

**Bachelors of Science in Computer Science and Information Technology (BSc. CSIT)**

**Course: Web Technology (CSC318)**

# Class of 2024/Semester: 5

**A Lab report on:**

**Web Technology**

Submitted by: Submitted to:

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|  |  |  |
| --- | --- | --- |
| **S.N** | **Title** | **Signature** |
| 1. | Introduction to HTML Elements and Attribute |  |
| 2. | Tables and Forms in HTML |  |
| 3. | Styling of HTML using CSS |  |
| 4. | Responsive Design and Use of Bootstrap |  |
| 5. | JavaScript Concepts And Currency Converter Using HTML and JS |  |
| 6. | Implementation of jQuery |  |
| 7. | Implementation of AJAX |  |
| 8. | Handling PHP CRUD operation using Database |  |

# Lab 1

**Objective** :Introduction to HTML Elements and Attributes

**Source Code:**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>HTML Elements and Attributes</title>

<style> body {

font-family: Arial, sans-serif; margin: 20px;

}

</style>

</head>

<body>

<h1>Introduction to HTML Elements and Attributes</h1>

<p>This is a simple HTML document that introduces some HTML elements and attributes.</p>

<!-- Heading Elements -->

<h2>Heading Elements</h2>

<h1>This is an H1 Heading</h1>

<h2>This is an H2 Heading</h2>

<!-- Paragraph Element -->

<p>This is a paragraph element. It is used to define paragraphs of text.</p>

<!-- Anchor Element -->

<p>Visit <a href="https://www.example.com" target="\_blank">Click Here</a> for more information.</p>

<!-- List Elements -->

<h2>List Elements</h2>

<ul>

<li>Unordered List Item 1</li>

<li>Unordered List Item 2</li>

</ul>

<ol>

<li>Ordered List Item 1</li>

<li>Ordered List Item 2</li>

<li>Ordered List Item 3</li>

<li>Ordered List Item 4</li>

</ol>

<!-- Image Element -->

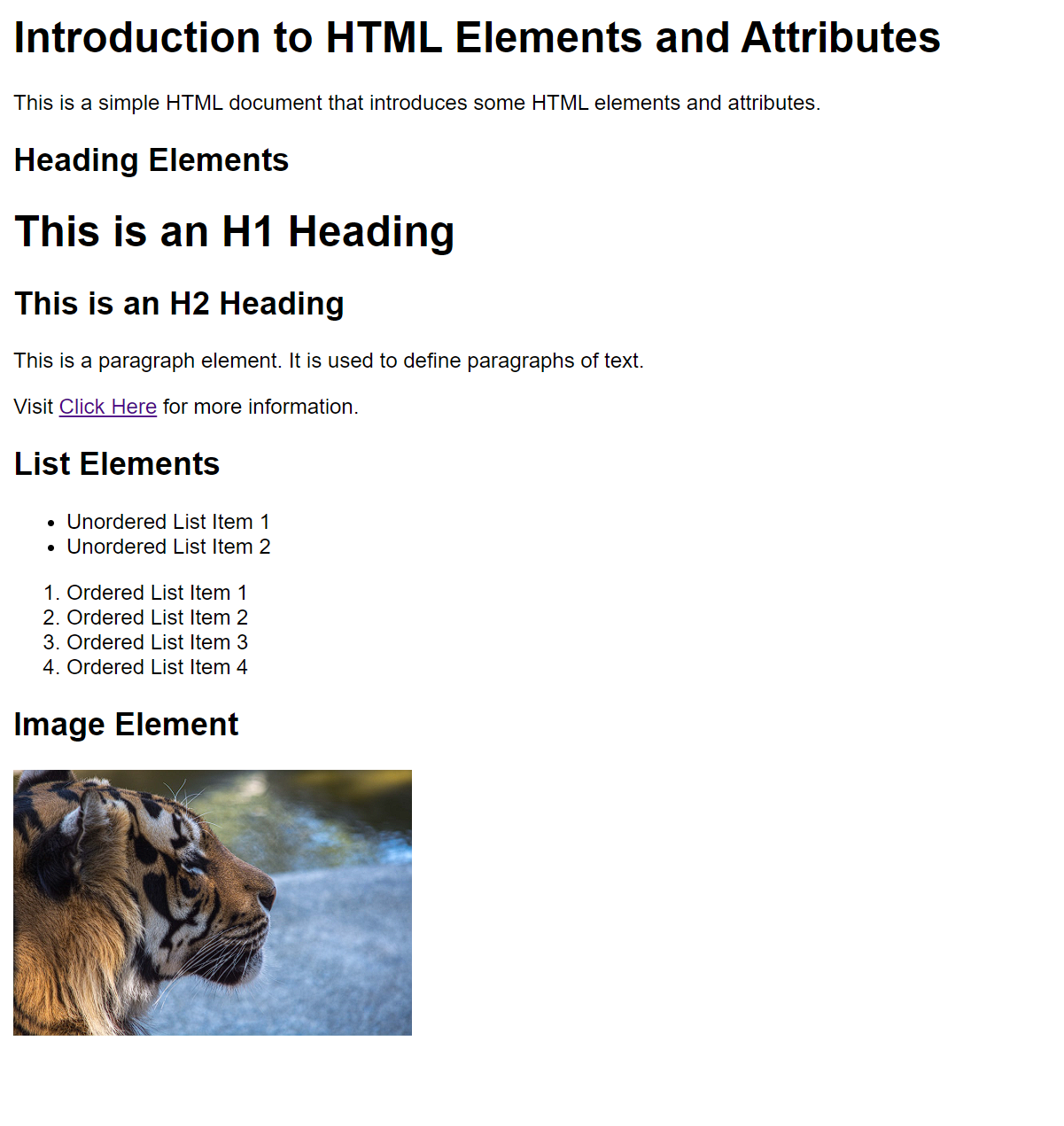
<h2>Image Element</h2>

<img src="image.jpg" alt="Placeholder Image" width="300" height="200">

</body>

</html>

**Output:**



# 

# Lab 2

**Objective** :Tables and Forms in HTML

**Source Code:**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Tables and Forms in HTML</title>

<style> table {

border-collapse: collapse; width: 100%; border: 1px solid black;

} th, td {

border: 1px solid black; padding: 8px; text-align: left;

