IWT Lab Question Bank

1. Design the Job/Student registration form using XHTML form.

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">

<head>

    <meta charset="utf-8"/>

    <title>Job Registration Form</title>

    <style>

       \*{

        background-color: azure;       }

        label{

            width:300px;

            display:inline-block;

        }

        input[type=checkbox]{

            display:block;

        }

    </style>

</head>

<body>

    <h1>Job Registration Form</h1>

    <form action="" method="post">

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

        <input type="text" id="name" name="name" required /><br /><br />

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

        <input type="email" id="email" name="email" required /><br /><br />

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

        <input type="tel" id="phone" name="phone" /><br /><br />

        <label for="resume">Upload Resume:</label>

        <input type="file" id="resume" name="resume" accept=".pdf, .doc, .docx" /><br /><br />

        <label for="position">Desired Position:</label>

        <select id="position" name="position">

            <option value="developer">Developer</option>

            <option value="designer">Designer</option>

            <option value="manager">Manager</option>

            <option value="analyst">Analyst</option>

        </select><br /><br />

         <label for="lang">Languages you speak</label><br><br>

         <label for="">English</label>

         <input type="checkbox" name = "lan" checked="checked" value="English"><br>

         <label for="">Telugu</label>

         <input type="checkbox" name = "lan" value="Telugu"><br>

         <label for="">Hindi</label>

         <input type="checkbox" name = "lan" value="Hindi"><br>

<br><br>

        <label>Preferred Work Location:</label><br />

        <input type="radio" id="location\_local" name="location" value="local" checked />

        <label for="location\_local">Local</label>

        <input type="radio" id="location\_remote" name="location" value="remote" />

        <label for="location\_remote">Remote</label><br /><br />

        <label for="comments">Skills:</label><br />

        <textarea id="comments" name="comments" rows="4" cols="50"></textarea><br /><br />

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

        <input type="reset" value="Reset" />

    </form>

</body>

</html>

A screenshot of a computer

Description automatically generated

1. Write the HTML code to display the webpages in the following format. Create a CSS file and use it to create all web pages. If links in left frame are clicked, some information related to those links must be displayed in description pane.

main.html

<!DOCTYPE html>

<html>

<head>

<title>Frame Layout</title>

<link rel="stylesheet" href="s1.css">

</head>

<frameset cols="30%,70%">

<frame src="leftFrame.html" name="leftFrame" frameborder="1" scrolling="auto">

<frame src="rightFrame.html" name="rightFrame" frameborder="1" scrolling="auto">

</frameset>

</html>

leftFrame.html

<!DOCTYPE html>

<html>

<head>

<title>Left Frame</title>

<link rel="stylesheet" href="s1.css">

</head>

<body>

<ul>

<li><a href="content1.html" target="rightFrame">Link 1</a></li>

<li><a href="content2.html" target="rightFrame">Link 2</a></li>

</ul>

</body>

</html>

rightFrame.html

<!DOCTYPE html>

<html>

<head>

<title>Right Frame</title>

<link rel="stylesheet" href="s1.css">

</head>

<body>

<!-- Content will be loaded here -->

</body>

</html>

Content1.html

<!DOCTYPE html>

<html>

<head>

<title>Content 1</title>

<link rel="stylesheet" href="s1.css">

</head>

<body>

<h1>Content for Link 1</h1>

<p>This is the content for Link 1.</p>

</body>

</html>

Content2.html

<!DOCTYPE html>

<html>

<head>

<title>Content 2</title>

<link rel="stylesheet" href="s1.css">

</head>

<body>

<h1>Content for Link 2</h1>

<p>This is the content for Link 2.</p>

</body>

</html>

S1.css

body {

margin: 0;

font-family: Arial, sans-serif;

}

.links {

list-style-type: none;

padding: 0;

}

.links li {

margin-bottom: 10px;

}

.links a {

text-decoration: none;

color: #333;

display: block;

padding: 5px;

border: 1px solid #ccc;

border-radius: 4px;

}

.content-title {

color: #007bff;

}

1. Write an HTML page including any required JavaScript that takes a number from one text field in the range of 0 to 999 and shows it in another text field in words. If the number is out of range, it should show “out of range” and if it is not a number, it should show “not a number” message in the result box.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Number to Words Converter</title>

</head>

<body>

<h1>Number to Words Converter</h1>

<label for="numberInput">Enter a number (0-999):</label>

<input type="text" id="numberInput" placeholder="Enter a number">

<button onclick="convertToWords()">Convert</button>

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

<script>

function convertToWords() {

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

const number = parseInt(numberInput);

const resultDiv = document.getElementById("result");

if (isNaN(number)) {

resultDiv.textContent = "not a number";

} else if (number < 0 || number > 999) {

resultDiv.textContent = "out of range";

} else {

const words = convertNumberToWords(number);

resultDiv.textContent = words;

}

}

function convertNumberToWords(number) {

const ones = ["", "one", "two", "three", "four", "five", "six", "seven", "eight", "nine"];

const teens = ["", "eleven", "twelve", "thirteen", "fourteen", "fifteen", "sixteen", "seventeen", "eighteen", "nineteen"];

const tens = ["", "ten", "twenty", "thirty", "forty", "fifty", "sixty", "seventy", "eighty", "ninety"];

if (number === 0) {

return "zero";

}

let words = "";

if (number >= 100) {

words += ones[Math.floor(number / 100)] + " hundred ";

number %= 100;

}

if (number >= 20) {

words += tens[Math.floor(number / 10)] + " ";

number %= 10;

}

if (number > 0) {

if (number >= 11 && number <= 19) {

words += teens[number - 10] + " ";

} else {

words += ones[number] + " ";

}

}

return words.trim();

}

</script>

</body>

</html>

A screenshot of a computer

Description automatically generated

1. Write an HTML page that contains a selection box with a list of 5 countries. When the user selects a country, its capital should be printed next to the list. Add CSS to customize the properties of the font of the capital (color, bold and font size).

