

ASSIGNMENT-14

TASK-1:

: Create a Responsive Web Page Layout

Instructions:

- Design a basic web page layout with a **header, main content area, and footer** using HTML and CSS.
- Use AI to assist in generating **responsive CSS** for different screen sizes.
- Ensure the layout is clean and visually organized.

CODE:

HTML CODE:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Savika's Portfolio</title>
    <link rel="stylesheet" href="styles.css" />
</head>

<body>
    <header>
        
        <h1>Savika Chidara</h1>
        <nav>
            <ul>
                <li><a href="#about">About Me</a></li>
                <li><a href="#skills">Skills</a></li>
                <li><a href="#projects">Projects</a></li>
                <li><a href="#contact">Contact</a></li>
            </ul>
        </nav>
    </header>

    <main>
        <section id="about">
            <h2>About Me</h2>
            <p>Hello! I am Savika, a passionate web developer.<br>
                I specialize in creating websites with a background in computer
                science.<br>
```

```
I bring aesthetic appeal to my work and enjoy learning new  
technologies in web development.<br>  
I am always exploring new ways to improve my work.</p>  
</section>  
  
<section id="skills">  
  <h2>Technical Skills</h2>  
  <ol>  
    <li>HTML</li>  
    <li>C Language</li>  
    <li>Python</li>  
    <li>JavaScript</li>  
    <li>SQL</li>  
  </ol>  
</section>  
  
<section id="projects">  
  <h2>Projects</h2>  
  <ol>  
    <li>  
      <h3>Portfolio</h3>  
      <p>A personal portfolio built with HTML5 to showcase my skills,  
      projects, and contact information.</p>  
    </li>  
    <li>  
      <h3>Task Manager App</h3>  
      <p>A full-stack task management application using React and  
      Node.js.</p>  
    </li>  
  </ol>  
</section>  
  
<section id="contact">  
  <h2>Contact</h2>  
  <address>  
    <p>Email: <a href="mailto:xyz@gmail.com">xyz@gmail.com</a></p>  
    <p>Phone: 87121xxxxx</p>  
    <p>LinkedIn: <a href="https://www.linkedin.com/in/savika-  
chidara">savika-chidara</a></p>  
    <p>GitHub: <a href="https://github.com/savika-chidara">savika-  
chidara</a></p>  
  </address>  
</section>  
</main>
```

```
<footer>
  <p>&copy; 2025 Savika Chidara. All rights reserved.</p>
</footer>

<script src="script.js"></script>
</body>
</html>
```

CSS CODE:

```
/* Basic Reset */
* {
  margin: 0;
  padding: 0;
  box-sizing: border-box;
}
```

```
body {
  font-family: Arial, sans-serif;
  line-height: 1.6;
  background-color: #f4f4f4;
  color: #333;
  padding: 20px;
  max-width: 900px;
  margin: auto;
}
```

```
/* Image styling */
img {
  max-width: 150px;
  border-radius: 50%;
  display: block;
  margin: 20px auto;
}
```

```
/* Header */
header {
  text-align: center;
  margin-bottom: 30px;
}
```

```
header h1 {
  font-size: 2.8rem;
  margin-bottom: 10px;
  color: #222;
}
```

```
/* Navigation */
nav ul {
    list-style: none;
    display: flex;
    justify-content: center;
    gap: 30px;
}

nav ul li a {
    text-decoration: none;
    color: #333;
    font-weight: 600;
    font-size: 1.1rem;
    transition: color 0.3s ease;
}

nav ul li a:hover {
    color: #007BFF;
}

/* Sections */
section {
    background: white;
    padding: 20px 25px;
    margin-bottom: 25px;
    border-radius: 8px;
    box-shadow: 0 0 8px rgba(0,0,0,0.1); }

section h2 {
    margin-bottom: 15px;
    border-bottom: 2px solid #007BFF;
    padding-bottom: 8px;
    color: #007BFF;
}

section p, section ol {
    font-size: 1rem;
    margin-top: 10px;
}

section ol {
    padding-left: 20px;
}
```

```
section ol li {
    margin-bottom: 8px;
}

/* Project titles */
section ol li h3 {
    margin-bottom: 5px;
    color: #444;
}

