1. Are the HTML tags and elements the same thing?

No. HTML elements are defined by a starting tag, closing tag and may contain some content.

For example : <h1>Heading 1</h1> is a HTML element but just <h1> is a starting tag and </h1> is a closing tag

1. What are void elements in HTML?

HTML elements which do not have closing tags or do not need to be closed are Void elements. For Example <br />, <img />, <hr />, etc.

1. What are HTML Entities?

In HTML some characters are reserved like ‘<’, ‘>’, ‘/’, etc. To use these characters in our webpage we need to use the character entities called HTML Entities.

|  |  |
| --- | --- |
|  |  |
| < | &lt; |
| > | &gt; |
| & | &amp; |
| ‘ | &apos; |
| “ | &quot; |
| Space | &nbsp; |

1. How to optimize website assets loading?

* **CDN hosting** - A CDN or content delivery network is geographically distributed servers to help reduce latency.
* **File compression** - This is a method that helps to reduce the size of an asset to reduce the data transfer
* **File concatenation** - This reduces the number of HTTP calls
* Minify scripts - This reduces the overall file size of js and CSS files
* Parallel downloads - Hosting assets in multiple subdomains can help to bypass the download limit of 6 assets per domain of all modern browsers. This can be configured but most general users never modify these settings.
* Lazy Loading - Instead of loading all the assets at once, the non-critical assets can be loaded on a need basis.

1. What is Doctype & what are the different type of doctypes?

It is a special tag that specifies the document type and version of HTML that a web page follows.

<!DOCTYPE html> at the beginning of an HTML document, it means that the page is written using HTML5 standards.

* Strict Doctype
* Transitional Doctype
* Frameset Doctype

1. How can we indicate character set being used by HTML Document?

We can use <meta > tag.

For Example: <meta characterset= “UTF-8”>

1. Can we display a web page inside a web page or Is nesting of webpages possible?

Yes, we can display a web page inside another web page. HTML provides a tag <iframe> using which we can achieve this functionality.

Example : <iframe src= “url of the web page to embed” />

1. How is Cell Padding different from Cell Spacing?

Cell Spacing is the space or gap between two consecutive cells. Whereas, Cell Padding is the space or gap between the text/content of the cell and the edge/ border of the cell.

1. What is the difference between “display: none” and “visibility: hidden”, when used as attributes to the HTML element.

When we use the attribute “visibility: hidden” for an HTML element then that element will be hidden from the webpage but still takes up space. Whereas, if we use the “display: none” attribute for an HTML element then the element will be hidden, and also it won’t take up any space on the webpage.

1. Difference Between ID & Class attribute.

ID Attribute

* The id attribute is used to provide a unique identifier for a single HTML element on a page.
* An id value should be unique within the entire HTML document. No two elements should have the same id.

Class Attribute

* The class attribute is used to assign one or more class names to an HTML element.
* Multiple elements can share the same class, and the same class can be applied to multiple elements.

1. Significance of Head & Body Tag.

Head

* This tag contains Meta Data about web page.
* <Link>, <meta>, <Style>, <Script> are contained in Head tag.

Body

* Contains body of HTML Document.

1. How can we include audio or video in a webpage?

HTML5 provides two tags: <audio> and <video> tags using which we can add the audio or video directly in the webpage.

1. Semantic & Non Semantic Element?

Semantic elements in HTML are tags that carry *meaningful information about the structure* and content of a web page. Eg. <header>, <main>, <section>, <nav>, <footer>, etc.

non-semantic elements are *used for layout, formatting,* and other purposes, without providing inherent meaning or structure to the content they enclose. Eg.<div>, <span>, <hr>, <br>, etc.

1. What is difference between Block and inline elements?

Block Element

A block-level element always starts on a new line, and the browsers automatically add some space (a margin) before and after the element.

Inline Element

An inline element does not start on a new line and only takes up as much width as necessary.

1. What is the difference between link tag <link> and anchor tag <a>?

The <link> tag links external resources, such as CSS stylesheets, to an HTML document. The <a> tag creates links to other pages or resources within the same document.

1. What is an image map?

An image map allows us to define clickable regions on an image, each of which corresponds to a different hyperlink or action.