<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

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

  <style>

    body {

      font-family: Arial, sans-serif;

    }

    select {

      font-size: 16px;

      padding: 5px;

      margin: 10px;

    }

    #capital {

      font-weight: bold;

      font-size: 18px;

      color: blue;

      margin-left: 10px;

    }

  </style>

  <title>Country Capital</title>

</head>

<body>

  <h1>Country Capital</h1>

  <label for="countrySelect">Select a country:</label>

  <select id="countrySelect" onchange="showCapital()">

    <option value="" selected disabled>Select a country</option>

    <option value="usa">United States</option>

    <option value="canada">Canada</option>

    <option value="uk">United Kingdom</option>

    <option value="france">France</option>

    <option value="germany">Germany</option>

  </select>

  <span id="capital"></span>

  <script>

    function showCapital() {

      var select = document.getElementById("countrySelect");

      var capitalSpan = document.getElementById("capital");

      var selectedOption = select.options[select.selectedIndex];

      if (selectedOption.value === "usa") {

        capitalSpan.textContent = "Capital: Washington, D.C.";

      } else if (selectedOption.value === "canada") {

        capitalSpan.textContent = "Capital: Ottawa";

      } else if (selectedOption.value === "uk") {

        capitalSpan.textContent = "Capital: London";

      } else if (selectedOption.value === "france") {

        capitalSpan.textContent = "Capital: Paris";

      } else if (selectedOption.value === "germany") {

        capitalSpan.textContent = "Capital: Berlin";

      } else {

        capitalSpan.textContent = "";

      }

    }

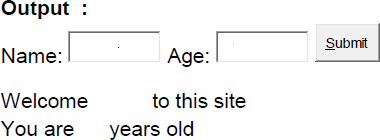
  </script>

</body>

</html>

A screenshot of a computer

Description automatically generated

1. A web application that takes name and age from an HTML page. If the age is less than 18, then print “Hello <name>, you are not authorized to visit this site” message in red color, where <name> should be replaced with the entered name. Otherwise it should send “Welcome <name> to this site” message in green color.

<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

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

  <style>

    body {

      font-family: Arial, sans-serif;

    }

    #message,#agedisp {

      font-size: 18px;

      margin: 20px;

    }

    .red {

      color: red;

    }

    .green {

      color: green;

    }

  </style>

  <title>Age Check</title>

</head>

<body>

  <h1>Age Check</h1>

  <label for="name">Name:</label>

  <input type="text" id="nameInput">

  <label for="age">Age:</label>

  <input type="number" id="ageInput">

  <button onclick="checkAge()">Check Age</button>

  <p id="message"></p>

  <p id="agedisp"></p>

  <script>

    function checkAge() {

      var name = document.getElementById("nameInput").value;

      var age = parseInt(document.getElementById("ageInput").value);

      var messageElement = document.getElementById("message");

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

      if (isNaN(age)) {

        messageElement.textContent = "Please enter a valid age.";

        messageElement.classList.remove("red", "green");

      } else {

        if (age < 18) {

          messageElement.textContent = "Hello " + name + ", you are not authorized to visit this site";

          messageElement.classList.add("red");

          messageElement.classList.remove("green");

        } else {

          messageElement.textContent = "Welcome " + name + " to this site ";

          agedisp.textContent = "You are "+age +"  years old";

         agedisp.classList.add("green");

          messageElement.classList.add("green");

          messageElement.classList.remove("red");

        }

      }

    }

  </script>

</body>

</html>

A screenshot of a computer

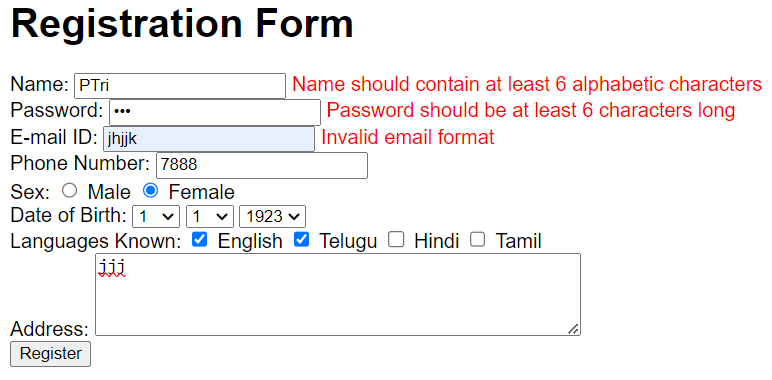
Description automatically generated

A screenshot of a computer

Description automatically generated

1. Create a “registration form “with the following fields

1) Name (Text field) 2) Password (password field) 3) E-mail id (text field) 4) Phone number (text field) 5) Sex (radio button) 9 6) Date of birth (3 select boxes) 7) Languages known (check boxes – English, Telugu, Hindi, Tamil) 8) Address (text area). Validate the following fields of the above registration page. Name (Name should contain alphabets and the length should not be less than 6 characters). Password (Password should not be less than 6 characters length). E-mail id (should not contain any invalid and must follow the standard pattern)



<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

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

  <title>Registration Form</title>

  <style>

    body {

      font-family: Arial, sans-serif;

    }

    .error {

      color: red;

    }

  </style>

</head>

<body>

  <h1>Registration Form</h1>

  <form id="registrationForm" onsubmit="return validateForm()">

    <label for="name">Name:</label>

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

    <span id="nameError" class="error"></span>

    <br>

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

    <input type="password" id="password" name="password">

    <span id="passwordError" class="error"></span>

    <br>

    <label for="email">E-mail ID:</label>

    <input type="text" id="email" name="email">

    <span id="emailError" class="error"></span>

    <br>

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

    <input type="text" id="phone" name="phone">

    <span id="phoneError" class="error"></span>

    <br>

    <label>Sex:</label>

    <input type="radio" id="male" name="sex" value="male">

    <label for="male">Male</label>

    <input type="radio" id="female" name="sex" value="female">

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

    <br>

    <label for="dob">Date of Birth:</label>

    <select id="dobDay" name="dobDay"></select>

    <select id="dobMonth" name="dobMonth"></select>

    <select id="dobYear" name="dobYear"></select>

    <span id="dobError" class="error"></span>

    <br>

    <label>Languages Known:</label>

    <input type="checkbox" id="english" name="languages" value="english">

    <label for="english">English</label>

    <input type="checkbox" id="telugu" name="languages" value="telugu">

    <label for="telugu">Telugu</label>

    <input type="checkbox" id="hindi" name="languages" value="hindi">

    <label for="hindi">Hindi</label>

    <input type="checkbox" id="tamil" name="languages" value="tamil">

    <label for="tamil">Tamil</label>

    <br>

    <label for="address">Address:</label>

    <textarea id="address" name="address" rows="4" cols="50"></textarea>

    <br>

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

  </form>

  <script>

    function validateForm() {

      var name = document.getElementById("name").value;

      var password = document.getElementById("password").value;

      var email = document.getElementById("email").value;

      var dobDay = document.getElementById("dobDay").value;

      var dobMonth = document.getElementById("dobMonth").value;

      var dobYear = document.getElementById("dobYear").value;

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

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

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

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

      nameError.textContent = "";

      passwordError.textContent = "";

      emailError.textContent = "";

      dobError.textContent = "";

      var valid = true;

      if (!/^[a-zA-Z]{6,}$/.test(name)) {

        nameError.textContent = "Name should contain at least 6 alphabetic characters";

        valid = false;

      }

      if (password.length < 6) {

        passwordError.textContent = "Password should be at least 6 characters long";

        valid = false;

      }

      if (!/^[^\s@]+@[^\s@]+\.[^\s@]+$/.test(email)) {

        emailError.textContent = "Invalid email format";

        valid = false;

      }

      if (dobDay === "" || dobMonth === "" || dobYear === "") {

        dobError.textContent = "Please select a valid date of birth";

        valid = false;

      }

      return valid;

