetics, stems from the gap we saw in the Indian market, motivating
us to offer options that breathe easy and elevate your space. </p>
</div>
<div class="row col-md-5">

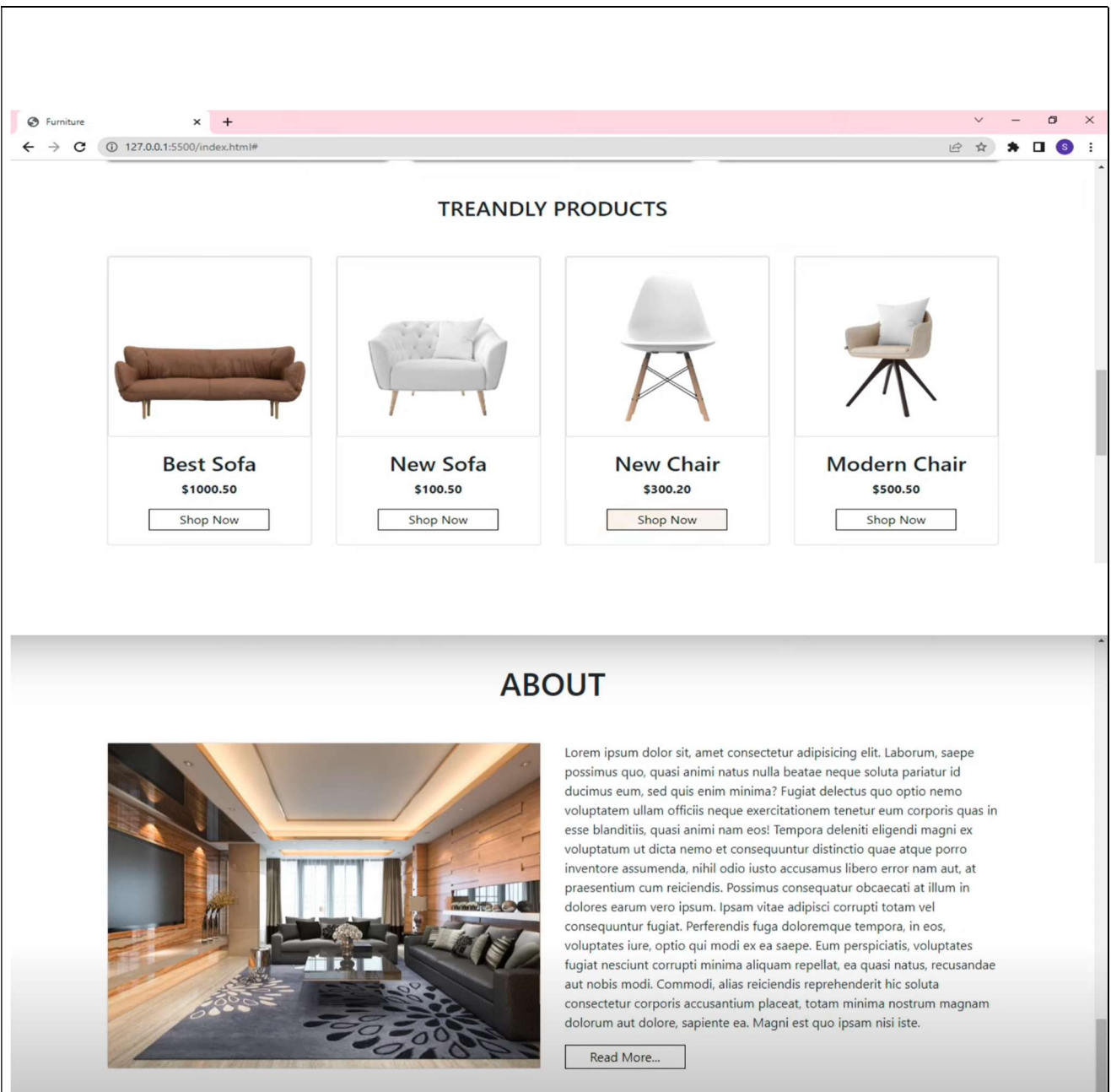
</div>
</div>
//shop.html
<main>
<section class="py-3 text-center container">
<div class="row py-lg-3">
<div class="col-lg-6 col-md-8 mx-auto">
<h1 class="fw-light">Explore from our wide range of furnitures !! </h1>
<p class="lead text-muted">Adding lives to your homes.</p>
</div>
</div>
</section>
<div class="album py-1 bg-light">
<div class="container">

<div class="row row-cols-1 row-cols-sm-2 row-cols-md-3 g-3">
<div class="col">
<div class="card shadow-sm">

<div class="card-body">
<p class="card-text">Dressing Table</p>
<div class="d-flex justify-content-between align-items-center">
<div class="btn-group">
<button type="button" class="btn btn-sm btn-outline-secondary">Buy</button>
</div>
<small class="text-muted">Rs 12000</small>
</div>
</div>
</div>
</div>
<div class="col">
<div class="card shadow-sm">

