# AI ASSISTED CODING

# LAB-14.4

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# BATCH:04 (AIML)

**TASK-01:**

Create a Responsive Web Page Layout

**PROMPT:**

Generate a basic webpage layout which include header, main content ,footer also add CSS to make it more responsive in different screen sizes.

**CODE:**

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Responsive Web Page Layout</title>
  <style>
    body {
      margin: 0;
      font-family: Arial, sans-serif;
      background: #f6f6fa;
      color: #222;
    }
    header {
      background: #2a1748;
      color: #fff;
      padding: 1rem 2rem;
      display: flex;
      justify-content: space-between;
      align-items: center;
    }
    nav a {
      color: #fff;
      text-decoration: none;
      margin-left: 1.5rem;
      font-weight: 500;
      transition: color 0.2s;
    }
    nav a:hover {
      color: #6b3bad;
    }
    main {
      max-width: 900px;
      margin: 2rem auto;
      padding: 1rem;
      background: #fff;
      border-radius: 8px;
      box-shadow: 0 2px 8px rgba(0,0,0,0.05);
    }
    .placeholder-img {
      width: 100%;
      max-width: 600px;
      display: block;
      margin: 1rem auto;
      border-radius: 6px;
    }
    footer {
      background: #2a1748;
```

```html
<html lang="en">
<head>
  <style>
    footer {
      background: [#222]
      color: #fff;
      text-align: center;
      padding: 1rem 0;
      font-size: 0.95rem;
      margin-top: 2rem;
    }
    /* Responsive Styles */
    @media (max-width: 900px) {
      main {
        max-width: 95%;
      }
    }
    @media (max-width: 600px) {
      header {
        flex-direction: column;
        align-items: flex-start;
        padding: 1rem;
      }
      nav {
        margin-top: 0.5rem;
      }
      nav a {
        margin-left: 0;
        margin-right: 1rem;
        display: inline-block;
      }
      main {
        padding: 0.5rem;
      }
      .placeholder-img {
        max-width: 100%;
      }
    }
  </style>
</head>
<body>
  <header>
    <div class="logo"><strong>MySite</strong></div>
    <nav>
      <a href="#">Home</a>
      <a href="#">About</a>
      <a href="#">Services</a>
      <a href="#">Contact</a>
```

```html
      <a href="#">About</a>
      <a href="#">Services</a>
      <a href="#">Contact</a>
    </nav>
  </header>
  <main>
    <h1>Welcome to My Responsive Web Page</h1>
    <p>
      This is a placeholder for the main content. The layout adapts to desktop, tablet, and mobile screens.
      You can observe the changes when you resize your browser size.
    </p>
    <img src="https://via.placeholder.com/800x200?text=Placeholder+Image" alt="Rectangular placeholder graphic displaying the words Placeholder Image centered on a light grey background, set within a clean and minimal web page layout" class="placeholder-img">
  </main>
  <footer>
    &copy; 2024 MySite. Contact: info@my site.com
  </footer>
</body>
</html>
```

**OUTPUT:**

## OBSERVATION:

The AI generated the webpage in an efficient way and it also included all the elements what we have instructed to it. It included the header section , body section and also the footer section.

## TASK-02:

Interactive Button with Java script.
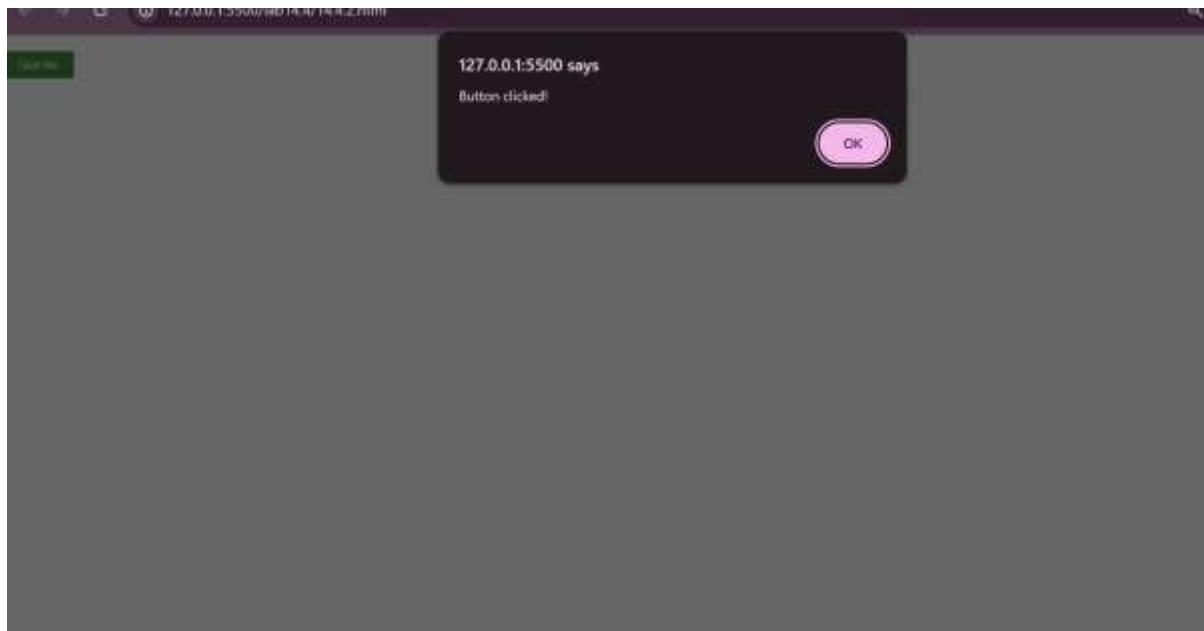
## PROMPT:

Create a button on the webpage then use java script to display the popup alert message "Button clicked" when the button is clicked.

## CODE:

**OUTPUT:**



**OBSERVATION:**

The code generated by the AI which shows the popup message when the button is clicked.

**TASK-03:**

Form with Validation.

**PROMPT:**

Generate a form which accepts the details like name, email ,message use java script to validate the correct format and display the error messages if the required field is empty after completion of filling the data then it should display the message "Form submitted Successfully" on clicking the submit button.

**CODE:**