}

</style>

</head>

<body>

<h1>Tables and Forms in HTML</h1>

<!-- Table Example -->

<h2>Table Example</h2>

<table>

<thead>

<tr>

<th>Name</th>

<th>Email</th>

<th>Phone</th>

</tr>

</thead>

<tbody>

<tr>

<td>Pratik</td>

<td>Pratik1@gmail.com</td>

<td>9856475213</td>

</tr>

<tr>

<td>Pratik Khadka</td>

<td>Pratikk23@gmail.com</td>

<td>9658632547</td>

</tr>

</tbody>

</table>

<!-- Form Example -->

<h2>Form Example</h2>

<form action="/submit-form" method="post">

<label for="name">Name:</label>

<input type="text"><br>

<label for="email">Email</label>

<input type="email"><br>

<label for="number">Age</label>

<input type="number"><br>

<label for="birthday">Birthday</label>

<input type="date"><br>

<p>Language you know</p>

<label for="java">JAVA</label>

<input type="checkbox">

<br>

<label for="java">C</label>

<input type="checkbox">

<br>

<label for="java">Python</label>

<input type="checkbox">

<br>

<p>

Gender

</p>

<label for="male">Male</label>

<input type="radio"> <br>

<label for="female">Female</label>

<input type="radio"> <br>

<label for="bloodgroup">Blood Group</label>

<select id="dropdown">

<option>A+ve</option>

<option>A-ve</option>

<option>B+ve</option>

<option>B-ve</option>

<option>O+ve</option>

<option>O-ve</option>

</select><br>

<label for="about">About</label>

<textarea rows="4"></textarea><br>

<label for="file">File</label>

<input type="file"><br>

<label for="phone">Phone</label>

<input type="text"> <br>

<label for="url">URL</label>

<input type="url"> <br>

<label for="color">Color</label>

<input type="color"> <br>

<label for="password">Password</label>

<input type="password"> <br>

<input type="reset">

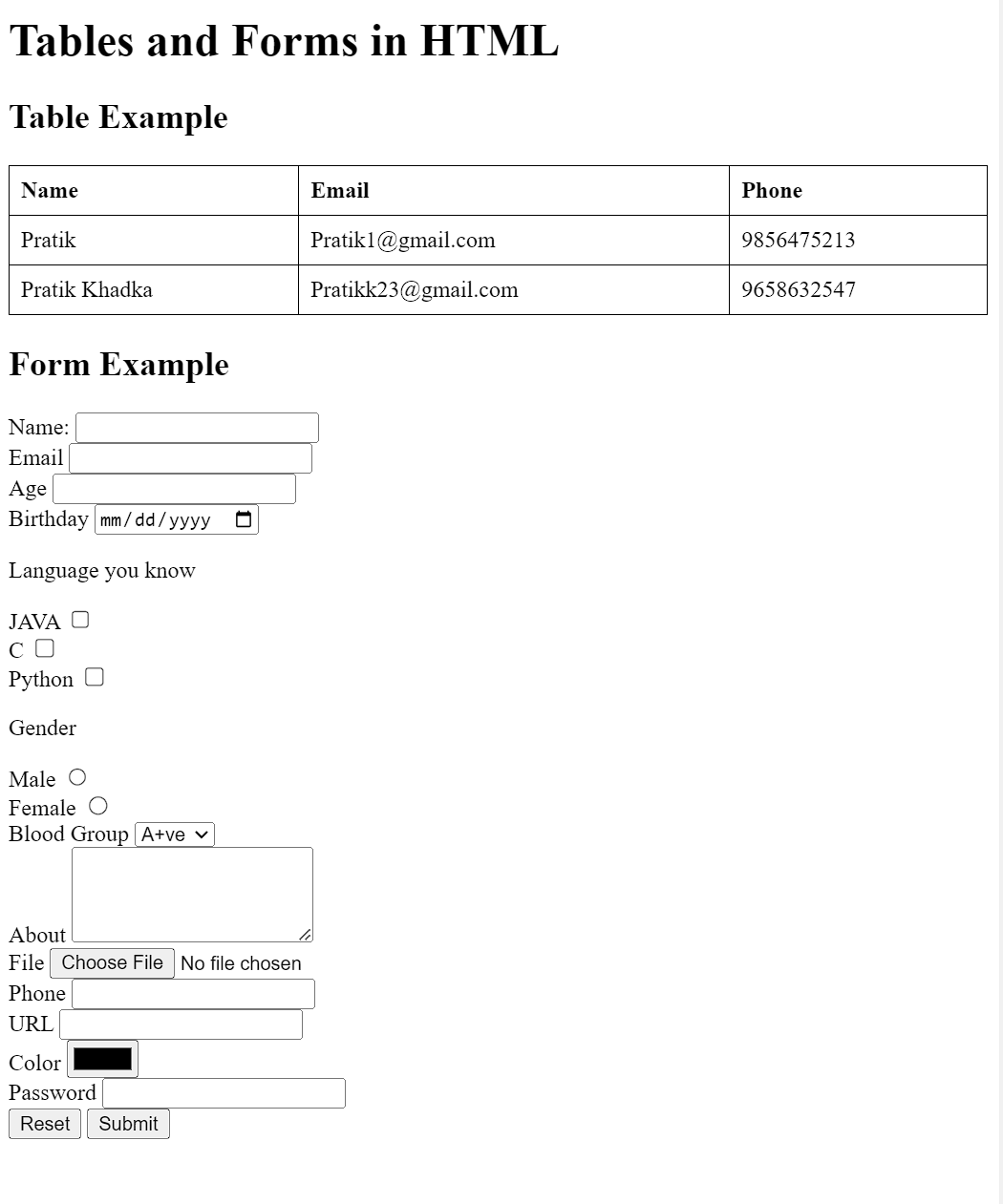
<input type="submit" value="Submit">

</form>

</body>

</html>

**Output:**

****

# Lab 3

**Objective**: To Implement Styling of HTML using CSS

**Source Code:**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Styling HTML with CSS</title>

<style>

body {

font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;

margin: 0;

padding: 0;

background-color: #f0f0f0;

color: #333;

}

header {

background-color: #3498db;

color: white;

padding: 20px;

text-align: center;

border-bottom: 5px solid #2980b9;

}

nav {

background-color: #555;

color: white;

padding: 10px;

text-align: center;

}

nav a {

color: white;

text-decoration: none;

margin: 0 15px;

transition: color 0.3s ease;

}

nav a:hover {

color: #3498db;

}

main {

display: flex;

justify-content: space-between;

padding: 20px;

}

.left-column,

.right-column {

flex-basis: 48%;

background-color: #fff;

padding: 20px;

box-sizing: border-box;

margin-bottom: 20px;

border-radius: 5px;

box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);

