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Module :18 practice Set
Github link of all code:

—------------------------PRACTICE SET:0)---------------------------------------—--

Question:01

1. List out the features of HTML5

Answer:

HTML5 offers a significant leap forward compared to its predecessors. Here are some of its key features:

1. Semantic Elements: HTML5 introduces new semantic elements that describe the document's content more meaningfully. These elements, like `<header>`, `<nav>`, `<section>`, `<article>`, `<aside>`, `<footer>`, and more, provide a clearer understanding of the page structure for both browsers and developers.

2. Rich Media Support: Embedding multimedia was previously dependent on external plugins. HTML5 introduces native support for audio and video elements (`<audio>` and `<video>`), allowing direct inclusion of multimedia content within web pages.

3. Canvas: The `<canvas>` element provides a powerful tool for creating dynamic graphics and animations directly on the webpage using JavaScript. Developers can leverage this for various purposes, like games, charts, and interactive elements.

4. Offline and Storage: HTML5 introduces mechanisms for web applications to function even without an internet connection. Local storage (`localStorage`) and session storage (`sessionStorage`) allow persistent or temporary data storage within the user's browser for offline use or future reference.

5. Web Sockets: This feature enables real-time, two-way communication between web servers and browsers. It facilitates constant data exchange without the need for page refreshes, making web applications more interactive and responsive.

Question:2

2. What are HTML Entities? List out 5 commonly used HTML entities.

Answer:

Here are five commonly used HTML entities:

1. &: This entity represents the ampersand character (&).
2. ": This entity represents the double quotation mark character (").
3. ': This entity represents the single quotation mark character (').
4. <: This entity represents the less than symbol (<).
5. >: This entity represents the greater than symbol (>).

HTML entities are used to represent characters that have special meaning in HTML, such as the less than symbol (<), which is used to define HTML tags. By using entities, you can ensure that these characters are displayed correctly in a web browser.

Question:3

3. Define accessibility in the context of web development. Discuss why it's essential to create accessible websites and how it benefits different user groups

Answer:-

Accessibility in web development refers to the practice of creating websites that can be used by everyone, regardless of their ability. This

includes people with disabilities, such as visual impairments, hearing impairments, cognitive disabilities, and motor impairments.

Here are some of the reasons why it's important to create accessible websites:

- **It's the right thing to do:** Everyone deserves to have access to information and services online.
- **It's the law:** In many countries, there are laws that require websites to be accessible to people with disabilities.
- **It's good for business:** Accessible websites can reach a wider audience, which can lead to increased sales and customer satisfaction.

Question:4

4. List any 3 ways which help us in improving the accessibility of HTML

Answer:

There are many different ways to make a website accessible. Here are a few examples:

- **Use alt text for images:** Alt text is a description of an image that is read by screen readers for people who are blind or visually impaired.
- **Use clear and concise language:** Avoid using jargon or technical terms that people may not understand.
- **Use proper heading structure:** Headings help to organize the content on a webpage and make it easier for people to navigate.
- **Ensure sufficient color contrast:** People with visual impairments may have difficulty seeing text if the contrast between the text color and the background color is not high enough.
- **Use keyboard navigation:** People who cannot use a mouse should be able to navigate the website using a keyboard.

By following these guidelines, you can help to create websites that are accessible to everyone.

Question:5;

5. Create a web page that highlights the features of HTML5. Use appropriate semantic tags to structure the content and showcase at least three key features of HTML5 with explanations.