<div class="card-body">
<p class="card-text">Study table</p>
<div class="d-flex justify-content-between align-items-center">
<div class="btn-group">
<button type="button" class="btn btn-sm btn-outline-secondary">Buy</button>
</div>
<small class="text-muted">RS 26700</small>
</div>
</div>
</div>

```

Output

Thus a webpage using bootstrap has been created.

Ex No: 7 Web page with Navigation menu, Inline editor, Order form, Instant Search**Date:** **Switchable Grid.****Aim**

To design a webpage with navigation menu, inline editor, order form, instant search and switchable grid.

Procedure

1. Set up the basic HTML structure with <header>, <nav>, <main>, <footer>, and necessary <section> elements.
2. Add placeholders for content and interactive components like the inline editor, order form, instant search, and switchable grid.
3. Create functionality for the order form to capture user input and handle form submission.
4. Add instant search functionality to allow users to search for content dynamically.
5. Implement the switchable grid feature to toggle between grid and non-grid views.

Code

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>My Website</title>
<style>
body {
font-family: Arial, sans-serif;
margin: 0;
padding: 0;
}

header {
background-color: #333;
padding: 10px 0;
}
main {
padding: 20px;
}

section {
margin-bottom: 30px;
}

h2 {
color: #333;
}

#editable {
border: 1px solid #ccc;
padding: 10px;
}

form label {
```



```

display: block;
margin-bottom: 5px;
}

input[type="text"],
input[type="number"],
button {
padding: 8px;
margin-bottom: 10px;
width: 100%;
}
button {
background-color: #333;
color: #fff;
border: none;
cursor: pointer;
}
#search-results p {
margin: 5px 0;
}
#grid {
display: flex;
flex-wrap: wrap;
}
.grid-item {
background-color: #f0f0f0;
border: 1px solid #ccc;
padding: 20px;
margin: 5px;
}
.grid-view .grid-item {
width: calc(33.33% - 10px);
}
</style>
</head>
<body>
<header>
<nav>
<ul>
<li><a href="#">Home</a></li>
<li><a href="#">Products</a></li>
<li><a href="#">About</a></li>
<li><a href="#">Contact</a></li>
</ul>
</nav>
</header>

<main>
<section id="editor">
<h2>Inline Editor</h2>
<div contenteditable="true" id="editable">Click here to edit content</div>
</section>

<section id="order-form">

```

```

<h2>Order Form</h2>
<form>
<label for="product">Product:</label>
<input type="text" id="product" name="product">
<label for="quantity">Quantity:</label>
<input type="number" id="quantity" name="quantity" min="1">
<button type="submit">Order Now</button>
</form>
</section>

<section id="instant-search">
<h2>Instant Search</h2>
<input type="text" id="search" placeholder="Search...">
<div id="search-results"></div>
</section>

<section id="switchable-grid">
<h2>Switchable Grid</h2>
<button id="toggle-grid">Switch Grid</button>
<div id="grid">
<!-- Grid items go here -->
<div class="grid-item">Item 1</div>
<div class="grid-item">Item 2</div>
<div class="grid-item">Item 3</div>
</div>
</section>
</main>

<footer>
<p>&copy; 2024 My Website</p>
</footer>

<script>
// JavaScript for interactive features
// Inline editor
document.getElementById('editable').addEventListener('input', function() {
// Save edited content
localStorage.setItem('editableContent', this.innerHTML);
});

// Retrieve saved content
var savedContent = localStorage.getItem('editableContent');
if (savedContent) {
document.getElementById('editable').innerHTML = savedContent;
}

// Instant search
document.getElementById('search').addEventListener('input', function() {
var query = this.value.toLowerCase();
var resultsContainer = document.getElementById('search-results');
// Clear previous results
resultsContainer.innerHTML = "";
// Simulated search results
var fakeResults = ['Result 1', 'Result 2', 'Result 3'];

```

```

fakeResults.forEach(function(result) {
if (result.toLowerCase().indexOf(query) !== -1) {
resultsContainer.innerHTML += '<p>' + result + '</p>';
}
});
});

```

// Switchable grid

```

document.getElementById('toggle-grid').addEventListener('click', function() {
document.getElementById('grid').classList.toggle('grid-view');
});
</script>
</body>
</html>

```

Output

The screenshot displays a web application with the following components:

- Navigation Menu:** A dark header bar with links for Home, Products, About, and Contact.
- Inline Editor:** A section titled "Inline Editor" containing a text input field with the value "WEB ESSENTIALS".
- Order Form:** A section titled "Order Form" with a "Product:" label, a text input field, a "Quantity:" label, another text input field, and a dark "Order Now" button.
- Instant Search:** A section titled "Instant Search" with a search input field containing the placeholder text "Search...".
- Switchable Grid:** A section titled "Switchable Grid" with a dark "Switch Grid" button and a grid of three items labeled "Item 1", "Item 2", and "Item 3".