}

footer {

background-color: #333;

color: white;

text-align: center;

padding: 10px;

position: fixed;

bottom: 0;

width: 100%;

border-top: 5px solid #2980b9;

}

</style>

</head>

<body>

<header>

<h1>Pratik Khadka - Class of 2024</h1>

</header>

<nav>

<a href="#">Home</a>

<a href="#">About</a>

<a href="#">Contact</a>

<a href="#">Help and Support</a>

</nav>

<main>

<div class="left-column">

<h2>Left Column</h2>

<p>Left column of the main content area.</p>

</div>

<div class="right-column">

<h2>Right Column</h2>

<p>Right column of the main content area.</p>

</div>

</main>

<footer>

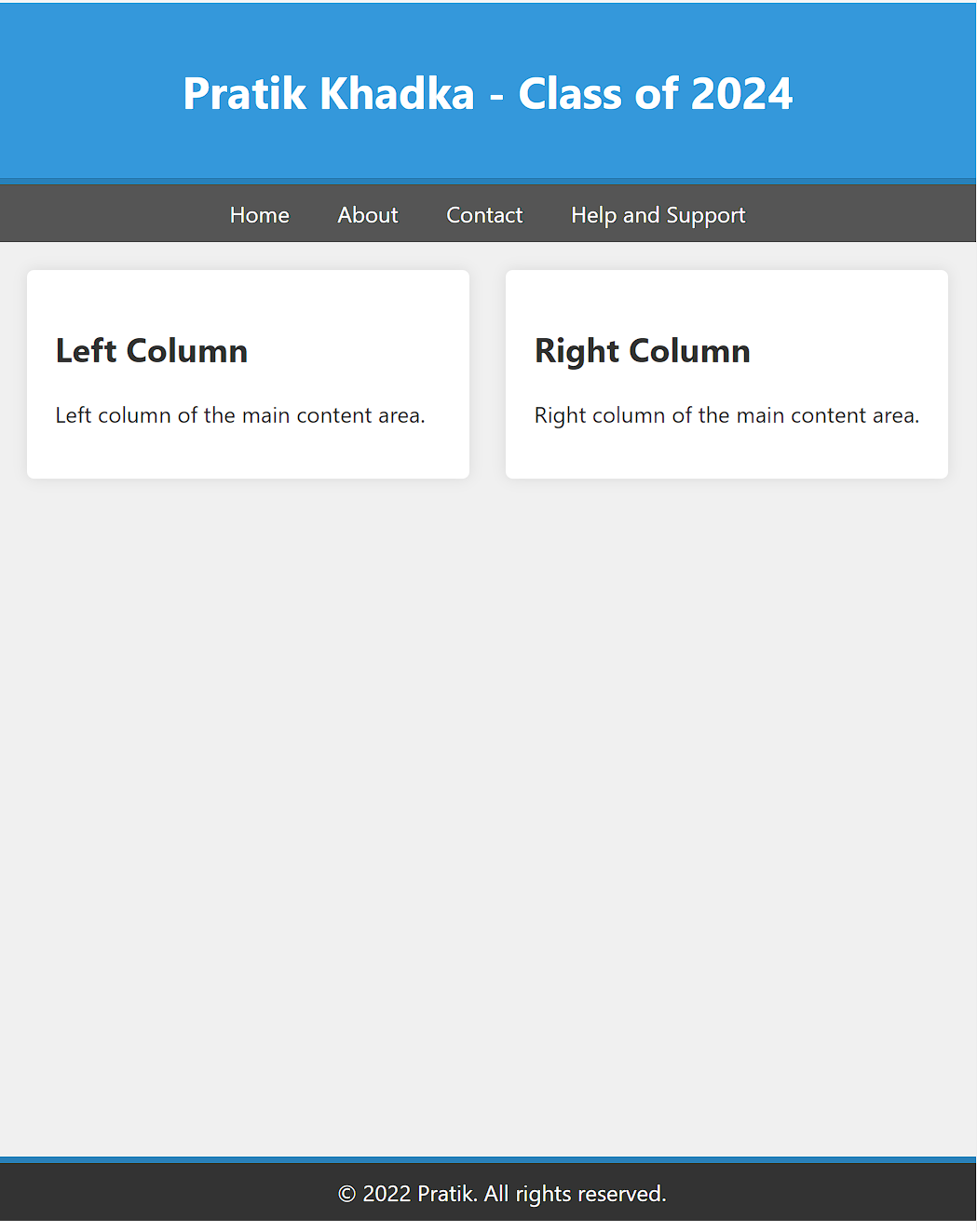
&copy; 2022 Pratik. All rights reserved.

</footer>

</body>

</html>

**Output:**



# Lab 4

**Objective:** Responsive Design and Use of Bootstrap

**Source Code:**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Creative Hub</title>

<!-- Bootstrap CSS -->

<link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">

</head>

<body>

<!-- Bootstrap Navbar -->

<nav class="navbar navbar-expand-lg navbar-light bg-light">

<a class="navbar-brand" href="#">Creative Hub</a>

<button class="navbar-toggler" type="button" data-toggle="collapse" data-target="#navbarNav"

aria-controls="navbarNav" aria-expanded="false" aria-label="Toggle navigation">

<span class="navbar-toggler-icon"></span>

</button>

<div class="collapse navbar-collapse" id="navbarNav">

<ul class="navbar-nav ml-auto">

<li class="nav-item active">

<a class="nav-link" href="#">Home</a>

</li>

<li class="nav-item">

<a class="nav-link" href="#">About</a>

</li>

<li class="nav-item">

<a class="nav-link" href="#">Contact</a>

</li>

</ul>

</div>

</nav>

<!-- Bootstrap Jumbotron -->

<div class="jumbotron jumbotron-fluid">

<div class="container">

<h1 class="display-4">Welcome to Creative Hub</h1>

<p class="lead">Discover the endless possibilities of this imaginative and responsive website.</p>

</div>

</div>

<!-- Bootstrap Container for Content -->

<div class="container">

<div class="row">

<!-- Main Content -->

<div class="col-lg-8">

<h2>Main Content Area</h2>

<p>Primary content area of the webpage. It adapts to various screen sizes.</p>

</div>

<!-- Sidebar -->

<div class="col-lg-4">

<h2>Explore More</h2>

<p>This is the additional content area. It's visible on larger screens.</p>

</div>

</div>

</div>

<!-- Bootstrap Footer -->

<footer class="bg-dark text-white text-center p-3 mt-5">

&copy; 2023 Pratik Khadka. All rights reserved.