/* Contact links */
address p {
    margin-bottom: 8px;
    font-style: normal;
}

address a {
    color: #007BFF;
    text-decoration: none;
}

address a:hover {
    text-decoration: underline;
}

/* Footer */
footer {
    text-align: center;
    padding: 15px 0;
    font-size: 0.9rem;
    color: #777;
    border-top: 1px solid #ddd;
    margin-top: 40px;
}

/* Responsive Design */
@media (max-width: 600px) {
    nav ul {
        flex-direction: column;
        gap: 15px;
    }
    img {
        max-width: 120px;
    }
}
```

JS CODE:

```
// Select all nav links
const navLinks = document.querySelectorAll('nav ul li a');

navLinks.forEach(link => {
  link.addEventListener('click', (e) => {
    e.preventDefault();
    const targetID = link.getAttribute('href').slice(1);
    const targetSection = document.getElementById(targetID);
    if (targetSection) {
      targetSection.scrollIntoView({ behavior: 'smooth' });
    }
  });
});
```

OUTPUT:

The screenshot shows a professional-looking portfolio website. At the top, there's a header with the name "Savika Chidara" and a navigation bar with links for "About Me", "Skills", "Projects", and "Contact". Below the header, there are four main sections: "About Me", "Technical Skills", "Projects", and "Contact".

- About Me:** A brief introduction stating: "Hello! I am Savika, a passionate web developer. I specialize in creating websites with a background in computer science. I bring aesthetic appeal to my work and enjoy learning new technologies in web development. I am always exploring new ways to improve my work."
- Technical Skills:** A list of five skills: HTML, C Language, Python, JavaScript, and SQL.
- Projects:** A list of two projects:
 - Portfolio:** A personal portfolio built with HTML5 to showcase my skills, projects, and contact information.
 - Task Manager App:** A full-stack task management application using React and Node.js.
- Contact:** Contact information including Email: eyo@gmail.com, Phone: 87121xxxx, LinkedIn: savika-chidara, and GitHub: savika-chidara.

At the bottom of the page, there's a small copyright notice: "© 2020 Savika Chidara. All rights reserved."

TASK-2: Interactive Button with JavaScript

Instructions:

- Create a **button** on a web page.
- Use AI to generate JavaScript code that displays an **alert message** when the button is clicked.
- Ensure the code is clean and well-commented.

Code:

HTML CODE:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Interactive Button</title>
    <!-- Link to external CSS file -->
    <link rel="stylesheet" href="style.css">
</head>
<body>

    <!-- Button Element -->
    <button id="myButton">Click Me!</button>

    <!-- Link to external JavaScript file -->
    <script src="script.js"></script>
</body>
</html>
```

CSS CODE:

```
/* Styling for the button */
button {
    padding: 10px 20px;
    font-size: 16px;
    background-color: #3498db;
    color: white;
    border: none;
    border-radius: 4px;
    cursor: pointer;
}

/* Add hover effect */
```

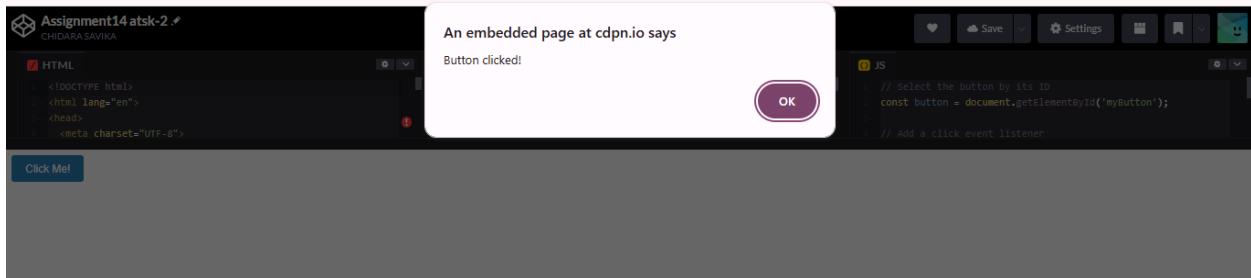
```
button:hover {  
    background-color: #2980b9;  
}
```

JS CODE:

```
// Select the button by its ID  
const button = document.getElementById('myButton');  
  
// Add a click event listener  
button.addEventListener('click', function() {  
    // Show an alert when the button is clicked  
    alert('Button clicked!');  
});
```

OUTPUT:

When the button was clicked it shows like an alert box.