```
<script>
    function validateEmail(email) {
        return /^[^\s@]+@[^\s@]+\.[^\s@]+$/.test(email);
    }

    form.addEventListener('submit', function(e) {
        e.preventDefault();
        let valid = true;
        nameError.textContent = '';
        emailError.textContent = '';
        messageError.textContent = '';
        successMsg.textContent = '';

        if (nameInput.value.trim() === '') {
            nameError.textContent = 'Name is required.';
            valid = false;
        }
        if (emailInput.value.trim() === '') {
            emailError.textContent = 'Email is required.';
            valid = false;
        } else if (!validateEmail(emailInput.value.trim())) {
            emailError.textContent = 'Please enter a valid email address.';
            valid = false;
        }
        if (messageInput.value.trim() === '') {
            messageError.textContent = 'Message is required.';
            valid = false;
        }

        if (valid) {
            successMsg.textContent = 'Form submitted successfully';
            form.reset();
        }
    });
</script>
</body>
</html>
```

## OUTPUT:

**Contact Us**

Name:

chandragiri ram charan

Email:

ramcharanch06@gmail.com

Message:

Hi everyone this is ramcharan from computer science and engineering.

Submit

## OBSERVATION:

From the code given by the AI we observed that it accepts the details such as name , email and a message if the required field is not filled it displays the error message.

**TASK-04:**

Dynamic content Generation

**PROMPT:**

Generate the html code which consists of list of items and the buttons add item and remove item then by using java script make it dynamic to add the item when clicked on add item and remove the item if remove item is clicked.

**CODE:**

```
lab14.4 > ◇ 14.4.4.html > ⬢ html > ⬢ body
  1    <!DOCTYPE html>
  2    <html lang="en">
  3    <head>
  4      <meta charset="UTF-8">
  5      <title>Dynamic Product List</title>
  6      <style>
  7        body { font-family: Arial, sans-serif; margin: 30px; }
  8        ul { margin-bottom: 20px; }
  9        button { margin-right: 10px; }
 10      </style>
 11    </head>
 12    <body>
 13      <h2>Product List</h2>
 14      <ul id="productList">
 15        <li>Product 1</li>
 16        <li>Product 2</li>
 17        <li>Product 3</li>
 18      </ul>
 19      <button id="addBtn">Add Item</button>
 20      <button id="removeBtn">Remove Item</button>
 21
 22      <script>
 23        const productList = document.getElementById('productList');
 24        const addBtn = document.getElementById('addBtn');
 25        const removeBtn = document.getElementById('removeBtn');
 26        let productCount = productList.children.length;
 27
 28        addBtn.onclick = function() {
 29          productCount++;
 30          const li = document.createElement('li');
 31          li.textContent = `Product ${productCount}`;
 32          productList.appendChild(li);
 33        };
 34
 35        removeBtn.onclick = function() {
 36          if (productList.children.length > 0) {
 37            productList.removeChild(productList.lastElementChild);
 38            productCount = productList.children.length;
 39          }
 40        };
 41      </script>
 42    </body>
 43    </html>
```

**OUTPUT:**

**Product List**

- Product 1
- Product 2
- Product 3
- Product 4

Add Item    Remove Item

## OBSERVATION:

The AI generated the code which contains the list of product names and it has the buttons add item and remove item which works in the dynamic way.

## TASK-05:

Styled Modal Popup.

## PROMPT:

Generate a modal popup which opens when we click the button which is present on the web page use CSS to style it in an impressive way also include the hide button which hides the modal popup.

## CODE:

