

HTML Basics

Q1. Define HTML. What is the purpose of HTML in web development?

ANS.

HTML stands for HyperText Markup Language. HTML is the standard language used to create and structure content on the web.

Purpose of HTML in Web Development is ;

1. Structure Content: HTML organizes content into a structured format using elements and tags. For example, `<h>` for headings, `<p>` for paragraphs, and `<div>` for divisions.
2. Create Web Page Layouts: HTML helps define sections of a web page like header, footer, navigation, main content, etc..
3. Embed Media: HTML supports the embedding of images, audio and other multimedia using tags like ``, `<audio>` etc..
4. Linking: HTML uses hyperlinks `<a>` tag to connect to other pages or websites.

Q2: Explain the basic structure of an HTML document. Identify the mandatory tags and their purposes.

ANS.

An HTML is “HyperText Markup Language document” made up of elements that tell the browser how to display the content.

Structure :

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>

  <title>Structure</title>

</head>

<body>

  <h1>Hello</h1>

  <p>HTML page</p>

</body>

</html>
```

Mandatory tags and their purposes :

1. **<!DOCTYPE html>**

Purpose: Tells the browser that the document is written in HTML5 or HTML4. It is not an HTML tag.

2. **<html> </html>**

Purpose: The root element that contains all HTML content.

3. **<head> </head>**

Purpose: Contains **metadata** (information about the web page) that is not displayed directly on the page. It include :

<title> – page title

<meta> – viewpoint

<link> – css or other file

<script> – JavaScript

4. **<body> </body>**

Purpose: Contains all visible content of the webpage – text, images, videos, links, etc.

Q3.What is the difference between block-level elements and inline elements in HTML? Provide examples of each.

Ans.

Block-Level Elements :

Elements that start on a new line and take up the full width available, stretching from left to right. Takes up full width by default. Example ;

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title>Structure</title>
```

```
</head>
```

```
<body>
```

```
<p>HTML page</p>
```

```
</body>
```

```
</html>
```

Inline elements :

Elements that do not start on a new line continue on the same line. They only take as much width as necessary. Example ;

```
<!DOCTYPE html>

<html>

<head>

<title>Structure</title>

</head>

<body>

<span>hello</span>

<span>parmar</span>

</body>

</html>
```

Q4.: Discuss the role of semantic HTML. Why is it important for accessibility and SEO? Provide examples of semantic elements.

ANS.

Semantic HTML means using HTML elements that have a meaningful name and purpose, describing their role in the content rather than just their appearance.

Role of Semantic HTML :

Structure & Readability : Makes your code easier for developers to understand.

Accessibility : Screen readers can navigate content correctly.

SEO (Search Engine Optimization) : Search engines better understand your page content and importance.

Maintainability : Easier to style and modify without breaking meaning.

Important :

Accessibility : Screen readers rely on semantic tags to tell visually impaired users what section they're in.

SEO : Search engines like Google use semantic elements to understand:

Which part is a heading

is the main article content

Which is navigation or footer

Example :

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title>Semantic Example</title>
```

```
</head>
```

```
<body>
```

```
<h1>My Blog</h1>
```

```
<footer>
```

```
<p>&copy; 2025 My Blog</p>
```

```
</footer>
```

```
</body>
```

```
</html>
```