TASK-3: Form with Validation

Instructions:

- Design a **contact form** with fields: Name, Email, Message.
- Use AI to generate JavaScript code for **form validation** (e.g., non-empty fields, valid email format).

Add **inline error messages** if input is invalid

CODE:

HTML CODE:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Contact Form with Validation</title>
    <link rel="stylesheet" href="style.css">
</head>
<body>

    <div class="container">
        <h2>Contact Us</h2>

        <!-- Success Message -->
        <div id="successMessage" class="success-message"></div>

        <!-- Contact Form -->
        <form id="contactForm" novalidate>
            <div class="form-group">
                <label for="name">Name:</label>
                <input type="text" id="name" />
                <span class="error-message" id="nameError"></span>
            </div>

            <div class="form-group">
                <label for="email">Email:</label>
                <input type="text" id="email" />
                <span class="error-message" id="emailError"></span>
            </div>

            <div class="form-group">
                <label for="message">Message:</label>
                <textarea id="message"></textarea>
                <span class="error-message" id="messageError"></span>
            </div>

            <button type="submit">Submit</button>
        </form>
    </div>

    <script src="script.js"></script>
</body>
</html>
```

CSS CODE:

```
body {  
    font-family: Arial, sans-serif;  
    background-color: #f4f4f4;  
    padding: 20px;  
}  
  
.container {  
    max-width: 500px;  
    margin: auto;  
    background: white;  
    padding: 30px;  
    border-radius: 8px;  
    box-shadow: 0 0 10px rgba(0,0,0,0.1);  
}  
  
h2 {  
    text-align: center;  
}  
  
.form-group {  
    margin-bottom: 15px;  
}  
  
label {  
    display: block;  
    font-weight: bold;  
}  
  
input, textarea {  
    width: 100%;  
    padding: 10px;  
    margin-top: 5px;  
    box-sizing: border-box;  
}  
  
textarea {  
    resize: vertical;  
    height: 100px;  
}  
  
button {  
    padding: 10px 20px;  
    background-color: #3498db;
```

```

color: white;
border: none;
cursor: pointer;
width: 100%;
font-size: 16px;
}

button:hover {
background-color: #2980b9;
}

.error-message {
color: red;
font-size: 14px;
}

.success-message {
color: green;
font-weight: bold;
text-align: center;
margin-bottom: 15px;
}

```

JS CODE:

```

// Wait until the DOM is fully loaded
document.addEventListener('DOMContentLoaded', function () {
  const form = document.getElementById('contactForm');

  form.addEventListener('submit', function (event) {
    event.preventDefault(); // Prevent actual form submission

    // Clear previous messages
    document.getElementById('successMessage').textContent = '';
    document.getElementById('nameError').textContent = '';
    document.getElementById('emailError').textContent = '';
    document.getElementById('messageError').textContent = '';

    // Get input values
    const name = document.getElementById('name').value.trim();
    const email = document.getElementById('email').value.trim();
    const message = document.getElementById('message').value.trim();

    let isValid = true;

    // Validate name
  });

```

```
if (name === '') {
    document.getElementById('nameError').textContent = 'Name is required.';
    isValid = false;
}

// Validate email
if (email === '') {
    document.getElementById('emailError').textContent = 'Email is required.';
    isValid = false;
} else if (!isValidEmail(email)) {
    document.getElementById('emailError').textContent = 'Please enter a valid email.';
    isValid = false;
}

// Validate message
if (message === '') {
    document.getElementById('messageError').textContent = 'Message is required.';
    isValid = false;
}

// If all fields are valid
if (isValid) {
    document.getElementById('successMessage').textContent = 'Form submitted successfully!';
    form.reset(); // Clear form fields
}
});

