

## 1. Concept of CSS (Cascading Style Sheets)

**\*\*What is CSS?\*\***

CSS, which stands for Cascading Style Sheets, is a styling language used to control the presentation and layout of HTML documents. It allows you to apply styles such as colors, fonts, spacing, and positioning to HTML elements. CSS works by selecting HTML elements and applying styles to them, providing a separation between content (HTML) and presentation (CSS).

## ### 2. Methods of Using CSS in HTML

There are three main ways to include CSS in an HTML document:

### #### 2.1. Inline CSS:

You can apply styles directly to HTML elements using the `style` attribute.

```
```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Inline CSS Example</title>
</head>
<body>

  <h1 style="color: blue; text-align: center;">This is a Heading</h1>
  <p style="font-size: 16px; line-height: 1.5;">This is a paragraph with inline styles.</p>

</body>
</html>
```
```

### #### 2.2. Internal (Embedded) CSS:

You can include CSS styles within the `<style>` tag in the `<head>` section of your HTML document.

```
```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
```

```

<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Internal CSS Example</title>
<style>
  h1 {
    color: blue;
    text-align: center;
  }
  p {
    font-size: 16px;
    line-height: 1.5;
  }
</style>
</head>
<body>

  <h1>This is a Heading</h1>
  <p>This is a paragraph with internal styles.</p>

</body>
</html>
'''

```

#### #### 2.3. External CSS:

You can create a separate CSS file and link it to your HTML document using the ``<link>`` tag.

```

**styles.css:**

```

```

'''css
/* styles.css */
h1 {
  color: blue;
  text-align: center;
}

p {
  font-size: 16px;
  line-height: 1.5;
}
'''

```

```

**index.html:**

```

```

'''html

```

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>External CSS Example</title>
  <link rel="stylesheet" href="styles.css">
</head>
<body>

  <h1>This is a Heading</h1>
  <p>This is a paragraph with external styles.</p>

</body>
</html>
...

```

### ### 3. Create and Implement a CSS Stylesheet

Let's create a simple CSS stylesheet and link it to an HTML document.

```

**styles.css:**

```css
/* styles.css */
body {
  font-family: 'Arial', sans-serif;
  background-color: #f4f4f4;
  margin: 0;
  padding: 0;
  display: flex;
  align-items: center;
  justify-content: center;
  height: 100vh;
}

.container {
  background-color: #fff;
  border-radius: 8px;
  box-shadow: 0 0 20px rgba(0, 0, 0, 0.1);
  padding: 30px;
  width: 400px;
}

```

```
h1 {
  color: #3498db;
  margin-bottom: 20px;
}

label {
  font-weight: bold;
  margin-bottom: 8px;
  color: #333;
}

input, textarea, select {
  width: 100%;
  padding: 12px;
  margin-bottom: 16px;
  border: 1px solid #ddd;
  border-radius: 6px;
  font-size: 14px;
}

.buttons {
  display: flex;
  justify-content: space-between;
}

input[type="submit"], input[type="reset"] {
  width: 48%;
  background-color: #3498db;
  color: #fff;
  cursor: pointer;
  border: none;
  border-radius: 6px;
  padding: 12px;
  font-size: 14px;
  transition: background-color 0.3s ease-in-out;
}

input[type="submit"]:hover, input[type="reset"]:hover {
  background-color: #2980b9;
}
...
```

**\*\*index.html:\*\***

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

  <div class="container">
    <form action="#" method="post">
      <h1>Contact Us</h1>

      <label for="name">Name:</label>
      <input type="text" id="name" name="name" placeholder="Your name" required>

      <label for="email">Email:</label>
      <input type="email" id="email" name="email" placeholder="Your email" required>

      <label for="message">Message:</label>
      <textarea id="message" name="message" placeholder="Your message" rows="4"
required></textarea>

      <label>Gender:</label>
      <label><input type="radio" name="gender" value="male"> Male</label>
      <label><input type="radio" name="gender" value="female"> Female</label>

      <label>Interests:</label>
      <label><input type="checkbox" name="interests" value="music"> Music</label>
      <label><input type="checkbox" name="interests" value="sports"> Sports</label>

      <label for="country">Country:</label>
      <select id="country" name="country">
        <option value="usa">United States</option>
        <option value="canada">Canada</option>
        <option value="uk">United Kingdom</option>
      </select>

      <div class="buttons">
        <input type="submit" value="Submit">
```

```
        <input type="reset" value="Reset">
    </div>
</form>
</div>

</body>
</html>
...

```

This example includes an external CSS file (`styles.css`) to style a simple form. The styles focus on creating a clean and professional appearance for the form elements. Feel free to modify the styles based on your preferences.