    }

    // Populate select boxes for date of birth

    var dobDaySelect = document.getElementById("dobDay");

    var dobMonthSelect = document.getElementById("dobMonth");

    var dobYearSelect = document.getElementById("dobYear");

    for (var day = 1; day <= 31; day++) {

      var option = document.createElement("option");

      option.value = day;

      option.textContent = day;

      dobDaySelect.appendChild(option);

    }

    for (var month = 1; month <= 12; month++) {

      var option = document.createElement("option");

      option.value = month;

      option.textContent = month;

      dobMonthSelect.appendChild(option);

    }

    var currentYear = new Date().getFullYear();

    for (var year = currentYear - 100; year <= currentYear; year++) {

      var option = document.createElement("option");

      option.value = year;

      option.textContent = year;

      dobYearSelect.appendChild(option);

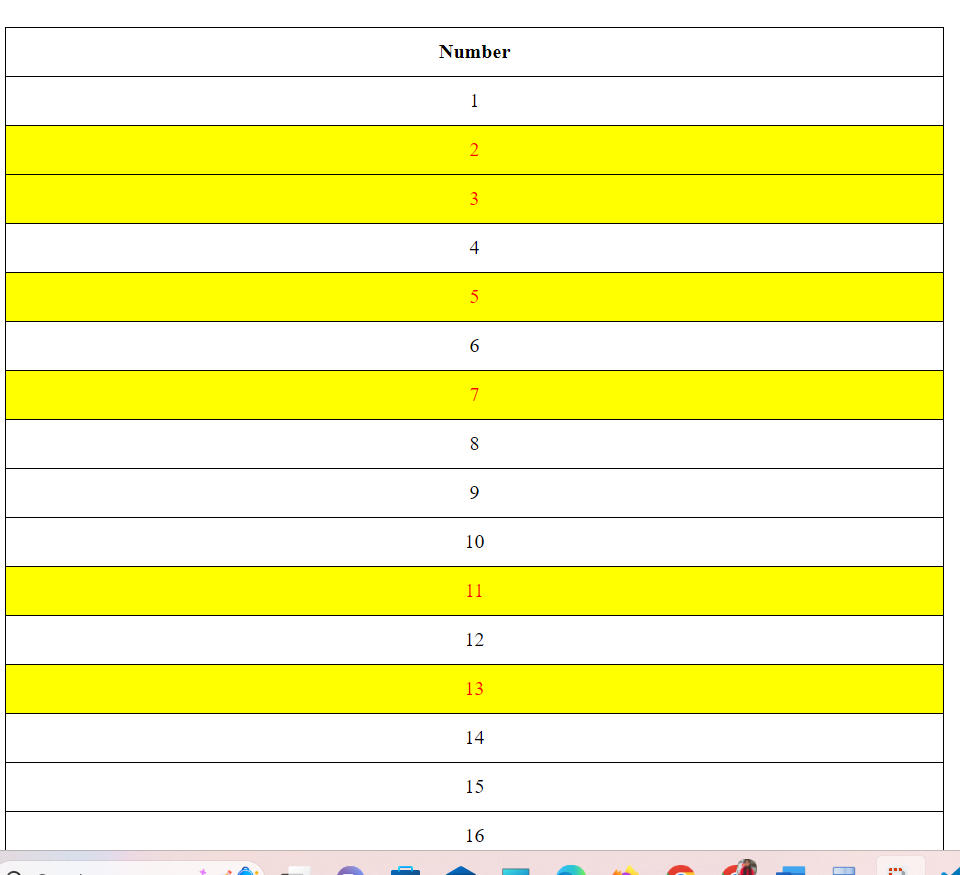
    }

  </script>

</body>

</html>

1. Create a Java script code to generate numbers from 1 to 100 in a table. If the number is prime number then fill the cell with yellow color or display that number with red color. (Note: use logic to identify the number is prime or not)



<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

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

  <style>

    table {

      border-collapse: collapse;

      width: 50%;

      margin: auto;

      text-align: center;

    }

    table, th, td {

      border: 1px solid black;

    }

    th, td {

      padding: 10px;

    }

    .prime-yellow {

      background-color: yellow;

    }

    .prime-red {

      color: red;

    }

  </style>

  <title>Prime Number Table</title>

</head>

<body>

  <h1>Prime Number Table</h1>

  <table>

    <thead>

      <tr>

        <th>Number</th>

      </tr>

    </thead>

    <tbody id="numberTableBody">

    </tbody>

  </table>

  <script>

    function isPrime(number) {

      if (number <= 1) {

        return false;

      }

      if (number <= 3) {

        return true;

      }

      if (number % 2 === 0 || number % 3 === 0) {

        return false;

      }

      for (let i = 5; i \* i <= number; i += 6) {

        if (number % i === 0 || number % (i + 2) === 0) {

          return false;

        }

      }

      return true;

    }

    function generatePrimeTable() {

      const tableBody = document.getElementById("numberTableBody");

      for (let i = 1; i <= 100; i++) {

        const row = document.createElement("tr");

        const cell = document.createElement("td");

        cell.textContent = i;

        if (isPrime(i)) {

          cell.classList.add("prime-yellow");

          cell.classList.add("prime-red");

        }

        row.appendChild(cell);

        tableBody.appendChild(row);

      }

    }

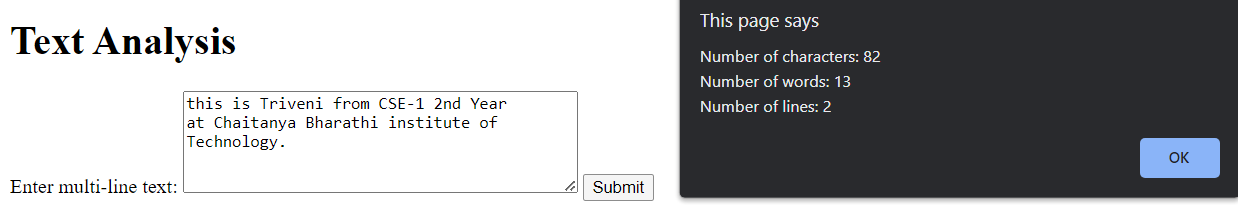
    generatePrimeTable();

  </script>

</body>

</html>

1. Write a HTML page that has one input, which can take multi-line text and a submit button. Once the user clicks the submit button, it should show the number of characters, words and lines in the text entered using an alert message. Words are separated with white spaces and lines are separated with new line character.



<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

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

  <title>Text Analysis</title>

</head>

<body>

  <h1>Text Analysis</h1>

  <label for="textInput">Enter multi-line text:</label>

  <textarea id="textInput" rows="5" cols="40"></textarea>

  <button onclick="analyzeText()">Submit</button>

  <script>

    function analyzeText() {

      var inputText = document.getElementById("textInput").value;

      var numCharacters = inputText.length;

      var numWords = inputText.split(/\s+/).filter(function(word) {

        return word !== '';

      }).length;

      var numLines = inputText.split('\n').length;

      var message = "Number of characters: " + numCharacters + "\n"

                  + "Number of words: " + numWords + "\n"

                  + "Number of lines: " + numLines;

      alert(message);

    }

  </script>

</body>

</html>

1. Write a JavaScript program which accept a number as input and insert dashes (-) between each two prime numbers. For example if you accept 0257468 the output should be 02-5-7468.