</footer>

<!-- Bootstrap JS and Popper.js -->

<script src="https://code.jquery.com/jquery-3.5.1.slim.min.js"></script>

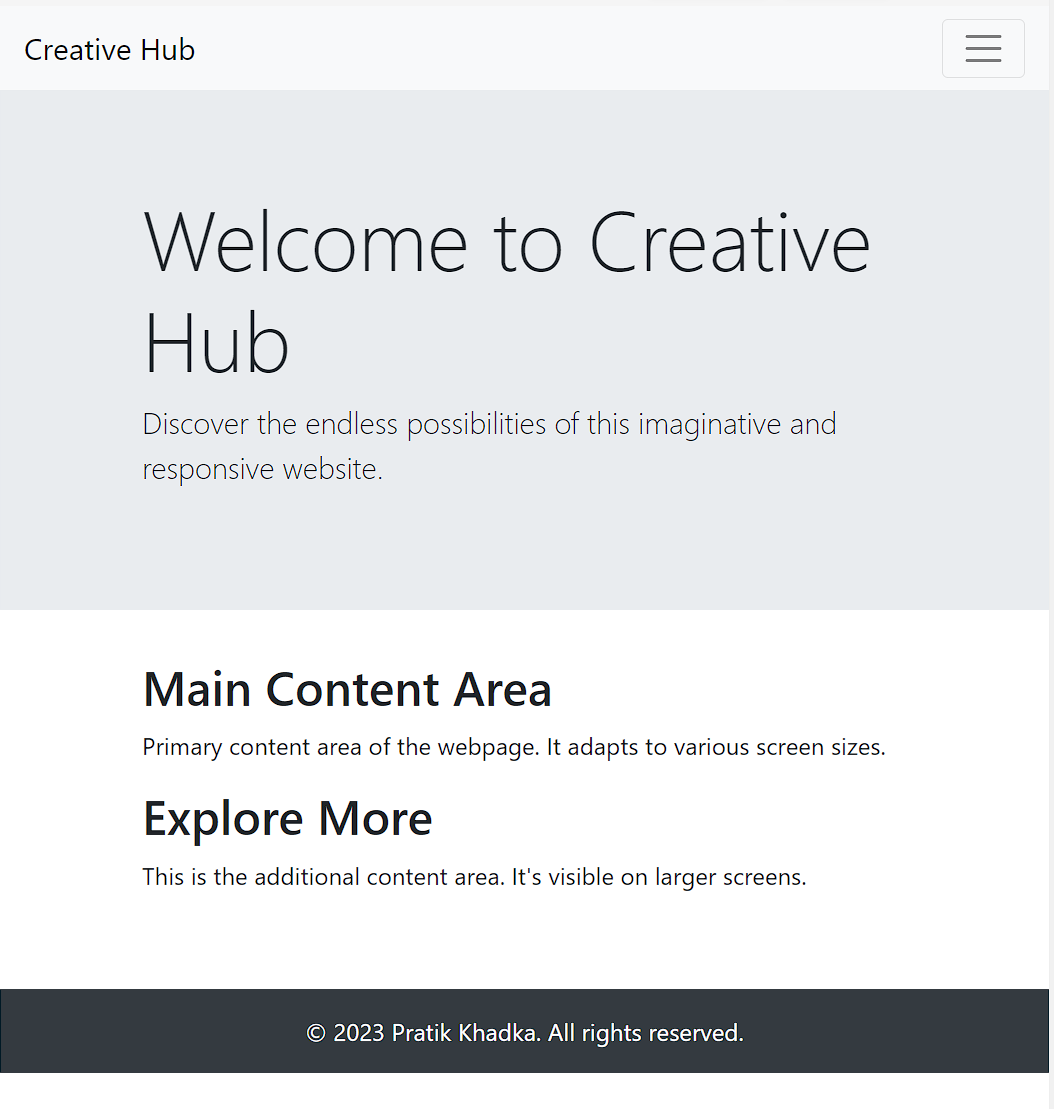
<script src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.10.2/dist/umd/popper.min.js"></script>

<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>

</body>

</html>

**Output:**



**Lab 5.1**

**Objective:** To Implement Javascript Concept

**Source Code:**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Interactive JavaScript Demo</title>

<style>

body {

font-family: 'Arial', sans-serif;

text-align: center;

background-color: #f8f8f8;

}

h1 {

color: #333;

}

button {

padding: 10px 20px;

font-size: 16px;

background-color: #4CAF50;

color: white;

border: none;

cursor: pointer;

transition: background-color 0.3s ease;

}

button:hover {

background-color: #45a049;

}

</style>

</head>

<body>

<h1>Interactive JavaScript Demo</h1>

<button id="interactiveButton">Click Me!</button>

<script>

// JavaScript code

// Variable declaration

var clickCounter = 0;

// Function to be executed when the button is clicked

function handleButtonClick() {

clickCounter++;

alert("Button Clicked! Click count: " + clickCounter);

// Change button text after 3 clicks

if (clickCounter === 3) {

interactiveButton.innerHTML = "Click Me Again!";

}

// Change background color after 5 clicks

if (clickCounter === 5) {

document.body.style.backgroundColor = "#e6f7ff";

}

}

// Get the button element by its ID

var interactiveButton = document.getElementById("interactiveButton");

// Attach a click event listener to the button

interactiveButton.addEventListener("click", handleButtonClick);

</script>

</body>

</html>

**Lab 5.2**

**Objective**: Currency Converter

**Source Code:**

**Index.html**

<!DOCTYPE html>

<html lang="en">

<head>

 <meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Currency Converter</title>

</head>

<body>

<h1>SImple Currency Converter using HTML and JS</h1>

<label for="amount">Enter Amount you want to convert :</label>

<input type="number" id="amount" placeholder="Enter amount" step="0.01"><br><br>

<label for="fromCurrency">From Currency:</label>

<select id="fromCurrency">

<option value="USD">US Dollars (USD)</option>

<option value="EUR">Euros (EUR)</option>

<option value="GBP">British Pounds (GBP)</option>

<option value="NPR">Nepali Rupees (NPR)</option>

<option value="INR">Indian Rupees (INR)</option>

</select><br><br>

<label for="toCurrency">To Currency:</label>

<select id="toCurrency">

<option value="USD">US Dollars (USD)</option>

<option value="EUR">Euros (EUR)</option>

<option value="GBP">British Pounds (GBP)</option>

<option value="NPR">Nepali Rupees (NPR)</option>

<option value="INR">Indian Rupees (INR)</option>

</select><br><br>

<button onclick="convertCurrency()">Convert</button><br><br>

<p>Converted Amount:</p>

<input type="text" id="convertedAmount" disabled>

<script type="text/javascript" src="currency.js"></script>

</body>

</html>

**Currency.js:**

function convertCurrency() {

    const amount = parseFloat(document.getElementById("amount").value);

    const fromCurrency = document.getElementById("fromCurrency").value;

    const toCurrency = document.getElementById("toCurrency").value;

    const exchangeRates = {

    USD: 1.0,

    EUR: 0.85,

    GBP: 0.73,

    NPR: 118.0,

    INR: 74.0,

    };