Answer:

```html
<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

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

    <title>HTML5 Features</title>

    <link rel="stylesheet" href="p5.css">

</head>

<body>

    <h1>Features of HTML5</h1>

    <section class="feature">

        <h2>Semantic Elements</h2>

        <p>HTML5 introduces semantic elements that describe the content
of a web page more meaningfully.

            This  improves accessibility and  search engine
optimization (SEO).</p>

    </section>

    <section class="feature">

        <h2>Rich Media Support</h2>

        <p>HTML5 includes native support for audio and video elements,
eliminating the need for external plugins

            for multimedia playback.</p>
```

```
    </section>

    <section class="feature">

        <h2>Canvas</h2>

        <p>The canvas element allows for dynamic graphics and
animations directly on the webpage using JavaScript.</p>

    </section>

    </body>

</html>
```
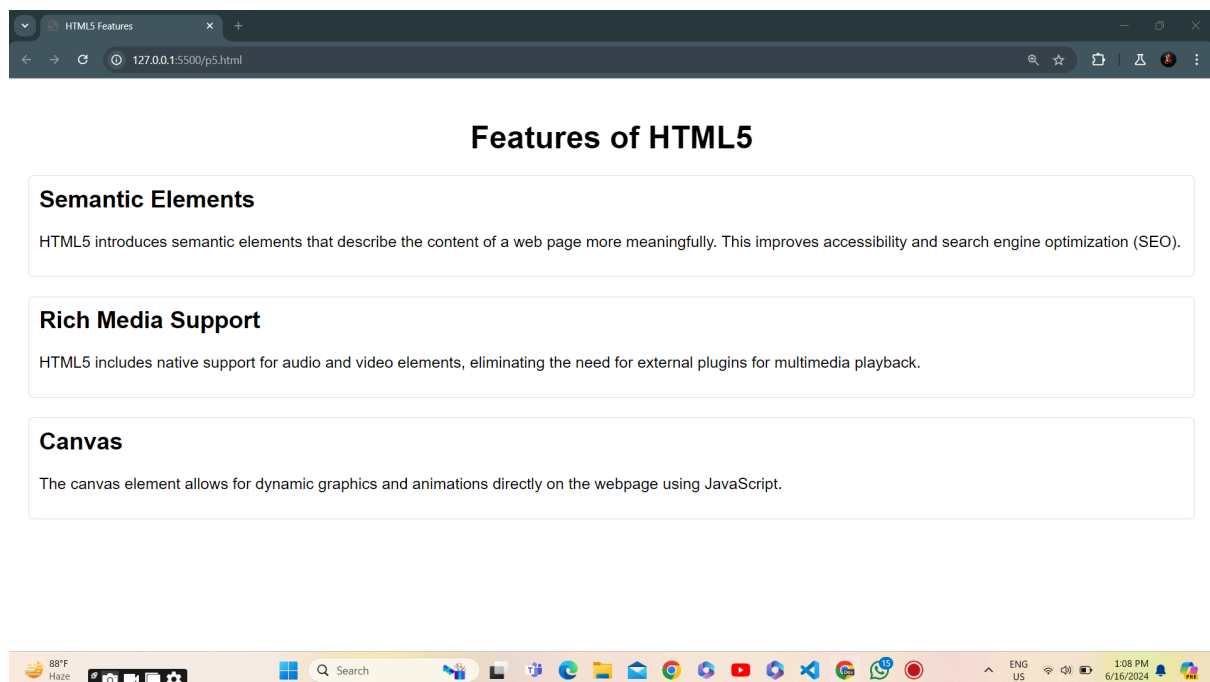
Output:-

Features of HTML5

Semantic Elements

HTML5 introduces semantic elements that describe the content of a web page more meaningfully. This improves accessibility and search engine optimization (SEO).

Rich Media Support

HTML5 includes native support for audio and video elements, eliminating the need for external plugins for multimedia playback.

Canvas

The canvas element allows for dynamic graphics and animations directly on the webpage using JavaScript.

Question:6

6. Create a simple web page which has a table. The table must have 2 columns HTML and HTML5. The table should include a minimum of three rows describing the differences between HTML and HTML5.

Answer:

```html
<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

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

    <title>HTML vs HTML5</title>

    <link rel="stylesheet" href="p6.css">

</head>

<body>

    <table>

        <caption>Comparison of HTML and HTML5</caption>

        <thead>

            <tr>

                <th>HTML</th>

                <th>HTML5</th>

            </tr>

        </thead>

        <tbody>

            <tr>

                <td>- The standard markup language for creating web
pages</td>

                <td>- The latest version of HTML</td>

            </tr>

            <tr>

                <td>- Limited multimedia support</td>
```
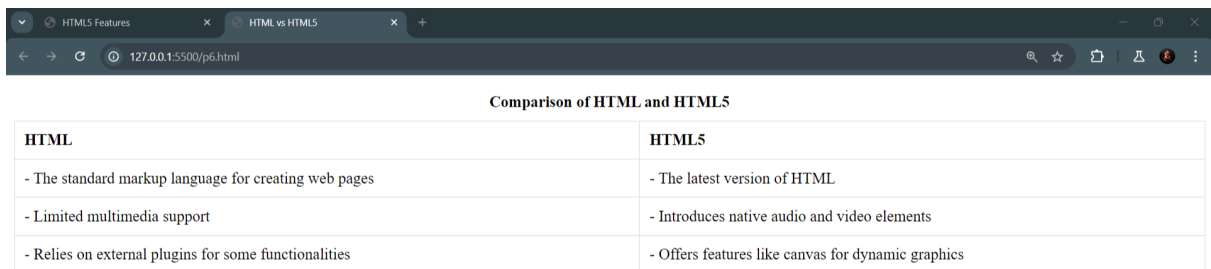
```html
            <td>- Introduces native audio and video elements</td>

        </tr>

        <tr>

            <td>- Relies on external plugins for some
functionalities</td>

            <td>- Offers features like canvas for dynamic
graphics</td>

        </tr>

    </tbody>

</table>

</body>

</html>
```

Css code:

```css
table {

    border-collapse: collapse;

    width: 100%; /* Adjust width as needed */

  }


  th, td {

    padding: 10px;

    border: 1px solid #ddd;

    text-align: left;

  }
```

```css
caption {

  text-align: center;

  font-weight: bold;

  padding: 10px;

}
```

Output:

HTML	HTML5
Comparison of HTML and HTML5	
- The standard markup language for creating web pages	- The latest version of HTML
- Limited multimedia support	- Introduces native audio and video elements
- Relies on external plugins for some functionalities	- Offers features like canvas for dynamic graphics