Full Stack Development-Assignment

1) HTML Stands for **Hypertext Markup Language**

2) What is current version of HTML is **HTML5.X**

3) IDE Stands for **Integrated Development Environment**

4) Which IDE Is Suitable IDE to develop web applications **Visual Studio Code**

5) CSS Stands for **Cascading Style Sheets**

6) Why CSS? Write minimum 3 points

1. It is used for styling and layout of web pages.
2. It allows controlling the presentation of HTML elements, enhancing the visual appeal and user experience of websites.
3. It enhances the visual presentation, layout, and overall user experience of websites while maintaining a clear separation between content and design.

7) What is the Current version of CSS? **CSS3.X**

8) What is Bootstrap?

It is a free, open source front-end development framework for the creation of websites and web apps.

9) What is Angular?

Angular allows us to build applications across all platforms. It is an open-source platform that uses TypeScript.

10) What is React?

React is an open-source JavaScript library designed for building user interfaces, particularly for single-page applications.

11)Explain MEAN Stack?

The MEAN stack is a collection of JavaScript-based technologies used for building dynamic web applications. MongoDB, Express. js, AngularJS, and Node. Js

12) Explain MERN Stack?

The MERN stack is a powerful technology stack used for building dynamic and interactive web applications. MongoDB, Express.js, React, and Node.js.

13) Explain MEVN Stack?

The MEVN stack is a modern, full-stack JavaScript solution that allows to build dynamic and scalable web applications using a single programming language, JavaScript, across both the client and server side. MongoDB, Express.js, Vue.js, and Node.js.

14) Write Features of HTML5.X?

- WebSocket
- Web Worker
- Storages API
- Geolocation API
- Drag & Drop API
- Semantic Elements

15) Explain Semantic Elements in HTML5 with Diagram?

Semantic Elements increases application readability

```html
<article>
  <header>
    <h1>The Rise of Web Semantics</h1>
  </header>
  <section>
    <p>Understanding semantic HTML is essential for modern web development...</p>
  </section>
  <aside>
    <h2>Did You Know?</h2>
    <p>Semantic HTML was a major leap forward for accessibility...</p>
  </aside>
  <footer>
    <p>Published on October 04, 2024, by ramanipraveen</p>
  </footer>
</article>
```

16) How to play audio in HTML5?

```html
<audio controls>
<source src="audio/guitar.mp3" type="audio/mp3">
<source src="audio/guitar.ogg" type="audio/ogg">
```

```
<p>Your browser doesn't support HTML5 audio. Here is a <a
href="audio/guitar.mp3">link to the audio</a> instead.</p>
</audio>
```

17)How to play Video in HTML5
```
<video controls width="400" height="400" loop muted poster="img/3.png">
<source src="video/1.mp4" type="video/mp4">
   <source src="video/1.ogg" type="video/ogg">
   <source src="video/1.webm" type="video/webm">    <p>Your browser doesn't
support HTML5 video. Here is a <a href="video/1.mp4">link to the video</a>
instead.</p></video>
```

18)What is attribute write few points?
Ans: Provide additional information about HTML elements.
   - Example: `class`, `id`, `style`, `href`, `src`.
   - Attributes are written inside the opening tag and usually have a name-value
pair.

19) Write basic Structure of Web Pages
Ans: <!DOCTYPE html>
```
<html>
<head>
//METADATA
</head>
<body>
//MAIN CONTENT
    </body>
    </html>
```

20) What DOCTYPE?
Ans: DOCTYPE Representing version of HTML

21) Write DOCTYPE for HTML5.X
<!DOCTYPE html>

22) What is METADATA?
Ans: Data about webpage called as METADATA

23) Write the Differences Between Container TAGS and Non-Container TAGS?
  - Ans: Container Tags: Have both opening and closing tags (e.g., `<div></div>`, `<p></p>`).
  - Non-Container Tags: Self-closing, no closing tag (e.g., `<img />`, `<br />`).
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24) How to develop static web pages

To develop static web pages, you use HTML, CSS, and sometimes JavaScript for interactivity.

25)What is the Extension for HTML Pages

The extension for HTML pages is `.html` or `.htm`.

26) What are the types of tags?

Ans: Container tags and non-container tags

27) What are container tags?

Ans: Container Tags: Tags that enclose content, requiring both an opening and closing tag (e.g., `<div>`, `<p>`).

28) What are non-container Tags>

Ans: Non-Container Tags: Tags that do not have closing counterparts, such as `<img>` or `<input>`.

29) What is HTML Element?

Ans: A single component of an HTML document, defined by a start tag, content (optional), and an end tag (optional).

30) What is the extension of CSS files? `.css`.

31) What is the extension of JavaScript files? '.js'

32) How to implement Forms Validations?

- HTML5 validation attributes like `required`, `pattern`, `maxlength`.
  - JavaScript to implement custom validation rules.

33) How to execute HTML, CSS and JavaScript?

- HTML and CSS are executed by opening the `.html` file in a browser.
- JavaScript is executed in the browser when embedded in HTML or linked to a `.js` file.

34) Write the Examples for Browsers?
-   Ans: Google Chrome
-   Mozilla Firefox
-   Microsoft Edge

35) Write the Examples for IDE'S?
Ans: Notepad
Edit Plus
Notepad++
Visual Studio Code
Eclipse

36) Who given VSCode?
VSCode was developed by Microsoft.

37) Which IDE Recommended to develop web applications
-   VSCode
-   WebStorm

38) How to give line break?

39) How to draw Horizontal line in webpages?   <hr />

40)Are comments executed by browsers? (yes/no)   NO

41)Write the Syntax for HTML Comments
Ans: <!-- This is a comment -->