<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

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

    <title>Document</title>

</head>

<body>

    <script>

        function isPrime(number) {

            if (number <= 1) {

              return false;

            }

            if (number <= 3) {

              return true;

            }

            if (number % 2 === 0 || number % 3 === 0) {

              return false;

            }

            for (let i = 5; i \* i <= number; i += 6) {

              if (number % i === 0 || number % (i + 2) === 0) {

                return false;

              }

            }

            return true;

          }

          function insertDashesBetweenPrimes(inputNumber) {

            const numStr = inputNumber.toString();

            let result = '';

            for (let i = 0; i < numStr.length; i++) {

              const currentDigit = parseInt(numStr[i]);

              result += currentDigit;

              if (i < numStr.length - 1) {

                const nextDigit = parseInt(numStr[i + 1]);

                if (isPrime(currentDigit) && isPrime(nextDigit)) {

                  result += '-';

                }

              }

            }

            return result;

          }

          const userInput = prompt("Enter a number:");

          const dashedNumber = insertDashesBetweenPrimes(userInput);

          document.write("Output:", dashedNumber);

    </script>

</body>

</html>

1. Write a DTD and XML for the given data Message is a root element which has email or letter as child elements. Email and letter has attribute reply with values yes or no default value is no. email has children such as one header, one or zero subject, and at lease one text elements. Letter has children such as one header and text. Header element has sender, recipient and date as children. Letterhead has sender, zero or more recipients, and one date element as children.

Message.dtd

<!ELEMENT Message (email | letter)>

<!ELEMENT email (header, subject?, text+)>

<!ATTLIST email reply (yes|no) "no">

<!ELEMENT letter (header, text)>

<!ATTLIST letter reply (yes|no) "no">

<!ELEMENT header (sender, recipient\*, date)>

<!ELEMENT sender (#PCDATA)>

<!ELEMENT recipient (#PCDATA)>

<!ELEMENT date (#PCDATA)>

<!ELEMENT subject (#PCDATA)>

<!ELEMENT text (#PCDATA)>

Example.html

<?xml version="1.0" encoding="UTF-8"?>

<!DOCTYPE Message SYSTEM "Message.dtd">

<Message>

<email reply="yes">

<header>

<sender>sender@example.com</sender>

<recipient>recipient1@example.com</recipient>

<recipient>recipient2@example.com</recipient>

<date>2023-08-20</date>

</header>

<subject>Subject of the email</subject>

<text>This is the email content.</text>

<text>Additional email content.</text>

</email>

<letter reply="no">

<header>

<sender>John Doe</sender>

<recipient>Jane Smith</recipient>

<date>2023-08-20</date>

</header>

<text>This is the letter content.</text>

</letter>

</Message>

1. Create a webpage with 3 frames. One is horizontal frame which displays the caption and two vertical frames where left frame contains 4 hyper links and right frame is empty. For left frame: the hyper links unvisited color must be green, visited color must be red and active color must be violet. If the link is clicked, the resultant page should be displayed in right frame. For all three frames different light background color should be used. The web pages attached to the hyperlinks should have uniform styles. For attached web pages: foreground(text) color should be violet, bgcolor should be blue, font-face should be Times, order list type should be Roman.

f\_index.html

<!DOCTYPE html>

<html>

<head>

  <title>Frame Example</title>

</head>

<frameset rows="70%, 30%">

  <frame src="header.html" name="header" frameborder="0" noresize="noresize">

  <frameset cols="30%, 70%">

    <frame src="links.html" name="links" frameborder="0" noresize="noresize">

    <frame src="" name="content" frameborder="0" noresize="noresize">

  </frameset>

  <frame src="footer.html" name="footer" frameborder="0" noresize="noresize">

</frameset>

</html>

f\_css.css

body {

    font-family: Times, serif;

  }

  a:link {

    color: green;

    text-decoration: none;

  }

  a:visited {

    color: red;

    text-decoration: none;

  }

  a:hover,

  a:active {

    color: violet;

  }

  frameset {

    background-color: #F0F0F0;

  }

  frame {

    border: none;

  }

footer.html

<!DOCTYPE html>

<html>

<head>

  <title>Footer</title>

  <link rel="stylesheet" type="text/css" href="styles.css">

</head>

<body>

  <p>This is the footer content.</p>

</body>

</html>

header.html

<!DOCTYPE html>

<html>

<head>

  <title>Header</title>

  <link rel="stylesheet" type="text/css" href="f\_css.css">

</head>

<body>

  <h2>Caption</h2>

</body>

</html>

Page1.html

<!DOCTYPE html>

<html>

<head>

  <title>Content Page</title>

  <style>

    .page1body{

      background-color: aquamarine;