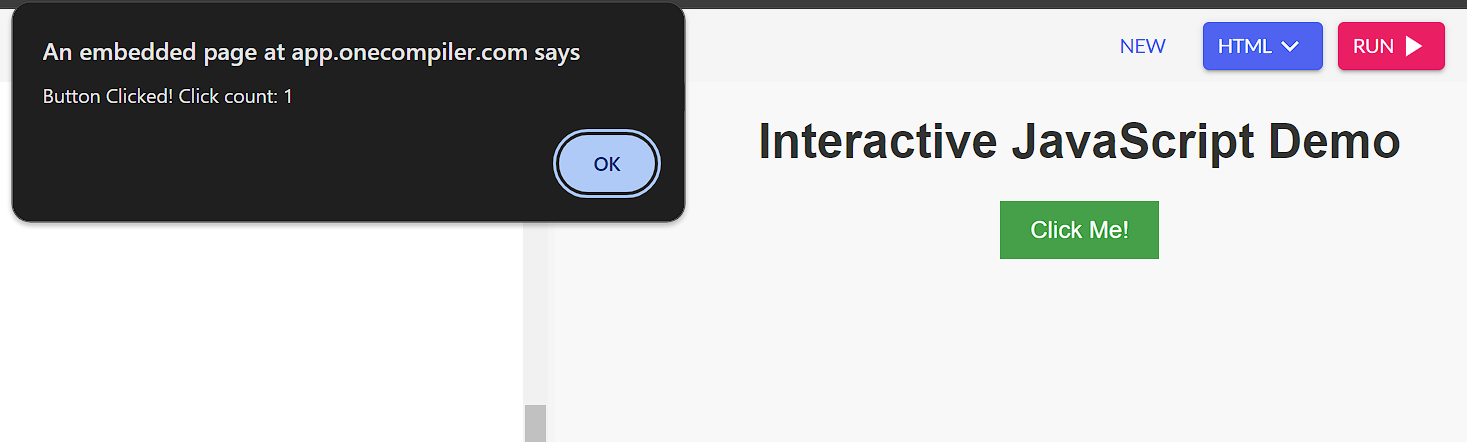
    const exchangeRate = exchangeRates[toCurrency] / exchangeRates[fromCurrency];

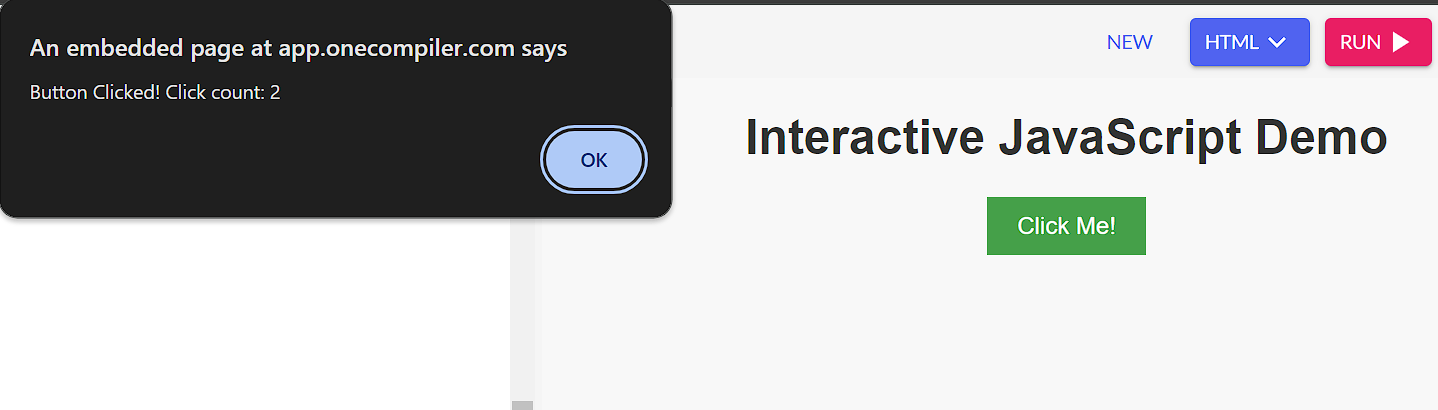
    const convertedAmount = amount \* exchangeRate;

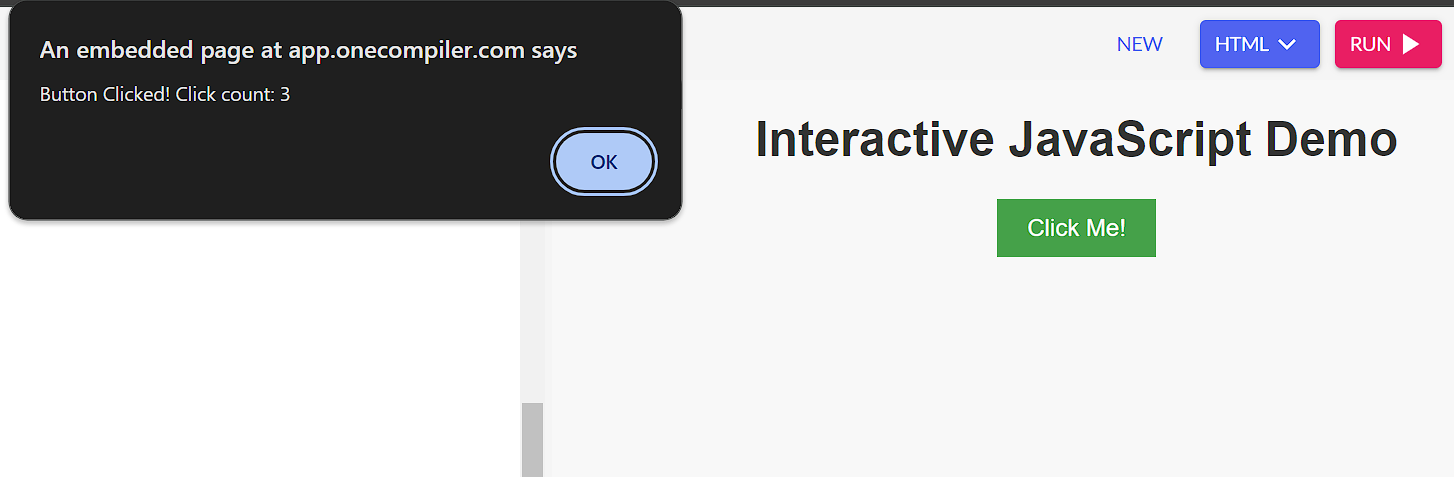
    document.getElementById("convertedAmount").value = convertedAmount.toFixed(2);