Output

Thus a webpage with instant search, navigation menu, order form and switchable grids has been created.

Ex No : 8**SINGLE PAGE APPLICATION USING ANGULAR 14****Date:****Aim**

To develop a single page web application using Angular JS.

Procedure

1. Define a simple controller:
2. After created module and controller, use them in our HTML.
3. Include angular script and app.js that we built.
4. Specify module in ng-app attribute and controller in ng-controller attribute.
5. Start working on adding single page application support.
6. Make a single page application and don't want any page refreshes, use Angular's routing capabilities.
7. Include angular-route script after the main angular script.
8. Specify that the module depends on ngRoute module to be able to use it.
9. The next thing is to distinguish common HTML for every page. This HTML will be layout of the website.
10. Then specify the place where HTML of each page will be placed in our layout. There is a ng-view directive for that.
11. ng-view is an Angular directive that will include the template of the current route (for example, /blog or /about) in the main layout file.
12. Configure the routes. Use \$routeProvider service from the ngRoute module.
13. For each route, specify templateUrl and controller.
14. If user will try to go to the route that does not exist, handle this by using otherwise function. In our case, we will redirect user to the "/" route:
15. Build controllers for every route (already specified their names in routeProvider).

Code

#index.html

<!doctype html>

<html ng-app="myApp">

<head>

```
<script src="https://cdnjs.cloudflare.com/ajax/libs/angular.js/1.4.7/
angular.min.js"></script>
```

```
<script src="https://cdnjs.cloudflare.com/ajax/libs/angular.js/1.4.7/angular-
route.min.js"></script>
```

```

</head>
<body>
<script type="text/ng-template" id="pages/home.html">
<h1>Home</h1>
<h3>{{message}}</h3>
</script>
<script type="text/ng-template" id="pages/courses.html">
<h1>Courses</h1>
<h3>{{message}}</h3>
</script>
<script type="text/ng-template" id="pages/contactus.html">
<h1>Contact Us</h1>
<h3>{{message}}</h3>
</script>
<a href="#/">Home</a>
<a href="#/courses">Courses</a>
<a href="#/contactus">Contact Us</a>
<div ng-view></div>
<script src="app.js"></script>
</body>
</html>

```

app.js

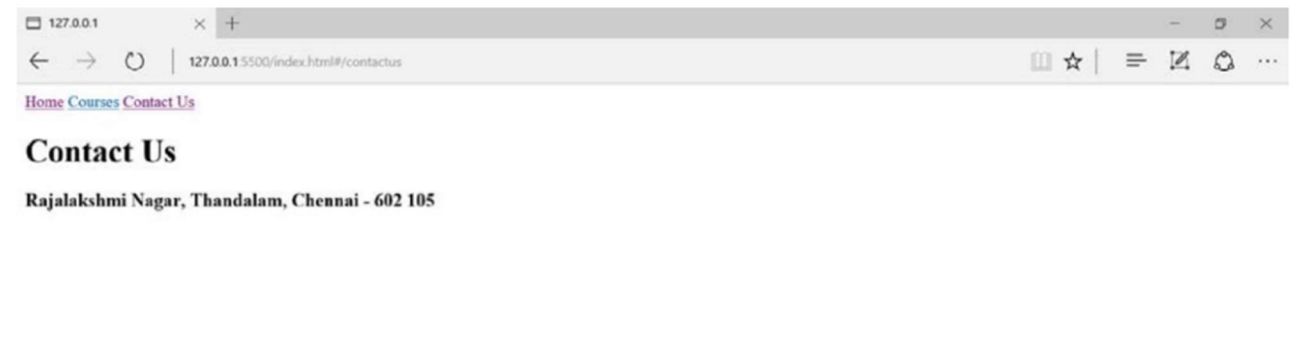
```

var app = angular.module('myApp', ['ngRoute']);
app.config(function($routeProvider) {
$routeProvider
.when('/', {
templateUrl : 'pages/home.html',
controller : 'HomeController'
})
.when('/courses', {
templateUrl : 'pages/courses.html',
controller : 'CoursesController'
})
.when('/contactus', {
templateUrl : 'pages/contactus.html',
controller : 'ContactUsController'
})

.otherwise({redirectTo: '/'});
});
app.controller('HomeController', function($scope) {
$scope.message = 'Welcome to REC';
});
app.controller('CoursesController', function($scope) {
$scope.message = 'AERO, AUTO, BIOMED, BIOTECH, CHEMICAL, CIVIL, CSE,
CSBC,ECE, EEE, FT, IT, MCT, MECH';
});
app.controller('ContactUsController', function($scope) {
$scope.message = 'Rajalakshmi Nagar, Thandalam, Chennai - 602 105';
});

```

Output



Output

Thus a single page web application has been created using Angular JS.