1. How to create a new HTML Element?

<script>document.createElement(“myElement”)</script>

<myElement>Hello!!</myElement>

1. Can we create multicolor text on web page?

<font color= “color-name”></font>

1. How to make a picture the background image of web page?

<body background= “image.gif”>

1. What is SVG?

Used for creating two-dimensional vector graphics.

1. Media Type Supported by HTML

* Audio

<audio controls>  
 <source src="audio.mp3" type="audio/mpeg">

Your browser does not support the audio element.

</audio>

* Video

<video controls>  
 <source src="video.mp4" type="video/mp4">

Your browser does not support the video element.

</video>

1. Different API’s introduced in HTML5.

Canvas API

Web Audio API

Web Storage API

IndexedDB API

File API

Geolocation API

WebSockets API

Web Workers API

Drag and Drop API

Notifications API

WebRTC (Web Real-Time Communication) API

Fullscreen API

History API

Service Workers API

1. SVG (Scalable Vector Images)

JPEG, PNG, GIF are Bitmap Images.

SVG is vector Image

1. How to use SVG in HTML?

1. <img src = “filename.svg” width = “200px” height = “200px”/>

2. <svg width="100" height="100">

<circle cx="50" cy="50" r="40" stroke="green" stroke-width="4" fill="yellow" />

</svg>

3. Using css background

1. What is ViewPort and ViewBox in HTML?

Viewport is the visible area of the SVG image.  
The viewBox attribute defines the position and dimension of an SVG viewport. The value of the viewBox attribute is a list of four numbers: min-x, min-y, width and height.

<svg viewBox="0 0 100 100" >

1. SVG Line

<svg height="210" width="500">

<line x1="0" y1="0" x2="200" y2="200" stroke="blue" stroke-width="12"/>

</svg>

The x1 attribute defines the start of the line on the x-axis

The y1 attribute defines the start of the line on the y-axis

The x2 attribute defines the end of the line on the x-axis

The y2 attribute defines the end of the line on the y-axis

Stroke is used to provide color to line.

1. SVG Rectangle  
   <svg width="400" height="180">

<rect x="50" y="20" width="150" height="150" fill="black" stroke = "pink" stroke-width = "5" rx="20" ry="20"/>

</svg>

The x attribute defines the left position of the rectangle (e.g. x="50" places the rectangle 50 px from the left margin)

The y attribute defines the top position of the rectangle (e.g. y="20" places the rectangle 20 px from the top margin)

The rx and the ry attributes rounds the corners of the rectangle.

1. SVG Circle

<svg height="100" width="100">

<circle cx="50" cy="50" r="40" stroke="black" stroke-width="3" fill="red" />

</svg>

The cx and cy attributes define the x and y coordinates of the center of the circle. If cx and cy are omitted, the circle's center is set to (0,0)

The r attribute defines the radius of the circle

1. Ellipse SVG

<svg height="140" width="500">  
 <ellipse cx="200" cy="80" rx="100" ry="50" fill: “yellow” stroke = “purple” stroke-width= “2” />

</svg1>

The cx attribute defines the x coordinate of the center of the ellipse

The cy attribute defines the y coordinate of the center of the ellipse

The rx attribute defines the horizontal radius

The ry attribute defines the vertical radius

1. Polygon SVG

<svg height="210" width="500">  
 <polygon points="100,10 40,198 190,78 10,78 160,198" fill = "lime" stroke = "RED" stroke-width = "5" fill-rule = "evenodd"/>

</svg>

<article> Defines independent, self-contained content

<aside> Defines content aside from the page content

<details> Defines additional details that the user can view or hide

<figcaption> Defines a caption for a <figure> element

<figure> Specifies self-contained content, like illustrations, diagrams, photos, code listings, etc.

<footer> Defines a footer for a document or section

<header> Specifies a header for a document or section

<main> Specifies the main content of a document

<mark> Defines marked/highlighted text

<nav> Defines navigation links

<section> Defines a section in a document

<summary> Defines a visible heading for a <details> element

<time> Defines a date/time

1. Drag and Drop

Events in Drag: dragstart, dragend, dragover, dragenter, dragleave, drop.