    }

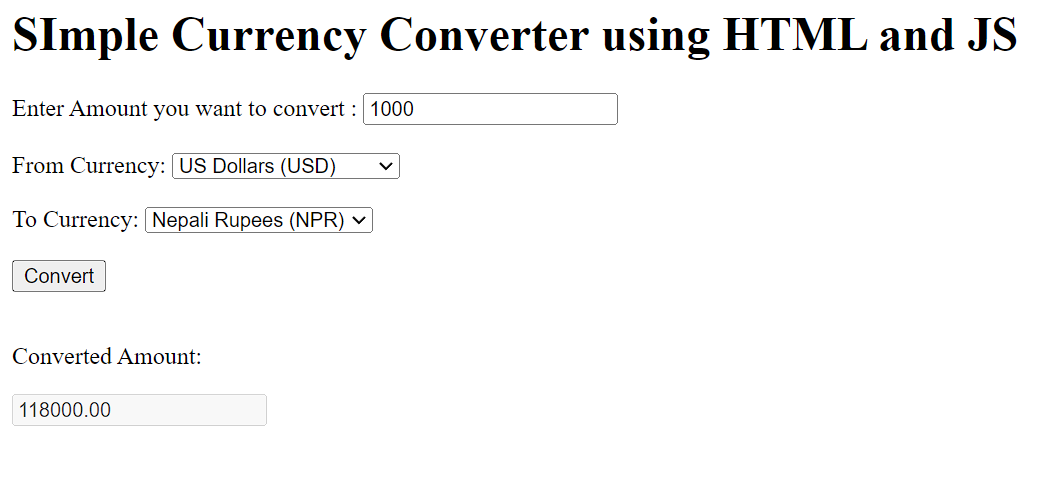
**Output: 5.1**







**Output:5.2**

****

# Lab 6

**Objective:** To Implement Jquery **Source Code:**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Interactive Form with jQuery</title>

<!-- Include jQuery library -->

<script src="https://code.jquery.com/jquery-3.6.4.min.js"></script>

<style>

body {

font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;

margin: 20px;

background-color: #f9f9f9;

}

h1 {

color: #333;

}

label {

display: block;

margin-bottom: 8px;

color: #555;

}

input {

width: 100%;

padding: 10px;

margin-bottom: 16px;

box-sizing: border-box;

}

#result {

margin-top: 20px;

font-weight: bold;

color: #333;

}

</style>

</head>

<body>

<h1>Interactive Form with jQuery</h1>

<label for="yourName">Your Name:</label>

<input type="text" id="yourName" placeholder="Enter your name">

<label for="yourEmail">Your Email:</label>

<input type="email" id="yourEmail" placeholder="Enter your email">

<label for="yourAge">Your Age:</label>

<input type="number" id="yourAge" placeholder="Enter your age">

<div id="result"></div>

<script>

// jQuery code

// jQuery ready function

$(document).ready(function () {

// Attach input event listeners

$("#yourName, #yourEmail, #yourAge").on("input", function () {

// Get values from input fields

var name = $("#yourName").val();

var email = $("#yourEmail").val();

var age = $("#yourAge").val();

// Update the result div

$("#result").html("Name: " + name + "<br>Email: " + email + "<br>Age: " + age);

});

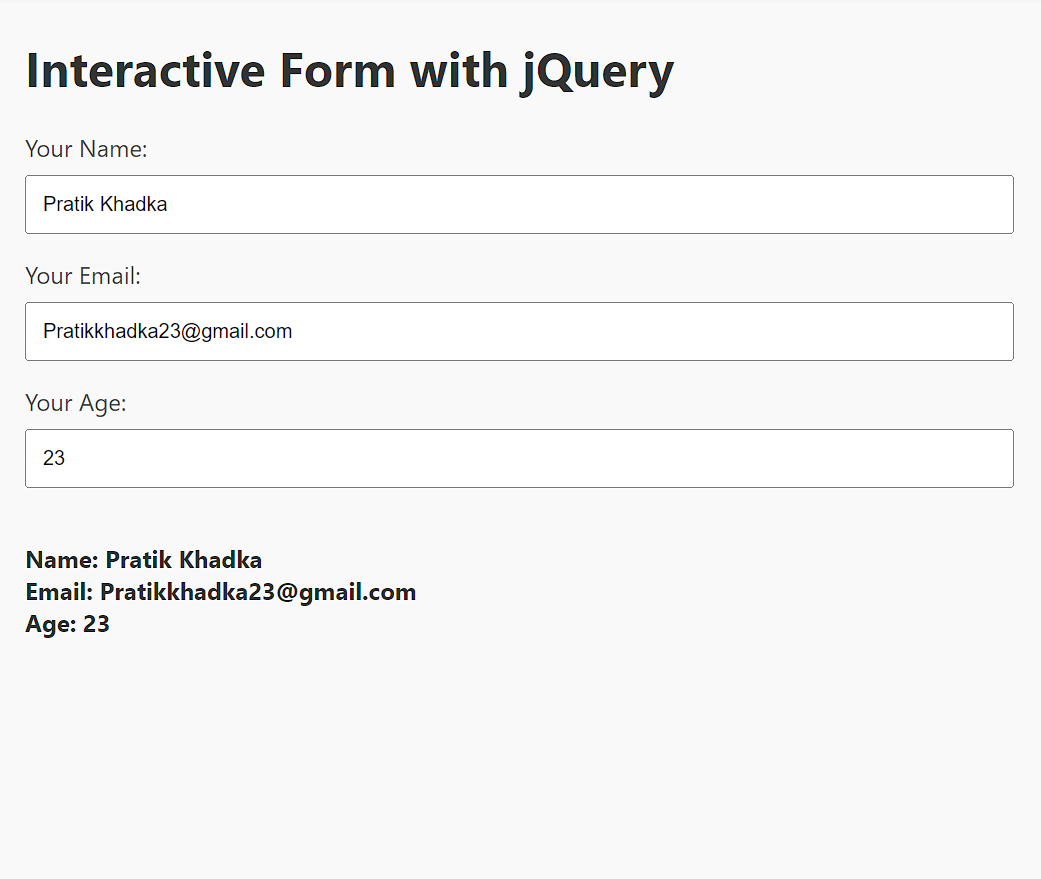
});