```
WEBLE > ++ bls3.html > @ html > @ head > @ style > $ modal
1   <!DOCTYPE html>
2   <html lang="en">
3   <head>
4     <meta charset="UTF-8">
5     <title>Modal Popup Example</title>
6     <style>
7       body {
8         font-family: Arial, sans-serif;
9       }
10      /* Overlay */
11      .modal-overlay {
12        display: none;
13        position: fixed;
14        top: 0; left: 0;
15        width: 100vw; height: 100vh;
16        background: rgba(0,0,0,0.5);
17        z-index: 1000;
18        justify-content: center;
19        align-items: center;
20      }
21      /* Modal */
22      .modal {
23        background: #fff;
24        padding: 2em;
25        border-radius: 8px;
26        position: relative;
27        min-width: 300px;
28        box-shadow: 0 2px 10px rgba(0,0,0,0.2);
29      }
30      /* Close button */
31      .close-btn {
32        position: absolute;
33        top: 10px; right: 10px;
34        background: none;
35        border: none;
36        font-size: 1.2em;
37        cursor: pointer;
38      }
39      .modal-overlay.show {
40        display: flex;
41        animation: fadeIn 0.3s ease-out;
42      }
43      @keyframes fadeIn {
44        from { opacity: 0; } to { opacity: 1; }
45      }
46    </style>
47  </head>
```
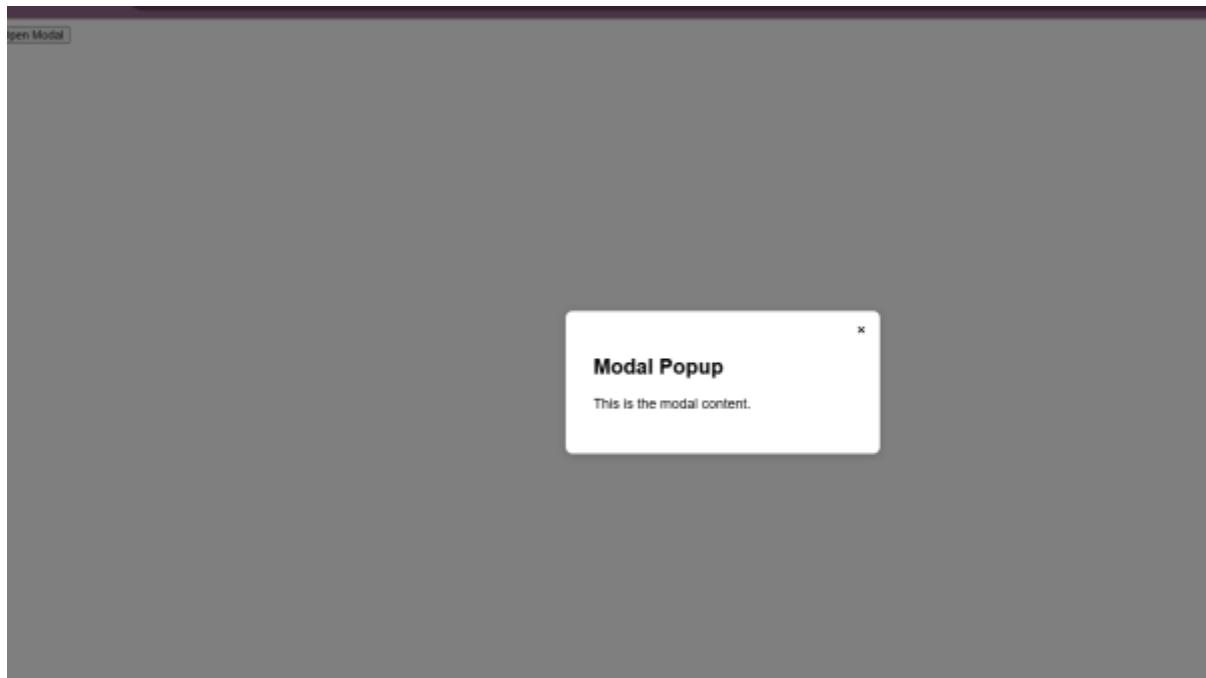
```
2   <html lang="en">
48  <body>
49    <button id="openModalBtn">Open Modal</button>
50
51    <div class="modal-overlay" id="modalOverlay">
52      <div class="modal">
53        <button class="close-btn" id="closeModalBtn">&times;</button>
54        <h2>Modal Popup</h2>
55        <p>This is the modal content.</p>
56      </div>
57    </div>
58
59    <script>
60      const openBtn = document.getElementById('openModalBtn');
61      const overlay = document.getElementById('modalOverlay');
62      const closeBtn = document.getElementById('closeModalBtn');
63
64      function openModal() {
65        overlay.classList.add('show');
66      }
67
68      function closeModal() {
69        // We can add a fade-out animation here in the future if desired
70        overlay.classList.remove('show');
71      }
72
73      openBtn.onclick = openModal;
74
75      closeBtn.onclick = closeModal;
76
77      // Close modal when clicking on the overlay area
78      overlay.onclick = (e) => {
79        if (e.target === overlay) {
80          closeModal();
81        }
82      };
83
84    </script>
85  </body>
86  </html>
```

**OUTPUT:**

## OBSERVATION:

The code generated by AI contains a button which displays a modal popup by clicking on it . the AI styled the modal popup in an impressive way.