    }

  </style>

  <link rel="stylesheet" type="text/css" href="f\_css.css">

</head>

<body class="page1body">

  <h3>Content Page</h3>

  <ol type="I">

    <li>Item 1</li>

    <li>Item 2</li>

    <li>Item 3</li>

  </ol>

</body>

</html>

Links.html

<!DOCTYPE html>

<html>

<head>

  <title>Links</title>

  <link rel="stylesheet" type="text/css" href="f\_css.css">

</head>

<body>

  <ul>

    <li><a href="page1.html" target="content">Link 1</a></li>

    <li><a href="page2.html" target="content">Link 2</a></li>

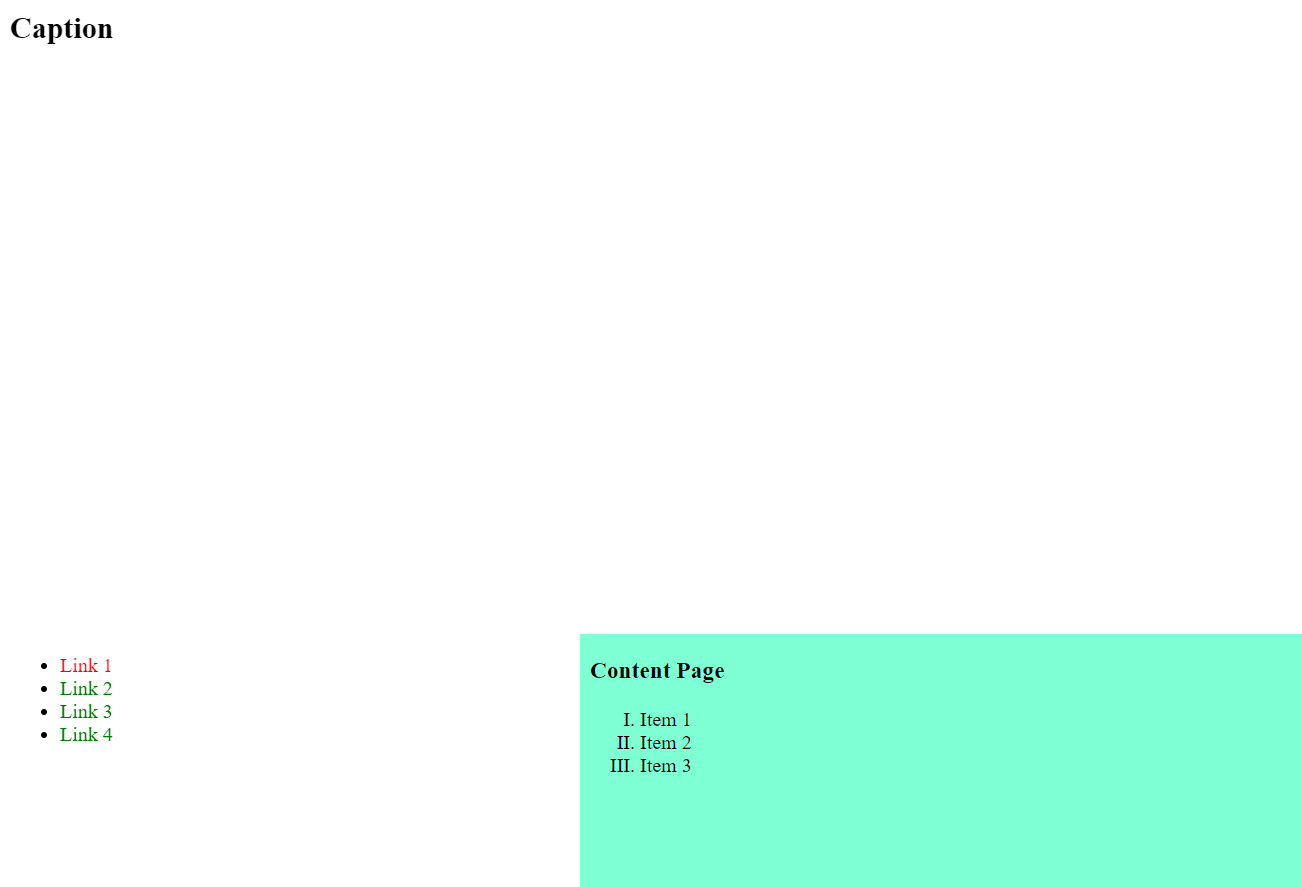
    <li><a href="page3.html" target="content">Link 3</a></li>

    <li><a href="page4.html" target="content">Link 4</a></li>

  </ul>

</body>

</html>



1. Design the following registration form using XHTML form.



1. Write a Javascript code to design a basic calculator

<!DOCTYPE html>

<html lang="en">

<head>

    <title>Document</title>

    <style>

        \*{

            margin: 0;

            padding: 0;

        }

        body

            {

                padding-top: 10px;

                background-color:aliceblue;

            }

h1{

    font-family:'Courier New', Courier, monospace;

    font-size:35px;

    text-decoration: underline;

    text-shadow: 40px;

}

table{

    height: 300px;

    width: 200px;

}

.btn{

            align-items: center;

            background-color: aliceblue;

            border-radius: 10px;

            size: 50px;

            width:40px

        }

        .btn:hover{

            background-color: hotpink;

        }

        .res{

            border-radius: 5px;

        }

        td{

            text-align:center;

        }

        input[type="text"]

        {

            height: 25px;

            font-family:Verdana, Geneva, Tahoma, sans-serif;

            font-size: large;

        }

        input[type="button"]{

            height: 30px;

        }

        .bg{

            width: 300px;

            background-color: lightslategray;

            vertical-align: center;

            border-radius: 10px;

            border:5px solid black;

            /\* display: flex;

            justify-content: center;

            align-items: center; \*/

        }

    </style>

</head>

<body>

    <center><h1>CALCULATOR</h1></center>

    <br><br>

    <center>

    <div class="bg">

    <table align="center" class="center">

        <tr>

            <th colspan="4"><input type=text  class="res" id="r" style="width: 200px;"/></th>

        </tr>

        <br>

        <tr>

            <td><input type="button" class="btn" value="7" id="7" onclick="calc('7')"/></td>

            <td><input type="button" class="btn" value="8" id="8" onclick="calc('8')"/></td>

            <td><input type="button" class="btn" value="9" id="9" onclick="calc('9')"/></td>

            <td><input type="button" class="btn" value="+" id="add" onclick="calc('+')"/></td>

        </tr>

        <tr>

            <td><input type="button" class="btn" value="4" id="4" onclick="calc('4')"/></td>

            <td><input type="button" class="btn" value="5" id="5" onclick="calc('5')"/></td>

            <td><input type="button" class="btn" value="6" id="6" onclick="calc('6')"/></td>

            <td><input type="button" class="btn" value="-" id="min" onclick="calc('-')"/></td>

        </tr>

        <tr>

            <td><input type="button" class="btn" value="1" id="1" onclick="calc('1')"/></td>

            <td><input type="button" class="btn" value="2" id="2" onclick="calc('2')"/></td>

            <td><input type="button" class="btn" value="3" id="3" onclick="calc('3')"/></td>

            <td><input type="button" class="btn" value="" id="mul" onclick="calc('')"/></td>

        </tr>

        <tr>

            <td><input type="button" class="btn" value="0" id="0" onclick="calc('0')"/></td>

            <td><input type="button" class="btn" value="Del" id="dell" onclick="del()"/></td>

            <td><input type="button" class="btn" value="." id="dot" onclick="calc('.')"/></td>

            <td><input type="button" class="btn" value="/" id="div" onclick="calc('/')"/></td>

        </tr>

        <tr align="center">

            <td colspan="2"><input type="button" style="width:100px;" class="btn" value="=" id="eq" onclick="calculate()"/></td>

            <td colspan="2"><input type="button" style="width:100px;" class="btn" value="Clr" id="clear" onclick="clearScreen()"/></td>

        </tr>

    </table>

</div>

</center>

</body>

<script>

    function calc(value)

    {

        document.getElementById("r").value+=value;

    }

    function clearScreen(){

        document.getElementById("r").value="";

    }

   function calculate(){

    try{

    var p=document.getElementById("r").value;

    var q=eval(p);

    document.getElementById("r").value=q;

   }

   catch(err)

   {

    document.getElementById("r").value="Syntax  error";

   }}

   function del(){

    r.value=r.value.slice(0,-1); //0 starting point -1 ending}

   }

</script>

</html>

A calculator with a number on it

Description automatically generated

1. Design the following registration form.



1. Write a Javascript code to develop Pizza order, on clicking confirm order following pop up box should get displayed

<!DOCTYPE html>

<html lang="en">

<head>

    <title>Document</title>

    <style>

        button{

            width: 100px;

            height:20px;