</script>

</body>

</html>

**Output:**



# Lab 7

**Objective:** To Implement AJAX

**Source Code:**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Dynamic User Info</title>

<!-- Include jQuery library -->

<script src="https://code.jquery.com/jquery-3.6.4.min.js"></script>

<style>

body {

font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;

margin: 20px;

background-color: #f5f5f5;

}

h1 {

color: #333;

text-align: center;

}

#loadDataBtn {

padding: 10px 20px;

font-size: 16px;

background-color: #3498db;

color: white;

border: none;

cursor: pointer;

transition: background-color 0.3s ease;

}

#loadDataBtn:hover {

background-color: #2980b9;

}

#userInfo {

margin-top: 20px;

padding: 20px;

background-color: #fff;

box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);

border-radius: 8px;

}

p {

margin: 10px 0;

color: #555;

}

</style>

</head>

<body>

<h1>Dynamic User Info(AJAX EXAMPLE) </h1>

<button id="loadDataBtn">Load User Data</button>

<div id="userInfo"></div>

<script>

// jQuery code

// jQuery ready function

$(document).ready(function () {

// Attach click event listener to the button

$("#loadDataBtn").click(function () {

// Make AJAX request to a different URL for user data

$.ajax({

url: "https://jsonplaceholder.typicode.com/todos/1", // Change the endpoint as needed

method: "GET",

dataType: "json",

success: function (data) {

// Update the content with the received data

$("#userInfo").html(`

<p>User ID: ${data.userId}</p>

<p>Title: ${data.title}</p>

<p>Completed: ${data.completed ? 'Yes' : 'No'}</p>

`);

},

error: function (xhr, status, error) {

console.error("Error:", status, error);

}

});

});

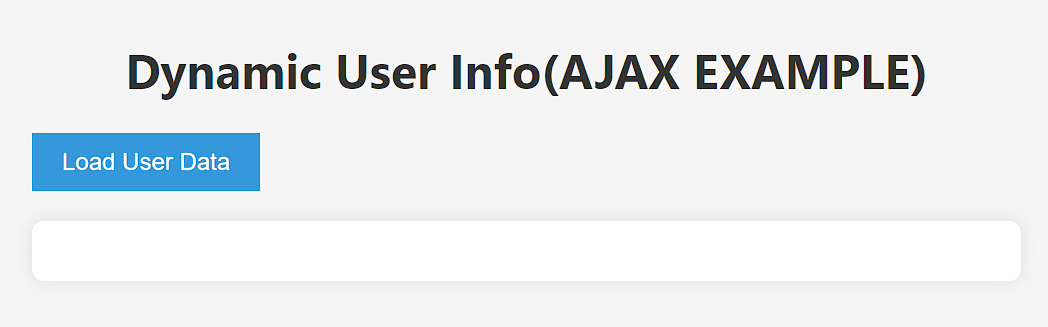
});

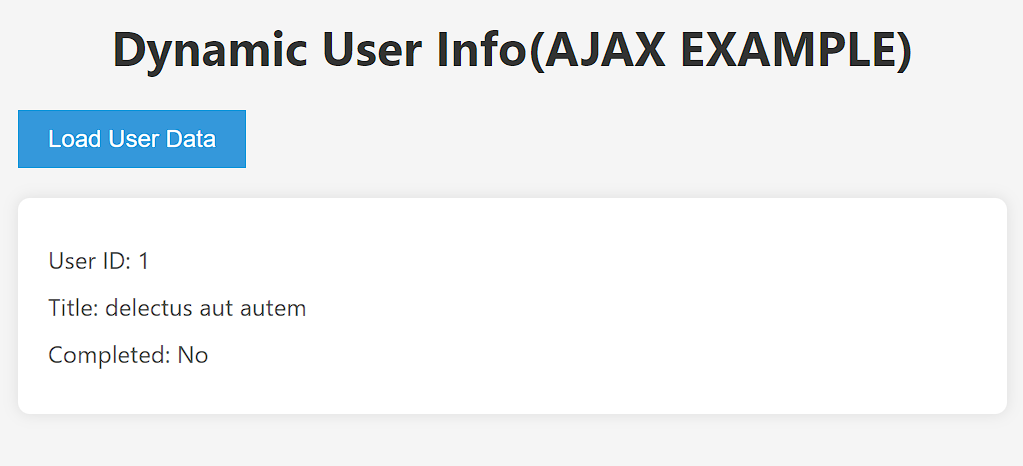
</script>

</body>

</html>

**Output:**





# Lab 8

# 

Objective: Handling PHP CRUD operation using Database

**Source Code:**

<?php

$servername = "localhost";

$username = "your\_username";

$password = "your\_password";

$dbname = "crud\_example";

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

if ($conn->connect\_error) {

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

}

// CRUD operations

// Create

if ($\_SERVER["REQUEST\_METHOD"] == "POST" && isset($\_POST["create"])) {

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

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

$sql = "INSERT INTO users (name, email) VALUES ('$name', '$email')";

if ($conn->query($sql) === TRUE) {

echo "Record created successfully";

} else {

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

}

}

// Read

$sql = "SELECT id, name, email FROM users";

$result = $conn->query($sql);

// Update

if ($\_SERVER["REQUEST\_METHOD"] == "POST" && isset($\_POST["update"])) {

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

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

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

$sql = "UPDATE users SET name='$name', email='$email' WHERE id=$id";

if ($conn->query($sql) === TRUE) {

echo "Record updated successfully";

} else {

echo "Error updating record: " . $conn->error;

}

}

// Delete

if ($\_SERVER["REQUEST\_METHOD"] == "GET" && isset($\_GET["delete"])) {

$id = $\_GET["delete"];

$sql = "DELETE FROM users WHERE id=$id";

if ($conn->query($sql) === TRUE) {

echo "Record deleted successfully";

