FSWD Assignment #1

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1. Knowledge

Definitions

HTML (Hypertext Markup Language): HTML serves as the primary markup language for structuring sections, paragraphs, and hyperlinks within web pages. It comprises various elements that encapsulate different content segments to dictate their appearance or behavior.

CSS (Cascading Style Sheets): CSS acts as a stylesheet language employed to define the visual presentation of HTML or XML documents (inclusive of XML derivatives like SVG). It specifies how elements should be displayed on screens, in print, or across different media.

Foundational Structure of an HTML Document:

```
<!DOCTYPE html>
<html>
<head>
  <title>Page Title</title>
</head>
<body>
  <h1>This is a Heading</h1>
  <p>This is a paragraph.</p>
</body>
</html>
```

HTML Elements vs Attributes

Distinguishing HTML Elements from Attributes HTML Elements: These constitute the fundamental components of HTML pages and are denoted by tags. An element typically comprises an opening tag, content, and a closing tag. HTML Attributes: These furnish supplementary details about elements. They are invariably specified within the opening tag of an HTML element and usually come in pairs denoting name and value (e.g., name="value").

2. Comprehension

Purpose and Usage of Common HTML Elements and Attributes

<head>: Contains meta-information about the HTML document, such as CSS links and the title.

<body>: Contains the content of the HTML document, such as text, images, and links.

<p>: Defines a paragraph in the HTML document.

Significance of Links, Tables, and Forms

Links: Allow navigation between pages or sections of a website.

Tables: Used to display data in a structured format.

Forms: Enable user input and interaction with the website.

Role of Inline Styling

Inline styling is used to apply CSS directly within an HTML element using the style attribute. It allows quick, element-specific styling but is less efficient for styling multiple elements across a site.

3. Application

Example HTML Document

```
<!DOCTYPE html>
<html>
<head>
  <title>Example Page</title>
</head>
<body>
  <h1 style="color:blue;">This is a Blue Heading</h1>
  <p style="background-color: yellow;">This paragraph has a yellow background.</p>
```

```
    <a href="https://www.example.com" style="text-decoration: none;">Visit
Example</a>
    <table style="border: 1px solid black;">
      <tr>
        <td>Name</td>
        <td>Age</td>
      </tr>
      <tr>
        <td>moiz khan</td>
        <td>20</td>
      </tr>
    </table>
    <form>
      <input type="text" name="firstname" placeholder="First Name">
      <input type="submit" value="Submit">
    </form>
</body>
</html>
```

4. Analysis

Importance of HTML Page Layouts

Effective page layouts are crucial for user experience as they guide the user's eye and flow of information, ensuring easy navigation and access to information. Layouts affect usability, accessibility, and how content is perceived, influencing user engagement and satisfaction.

Comparison of Different HTML Form Elements

Form Element	Description	Functionality
`<input type="text">`	Allows users to enter a single line of text.	Used for collecting names, email addresses, or other short text responses.
`<input type="password">`	A text box that hides characters.	For entering passwords or sensitive information that should not be displayed on screen.
`<textarea>`	A multi-line text input.	Ideal for collecting longer inputs from users, such as comments or messages.
`<input type="checkbox">`	Allows users to select one or more options from a set.	Used for toggles, agreeing to terms, or any situation where multiple selections are allowed.
`<input type="radio">`	Allows users to select a single option from a set.	Suitable for multiple-choice questions where only one answer is correct.
`<select>`	A drop-down list that allows users to choose one option from a list.	Useful for saving space on the form while offering several options, like choosing a country from a list.

Form Element	Description	Functionality
`<input type="file">`	Lets users upload files.	Used in forms requiring file uploads, such as documents, images, or resumes.
`<input type="submit">`	A button that submits the form to a server.	The primary means for users to submit the form data for processing.

github link:

https://moizk678.github.io/fswd/

webpage code:

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Comprehensive Webpage Example</title>
    <style>
        body {
            font-family: Arial, sans-serif;
            margin: 0;
            padding: 0;
            box-sizing: border-box;
            background-color: #f0f0f0;
        }
        .header {
            background-color: #9370DB; /* Milky Purple */
            color: #ffffff;
            padding: 20px;
            text-align: center;
        }
        .nav {
            background: #333;
            overflow: hidden;
            text-align: center;
        }
        .nav a {
            color: white;
            text-align: center;
```

```css
        padding: 14px 16px;
        text-decoration: none;
        font-size: 17px;
        display: inline-block;
        margin: 0 10px;
    }
    .nav a:hover {
        background-color: #ddd;
        color: black;
    }
    .content {
        padding: 20px;
        text-align: center;
    }
    .image-gallery {
        display: flex;
        flex-wrap: wrap;
        justify-content: center;
        margin-top: 20px;
    }
    .image-gallery img {
        width: 30%;
        margin: 5px;
        border-radius: 5px;
    }
    blockquote {
        background: #f9f9f9;
        border-left: 10px solid #ccc;
        margin: 1.5em auto;
        padding: 0.5em 20px;
        max-width: 600px;
    }
    blockquote:before {
        color: #ccc;
        content: open-quote;
        font-size: 4em;
        line-height: 0.1em;
        margin-right: 0.25em;
        vertical-align: -0.4em;
    }
    blockquote p {
        display: inline;
    }
    .footer {
        background-color: #9370DB; /* Milky Purple */
```

```
            color: #ffffff;
            padding: 20px;
            text-align: center;
            position: fixed;
            bottom: 0;
            width: 100%;
        }
    </style>
</head>
<body>

<div class="header">
    <h1>Muhammad Moiz Khan-210897 FSWD ASSIGNMENT</h1>
</div>

<div class="nav">
    <a href="#home">Home</a>
    <a href="#news">info</a>
    <a href="#More">More</a>
    <a href="#about">Contact</a>
</div>

<div class="content">
    <h2>Quotations of Maya Angelou</h2>
    <blockquote cite="https://example.com/source-of-quote">
        <p>The only way to do great work is to love what you do. - Maya
Angelou</p>
    </blockquote>
    <p>Maya Angelou's wisdom on the importance of passion and love in work
is truly inspiring.</p>

    <h2>Images</h2>
    <div class="image-gallery">
        <img src=".\images\image1.jpeg" alt="Placeholder Image 1">
        <img src=".\images\image2.jpeg" alt="Placeholder Image 2">
        <img src=".\images\image3.jpeg" alt="Placeholder Image 3">
    </div>
</div>

<div class="footer">
    <p>&copy; 2024 Our Webpage. All rights reserved.</p>
</div>

</body>
</html>
```