        }

        input[type="number"]{

            width:100px;

        }

    </style>

</head>

<body>

    <table cellspacing="0px" border="1px">

        <tr>

            <th>Item Name</th>

            <th>Price</th>

            <th>Quantity</th>

        </tr>

        <tr cellpadding="15px">

            <td>Chicken Pizza</td>

            <td>100</td>

            <td><input type="number"placeholder=0 name="q1" id="inputnumber"></td>

        </tr>

        <tr cellpadding="15px">

            <td>Paneer Pizza</td>

            <td>80</td>

            <td><input type="number"placeholder=0 name="q1" id="inputnumber1"></td>

        </tr>

        <tr cellpadding="15px">

            <td>Veg Pizza</td>

            <td>70</td>

            <td><input type="number"placeholder=0 name="q1" id="inputnumber2"></td>

        </tr>

       </table>

    <br><br><br>

   <table cellpadding="0" border="0px">

        <tr>

            <td><button value="totcost" onclick="calc()">total cost</button></td>

            <td><input type="number"placeholder=0 id="result"></td>

        </tr>

        <tr>

            <td><button value="confirm" onclick= "Confirm()">Confirm Order</button></td>

            <td><button value="confirm" onclick="cancel()">Cancel Order</button></td>

        </tr>

    </table>

    <script>

function calc(){

   var a=document.getElementById("inputnumber").value;

   var b=document.getElementById("inputnumber1").value;

   var c=document.getElementById("inputnumber2").value;

   var k = a\*100+b\*80+c\*70;

   document.getElementById("result").value = k;

}

 function Confirm(){

    alert("Your order is confirmed and reach you in 10 minutes");

 }

 function cancel(){

    alert("Your order is Cancelled");

 }

    </script>

</body>

Output:

A picture containing text, screenshot, font, number

Description automatically generated

A picture containing text, screenshot, font

Description automatically generated

A black background with white text

Description automatically generated with low confidence

1. A program to demonstrate absolute and relative positioning of elements.

<!DOCTYPE html>

<html>

<head>

  <style>

    .container {

      position: relative;

      width: 300px;

      height: 200px;

      border: 1px solid black;

    }

    .absolute {

      position: absolute;

      top: 20px;

      left: 50px;

      width: 100px;

      color:white;

      height: 50px;

      background-color: red;

    }

    .relative {

      position: relative;

      top: 30px;

      left: 10px;

      width: 200px;

      height: 60px;

      color:white;

      background-color: blue;

    }

  </style>

</head>

<body>

  <div class="container">

    <div class="absolute">Absolute Positioning</div>

    <div class="relative">Relative Positioning</div>

  </div>

</body>

</html>

A blue and red rectangles with white text

Description automatically generated

1. A program to display an image when mouse is clicked and hide that image when mouse is released.

<html>

<head>

  <style>

    #image {

      display: none;

    }

  </style>

  <script>

    function showImage() {

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

      image.style.display = "block";

    }

    function hideImage() {

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

      image.style.display = "none";

    }

  </script>

</head>

<body>

  <img id="image" src="https://1.bp.blogspot.com/-kK7Fxm7U9o0/YN0bSIwSLvI/AAAAAAAACFk/aF4EI7XU\_ashruTzTIpifBfNzb4thUivACLcBGAsYHQ/s1280/222.jpg" alt="Image">

  <p>Click and hold the mouse to display the image. Release the mouse to hide the image.</p>

  <script>

    document.addEventListener("mousedown",showImage);

    document.addEventListener("mouseup", hideImage);

  </script>

</body>

</html>

1. A program to demonstrate z-index property (or) a program to demonstrate stacking of elements using z-index property.

<!DOCTYPE html>

<html>

<head>

  <style>

    .box {

      width: 200px;

      height: 200px;

      position: absolute;

      border: 1px solid black;

    }

    .box1 {

      background-color: red;

      z-index: 1;

    }

    .box2 {

      background-color: blue;

      z-index: 2;

      left: 50px;

      top: 50px;

    }

    .box3 {

      background-color: green;

      z-index: 3;

      left: 100px;

      top: 100px;

    }

    .box4 {

      background-color: yellow;

      z-index: 4;

      left: 150px;

      top: 150px;

    }

  </style>

</head>

<body>

  <div class="box box1">Box 1</div>

  <div class="box box2">Box 2</div>

  <div class="box box3">Box 3</div>

  <div class="box box4">Box 4</div>

</body>

</html>

A screenshot of a computer screen

Description automatically generated

1. A program to insert the rows into a table dynamically using Dynamic HTML.

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

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

    <title>Document</title>

</head>

<body>

    <table id="tblPeople" border="1" cellspacing="0">

    <tr>

    <th>First Name</th>

    <th>Middle Name</th>

    <th>Last Name</th>

    </tr>

    </table>

   <br>

    <form name="formName" >

    First Name: <input type="text" name="FirstName">

    Middle Name: <input type="text" name="MiddleName">

    Last Name: <input type="text" name="LastName">

    <br />

    <br />

  <input type="button" value="Add Name"

    onclick="addRow('tblPeople',

    [this.form.FirstName.value,this.form.MiddleName.value, this.form.LastName.value]

    );">

    </form>

    <script>

        function addRow(tableId, cells){

var tabEle = document.getElementById(tableId);

var newRow = tabEle.insertRow(tabEle.rows.length);

var newCell;

for (var i = 0; i < cells.length; i++) {

newCell = newRow.insertCell(newRow.cells.length);

newCell.innerHTML = cells[i];

}

return newRow;

}

    </script>

    </body> </html>

A picture containing text, line, font, screenshot

Description automatically generated

1. A program to track the mouse coordinates .

Move cursor anywhere on screen

<!DOCTYPE html>

<html>

<head>

  <title>Mouse Coordinates Tracker</title>

</head>

<body>

  <h1>Mouse Coordinates Tracker</h1>

  <p>Move your mouse cursor over the page to see the coordinates:</p>

  <p id="coordinates"></p>

  <script>

    const coordinatesDisplay = document.getElementById("coordinates");

    function trackCoordinates(event) {

      const x = event.clientX;

      const y = event.clientY;

      coordinatesDisplay.textContent = `X: ${x}, Y: ${y}`;

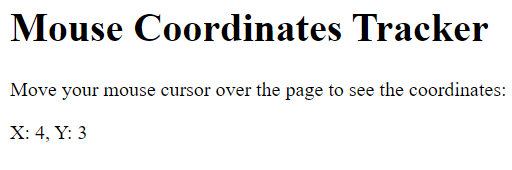
    }

    document.addEventListener("mousemove", trackCoordinates);

  </script>

</body>

</html>



1. A program to move aN image slowly with the help of either setTimeout() or setInterval().

<!DOCTYPE html>

<html>

<head>

<style>

  #movingImage {

    position: absolute;

    top: 50px;

    left: 50px;

    width: 100px;

    height: 100px;

    background-color: blue;