// Email format validation using regex
function isValidEmail(email) {
    const emailPattern = /^[^@\s]+@[^\s@]+\.\[^@\s]+$/;
    return emailPattern.test(email);
}
});
```

OUTPUT:

The image shows a contact form titled "Contact Us". At the top, it displays the message "Form submitted successfully!". Below this, there are three input fields: "Name" containing "xyz", "Email" containing "xyz@gmail.com", and "Message" containing "hi". A blue "Submit" button is located at the bottom of the form.

TASK-4: Dynamic Content Generation

Instructions:

- Create a list of items (e.g., product names) using **HTML**.
- Use AI-generated JavaScript to **dynamically add or remove items** from the list when a button is clicked.

CODE:

HTML CODE:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Dynamic List</title>
  <link rel="stylesheet" href="style.css">
</head>
<body>
```

```

<div class="container">
  <h2>Product List</h2>

  <!-- Buttons -->
  <div class="buttons">
    <button id="addItemBtn">Add Item</button>
    <button id="removeItemBtn">Remove Item</button>
  </div>

  <!-- Item List -->
  <ul id="itemList">
    <li>Product 1</li>
    <li>Product 2</li>
    <li>Product 3</li>
  </ul>
</div>

<script src="script.js"></script>
</body>
</html>

```

CSS CODE:

```

body {
  font-family: Arial, sans-serif;
  background: #f5f5f5;
  padding: 40px;
}

.container {
  max-width: 400px;
  margin: auto;
  background: white;
  padding: 30px;
  border-radius: 8px;
  box-shadow: 0 2px 8px rgba(0, 0, 0, 0.1);
}

h2 {
  text-align: center;
}

ul {
  list-style-type: disc;
  padding-left: 20px;
}

```

```

li {
  margin: 8px 0;
  font-size: 16px;
}

.buttons {
  display: flex;
  justify-content: space-between;
  margin-bottom: 20px;
}

button {
  padding: 10px 15px;
  font-size: 14px;
  background-color: #3498db;
  color: white;
  border: none;
  border-radius: 4px;
  cursor: pointer;
}

button:hover {
  background-color: #2980b9;
}

```

JS CODE:

```

// Wait until the DOM is fully loaded
document.addEventListener('DOMContentLoaded', function () {
  const itemList = document.getElementById('itemList');
  const addItemBtn = document.getElementById('addItemBtn');
  const removeItemBtn = document.getElementById('removeItemBtn');

  let itemCount = itemList.children.length; // Start with existing items

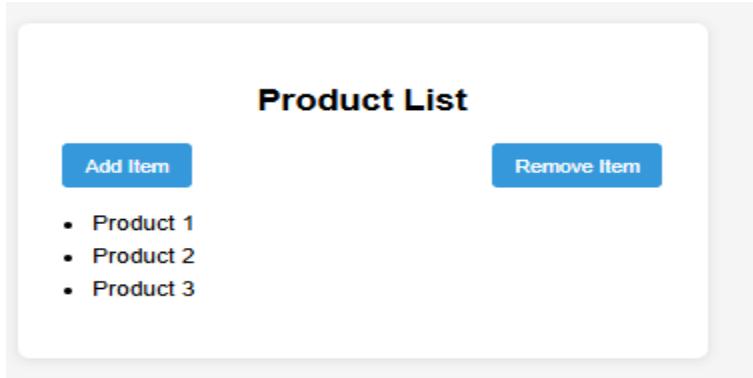
  // Add item when button is clicked
  addItemBtn.addEventListener('click', function () {
    itemCount++;
    const newItem = document.createElement('li');
    newItem.textContent = `Product ${itemCount}`;
    itemList.appendChild(newItem);
  });

  // Remove last item when button is clicked
  removeItemBtn.addEventListener('click', function () {

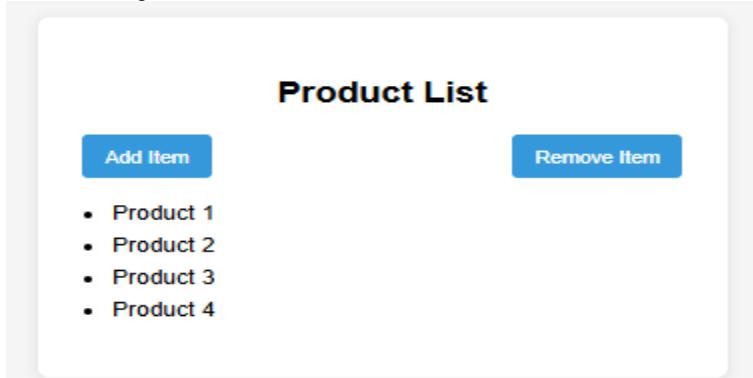
```

```
if (itemList.children.length > 0) {  
    itemList.removeChild(itemList.lastElementChild);  
    itemCount--;  
}  
});  
});
```