} else {

echo "Error deleting record: " . $conn->error;

}

}

// Edit

if ($\_SERVER["REQUEST\_METHOD"] == "GET" && isset($\_GET["edit"])) {

$id = $\_GET["edit"];

$sql = "SELECT id, name, email FROM users WHERE id=$id";

$result = $conn->query($sql);

if ($result->num\_rows == 1) {

$row = $result->fetch\_assoc();

$editName = $row["name"];

$editEmail = $row["email"];

} else {

echo "User not found";

}

}

$conn->close();

?>

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>CRUD Example</title>

</head>

<body>

<!-- Create form -->

<form method="post" action="<?php echo $\_SERVER["PHP\_SELF"]; ?>">

<label for="name">Name:</label>

<input type="text" name="name" required>

<label for="email">Email:</label>

<input type="email" name="email" required>

<button type="submit" name="create">Create</button>

</form>

<!-- Read data -->

<?php

if ($result->num\_rows > 0) {

echo "<h2>User List</h2>";

echo "<ul>";

while ($row = $result->fetch\_assoc()) {

echo "<li>{$row['name']} - {$row['email']}

<a href=\"{$\_SERVER['PHP\_SELF']}?delete={$row['id']}\">Delete</a>

<a href=\"{$\_SERVER['PHP\_SELF']}?edit={$row['id']}\">Edit</a></li>";

}

echo "</ul>";

} else {

echo "No users found";

}

?>

<!-- Edit form -->

<?php if (isset($editName) && isset($editEmail)) : ?>

<h2>Edit User</h2>

<form method="post" action="<?php echo $\_SERVER["PHP\_SELF"]; ?>">

<input type="hidden" name="id" value="<?php echo $id; ?>">

<label for="name">Name:</label>

<input type="text" name="name" value="<?php echo $editName; ?>" required>

<label for="email">Email:</label>

<input type="email" name="email" value="<?php echo $editEmail; ?>" required>

<button type="submit" name="update">Update</button>

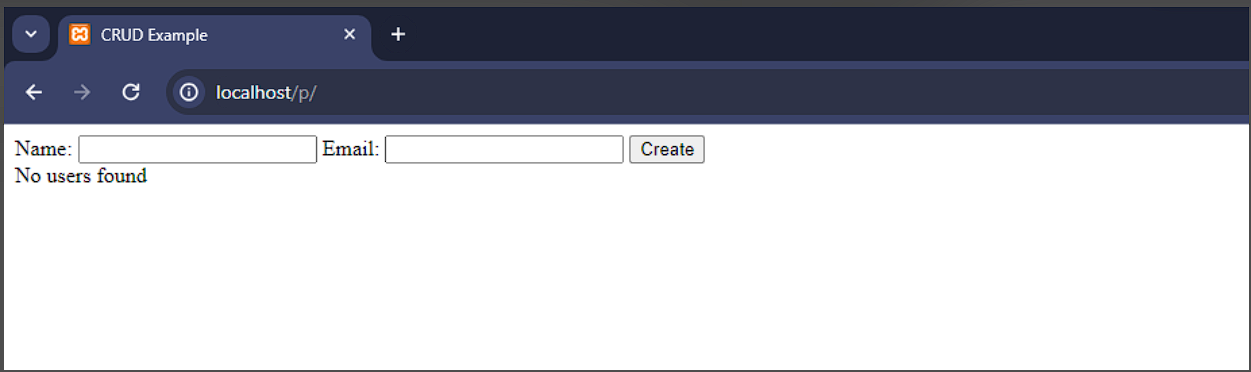
</form>

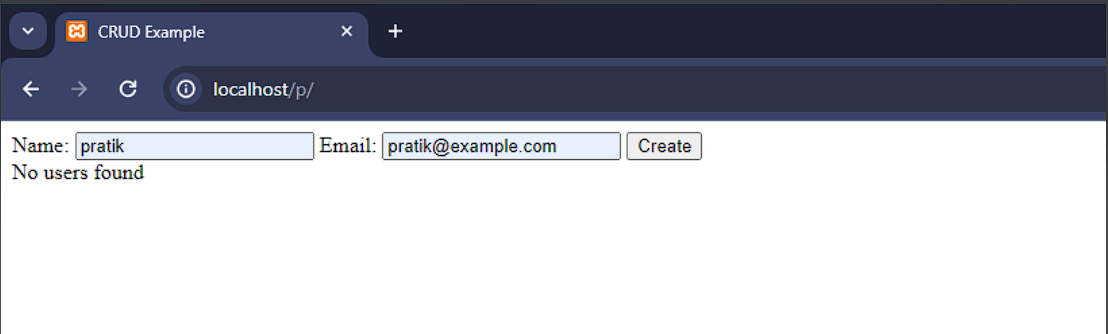
<?php endif; ?>

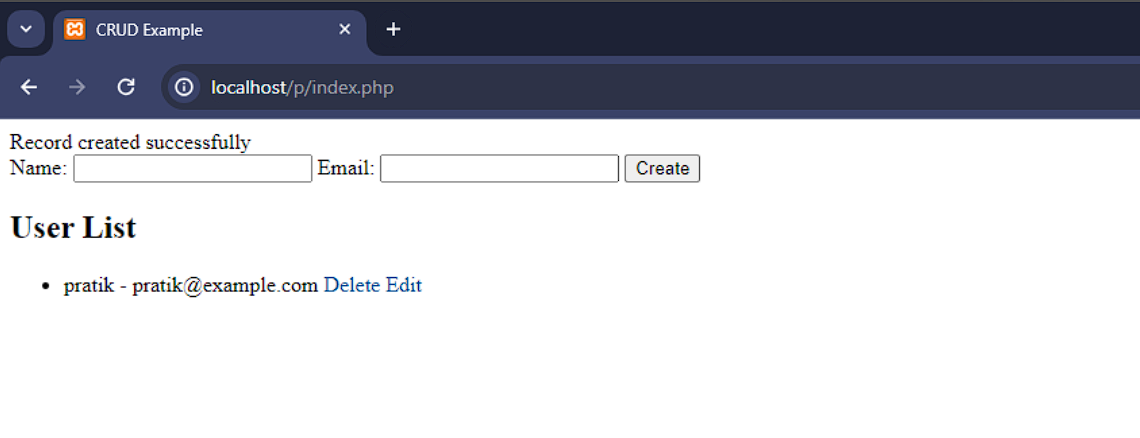
</body>

</html>

**Output:**

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