  }

</style>

</head>

<body>

<div id="movingImage"></div>

<script>

const movingImage = document.getElementById("movingImage");

let currentTop = 50; // Starting top position

let currentLeft = 50; // Starting left position

function moveImage() {

  currentTop += 1; // Increment the top position

  currentLeft += 1; // Increment the left position

  movingImage.style.top = currentTop + "px"; // Set the new top position

  movingImage.style.left = currentLeft + "px"; // Set the new left position

  if (currentTop < 250 && currentLeft < 250) {

    setTimeout(moveImage, 20); // Continue moving

  }

}

// Start moving the image

setTimeout(moveImage, 1000); // Delay the movement by 1 second

</script>

</body>

</html>

// blue object slides across and reached its defined endpoint

A blue square with a white background

Description automatically generated

Set interval

A close up of text

Description automatically generated

<!DOCTYPE html>

<html>

<body>

<h1>The Window Object</h1>

<h2>The setInterval() Method</h2>

<p id="demo"></p>

<script>

const element = document.getElementById("demo");

setInterval(function() {element.innerHTML += "Hello"}, 1000);

</script>

</body>

</html>

1. Steps to install Django and create a Django application.

A black background with white text

Description automatically generatedA computer screen with white text

Description automatically generated

A computer screen shot of a program

Description automatically generated

A screen shot of a computer screen

Description automatically generated

A black background with white text

Description automatically generated

A computer screen with text

Description automatically generated

A screenshot of a computer

Description automatically generated

1. Write a Django application to print a welcome message with the name passed from view:

Views.py

from django.shortcuts import render

def welcome\_view(request, name):

context = {'name': name}

return render(request, 'welcome\_app/welcome.html', context)

welcome.html

<!DOCTYPE html>

<html>

<head>

<title>Welcome Page</title>

</head>

<body>

<h1>Welcome, {{ name }}!</h1>

</body>

</html>

Appurls.py

from django.urls import path

from . import views

urlpatterns = [

path('welcome/<str:name>/', views.welcome\_view, name='welcome'),

]

Project urls.py

from django.contrib import admin

from django.urls import path, include

urlpatterns = [

path('admin/', admin.site.urls),

path('welcome/', include('welcome\_app.urls')),

]

1. Write a Django application to print addition of two numbers. Use a HTML form to read the numbers to be added and display the result in another HTML page.

Addition of two number (Django)

Addition\_project, addition\_app

A computer screen shot of a program code

Description automatically generated

A screenshot of a computer program

Description automatically generated

A screen shot of a computer

Description automatically generated

A screen shot of a computer program

Description automatically generated

Project urls

A screen shot of a computer code

Description automatically generated

A screenshot of a computer

Description automatically generated A black text on a white background

Description automatically generated

1. Exploration of web frameworks (AngularJS, JQuery, Flask, Web2Py, FuelPhP).
2. Create a table in SQLite database using a Django application.

To perform crud operations, lets create a class called cars in models.py of app a1

A screen shot of a computer code

Description automatically generated

Make migrations and migrate

A screen shot of a computer program

Description automatically generated

Move to the shell to open interactive console

1. Insertion in 3 different formats

A computer screen with text and numbers

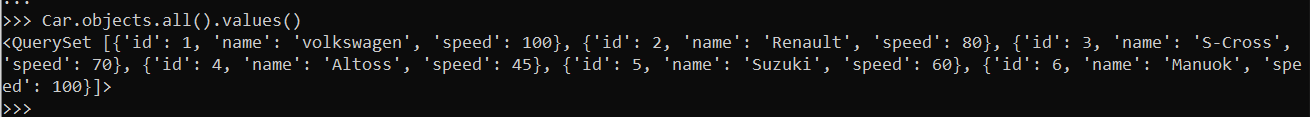
Description automatically generated

Insert multiple records

A black screen with white text

Description automatically generated

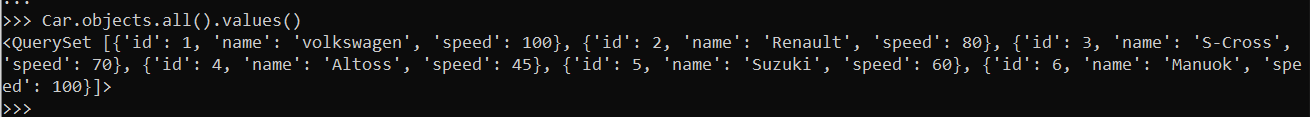
Resultant Queryset:



To access



1. Display the entire table data stored in SQLite database using a Django application.

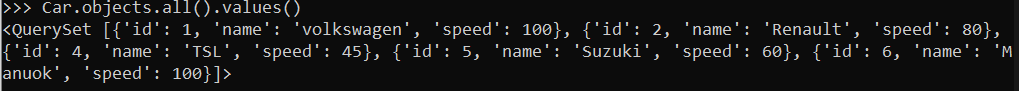


1. Update a specified entry in the table stored in SQLite database using a Django application.

Update a record

A screen shot of a computer code

Description automatically generated



Update a model

Updating Car model by adding condition attribute

A screen shot of a computer code

Description automatically generated

Make migrations, migrate and move to shell

A computer screen with white text

Description automatically generated

1. Delete a specified row from the table stored in SQLite database using a Django application.

A blurry image of a city

Description automatically generated

1. Create a form validation application in Django.

Form validation

A screen shot of a computer program

Description automatically generated

A screen shot of a computer code

Description automatically generated

A screenshot of a computer program

Description automatically generated

Project urls.py

A screen shot of a computer program

Description automatically generated

A screen shot of a computer program

Description automatically generated

A pink registration form with black text

Description automatically generatedA pink registration form with white text

Description automatically generated

A pink screen shot of a form

Description automatically generated

1. Create session handling application in Django.

Sessions

A computer screen shot of text

Description automatically generated

A screen shot of a computer code

Description automatically generated

A screen shot of a computer code

Description automatically generated

A computer screen shot of a program

Description automatically generated

A screen shot of a computer code

Description automatically generated

A screen shot of a computer code

Description automatically generated

A screen shot of a computer code

Description automatically generated

Make migrations, migrate and then runserver.