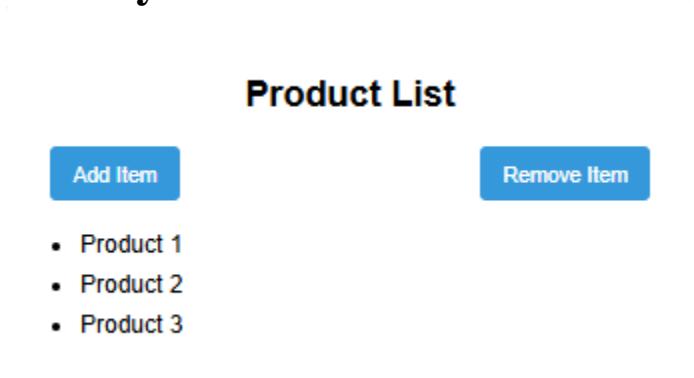
OUTPUT:



When you click on add item it will added to list.



When you click on remove item it will remove from list.



Task 5: Styled Modal Popup

Instructions:

- Use AI to generate a modal popup that opens when a button is clicked.
- Style the modal using CSS with a semi-transparent overlay.
- Include a close button that hides the modal.

CODE:

HTML CODE:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Styled Modal Popup</title>
  <link rel="stylesheet" href="style.css">
</head>
<body>

  <!-- Button to open the modal -->
  <button id="openModalBtn">Open Modal</button>

  <!-- Modal overlay and content -->
  <div id="modalOverlay" class="modal-overlay">
    <div class="modal-box">
      <span id="closeModalBtn" class="close-button">&times;</span>
      <h2>Modal Title</h2>
      <p>This is some content inside the modal popup.</p>
    </div>
  </div>

  <script src="script.js"></script>
</body>
</html>
```

CSS CODE:

```
/* General page styles */
body {
  font-family: Arial, sans-serif;
  background: #f0f0f0;
  padding: 50px;
```

```
    text-align: center;
}

/* Button styles */
button {
    padding: 12px 20px;
    font-size: 16px;
    background-color: #3498db;
    color: white;
    border: none;
    border-radius: 5px;
    cursor: pointer;
}

button:hover {
    background-color: #2980b9;
}

/* Modal overlay */
.modal-overlay {
    display: none; /* Hidden by default */
    position: fixed;
    top: 0;
    left: 0;
    width: 100%;
    height: 100%;
    background-color: rgba(0, 0, 0, 0.5); /* Semi-transparent overlay */
    justify-content: center;
    align-items: center;
    z-index: 1000;
}

/* Modal box */
.modal-box {
    background: white;
    padding: 30px;
    border-radius: 8px;
    width: 400px;
    max-width: 90%;
    position: relative;
    box-shadow: 0 4px 12px rgba(0,0,0,0.3);
}

/* Close button (X) */
.close-button {
    position: absolute;
    top: 10px;
    right: 15px;
```

```

    font-size: 24px;
    color: #888;
    cursor: pointer;
}
.close-button:hover {
    color: #333;
}

```

JS CODE:

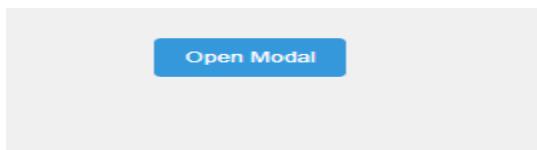
```

document.addEventListener('DOMContentLoaded', function () {
    const openModalBtn = document.getElementById('openModalBtn');
    const modalOverlay = document.getElementById('modalOverlay');
    const closeModalBtn = document.getElementById('closeModalBtn');

    // Show the modal
    openModalBtn.addEventListener('click', function () {
        modalOverlay.style.display = 'flex';
    });
    // Close the modal when "X" is clicked
    closeModalBtn.addEventListener('click', function () {
        modalOverlay.style.display = 'none';
    });
    // Close the modal if clicking outside the modal box
    modalOverlay.addEventListener('click', function (e) {
        if (e.target === modalOverlay) {
            modalOverlay.style.display = 'none';
        }
    });
});

```

OUTPUT:



When you click on “open modal” it will show output like this.