Sessions



A close up of a text

Description automatically generated

A black text on a white background

Description automatically generated

1. Create a responsive website using bootstrap.

<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

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

  <title>Responsive Website</title>

  <!-- Bootstrap CSS -->

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

  <!-- Custom CSS -->

  <style>

    .jumbotron {

      text-align: center;

    }

    .card {

      margin-bottom: 20px;

    }

  </style>

</head>

<body>

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

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

          <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="#">Services</a>

        </li>

        <li class="nav-item">

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

        </li>

      </ul>

    </div>

  </nav>

  <div class="jumbotron">

    <h1 class="display-4">Welcome to Our Website</h1>

    <p class="lead">We provide quality services and solutions.</p>

    <hr class="my-4">

    <p>Get in touch with us to learn more.</p>

    <a class="btn btn-primary btn-lg" href="#" role="button">Contact Us</a>

  </div>

  <div class="container">

    <div class="row">

      <div class="col-md-4">

        <div class="card">

          <img src="https://via.placeholder.com/300" class="card-img-top" alt="Image 1">

          <div class="card-body">

            <h5 class="card-title">Service 1</h5>

            <p class="card-text">This is a short description of Service 1.</p>

          </div>

        </div>

      </div>

      <div class="col-md-4">

        <div class="card">

          <img src="https://via.placeholder.com/300" class="card-img-top" alt="Image 2">

          <div class="card-body">

            <h5 class="card-title">Service 2</h5>

            <p class="card-text">This is a short description of Service 2.</p>

          </div>

        </div>

      </div>

      <div class="col-md-4">

        <div class="card">

          <img src="https://via.placeholder.com/300" class="card-img-top" alt="Image 3">

          <div class="card-body">

            <h5 class="card-title">Service 3</h5>

            <p class="card-text">This is a short description of Service 3.</p>

          </div>

        </div>

      </div>

    </div>

  </div>

  <!-- Bootstrap JS -->

  <script src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>

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

</body>

</html>

A screenshot of a website

Description automatically generated

1. A program to read and print a JSON file using ajax.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>JSON File Reader</title>

</head>

<body>

<h1>JSON File Reader</h1>

<button id="loadButton">Load JSON</button>

<div id="output"></div>

<script>

document.getElementById("loadButton").addEventListener("click", function() {

const xhr = new XMLHttpRequest();

xhr.open("GET", "data.json", true);

xhr.onload = function() {

if (xhr.status === 200) {

const jsonData = JSON.parse(xhr.responseText);

const outputDiv = document.getElementById("output");

outputDiv.innerHTML = `

<p>Name: ${jsonData.name}</p>

<p>Age: ${jsonData.age}</p>

<p>City: ${jsonData.city}</p>

`;

}

};

xhr.send();

});

</script>

</body>

</html>

Data.json

{

"name": "John Doe",

"age": 30,

"city": "New York"

}

A screenshot of a computer

Description automatically generated

1. A program to use Ajax function in JQuery.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>JSON File Reader with jQuery</title>

<script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>

</head>

<body>

<h1>JSON File Reader with jQuery</h1>

<button id="loadButton">Load JSON</button>

<div id="output"></div>

<script>

$(document).ready(function() {

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

$.ajax({

url: "data.json",

success: function(data) {

const outputDiv = $("#output");

outputDiv.html(`

<p>Name: ${data.name}</p>

<p>Age: ${data.age}</p>

<p>City: ${data.city}</p>

`);

}

});

});

});

</script>

</body>

</html>

Data.json

{

"name": "John Doe",

"age": 30,

"city": "New York"

}

A close-up of a file

Description automatically generated

1. A program to handle mouse events using JQuery.

<!DOCTYPE html>

<html>

<head>

    <title>Mouse Events with jQuery</title>

    <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>

    <style>

        body {

            font-family: Arial, sans-serif;

            text-align: center;

            margin-top: 50px;

        }

        .box {

            width: 200px;

            height: 100px;

            background-color: #ffcc00;

            border: 1px solid #333;

            line-height: 100px;

            font-size: 20px;

            margin: 10px auto;

            cursor: pointer;

        }

    </style>

</head>

<body>

    <div class="box" id="box1">Click Me!</div>

    <script>

        // Function to handle click event

        function handleClick() {

            $(this).text('Clicked!');

            $(this).css('background-color', 'red');

        }

        // Function to handle mouseenter event

        function handleMouseEnter() {

            $(this).text('Mouse Entered!');

        }

        // Function to handle mouseleave event

        function handleMouseLeave() {

            $(this).text('Click Me!');

            $(this).css('background-color', '#ffcc00');

        }

        // Attach event handlers to the element with the "box" class

        $(document).ready(function () {

            $('#box1').click(handleClick);

            $('#box1').mouseenter(handleMouseEnter);

            $('#box1').mouseleave(handleMouseLeave);

        });

    </script>

</body>

</html>

A yellow rectangle with black text

Description automatically generated

1. A program to print “hello world” message using node.js.

Hello.js

var http = require('http');

//create a server object:

http.createServer(function (req, res) {

    res.write('Hello World!'); //write a response to the client

    res.end(); //end the response

}).listen(5000); //the server object listens on port 8080

// Console will print the message

console.log('Server running');

A screenshot of a computer

Description automatically generated node hello.js

1. Write about AngularJS.
2. Write about FuelPhP.
3. Write about Web2Py.
4. Write about Jquery, Flask

1. To print a multiplication table by taking no of rows and columns as input

Description:

A multiplication is to be designed that takes no of rows and no of columns as input and print the table

Using javascript variables , loops, prompts, and css properties to style the table

Code:

<!DOCTYPE html>

<html>

    <head>

        <title>Multiplication Table</title>

        <style>

           table {

  border-collapse: collapse;

  margin-left:auto;

  margin-right:auto;

}

td {

  border: 1px solid black;

  padding: 20px;

  text-align: center;

}

.header{

    background-color:rgb(26, 201, 232);

}

        </style>

    </head>

    <body align="center">

        <h2 align="center">MULTIPLICATION TABLE</h2>

        <script>

            const table = document.createElement('table');

            var x=prompt('enter no.of rows: ');

            var y=prompt('enter no.of col: ');

for (let i = 0; i <= x; i++){

  const row = document.createElement('tr');

  for (let j = 0; j <= y; j++){

    const col = document.createElement('td');

    let val = i \* j;

    if (val === 0) {

      val = i || j;

      val = val ? val : ' ';

      col.classList.add('header');

    }

    col.innerHTML = val;

    row.appendChild(col);

  }

  table.appendChild(row);

}

document.body.appendChild(table);

        </script>

    </body>

</html>

Output:

A picture containing text, screenshot, font, number

Description automatically generated A picture containing text, screenshot, font, software

Description automatically generated

A table of multiplication with blue squares

Description automatically generated

Book management

<!DOCTYPE html>

<html lang="en">

<head>

    <title>t1</title>

</head>

<body>

 <script>

    var input;

    var books=[];

    while(input!='exit')

    {

        var input=prompt("Enter add || delete || list ||exit");

        if (input=='add')

        {

            var b=prompt("enter book to add");

            books.push(b);

            console.log(b + "  added");

        }

        else if (input=='delete')

        {

            var b=prompt("enter book to delete");

            var index=books.indexOf(b);

            if(index==-1)

            console.log(b+"  doesn't exists");

            else{

                books.splice(index,1);

                console.log(b+" Book deleted");

            }

        }

        else if(input=='list'){

           if (books.length > 0)

           console.log(books);

           else

           console.log("No books available");

        }

        else{

        console.log("Terminating...");

break;        }

    }

 </script>

</body>

</html>

A screenshot of a computer program

Description automatically generated