What is HTML?

Introduced by Tim Berners-Lee, HTML stands for HyperText Markup Language. It is an open source technology, which means it is not owned by anyone in particular and can be used without any cost. HTML provides data to the user in a way that the user can query or lookup for more information just by clicking a highlighted word (a link or image etc.) or by navigating from one HTML page to another. It is made up of tags (<>) which annotate text.

### **HTML Versions**

HTML 1.0: It was the first release but had very limited usage.

HTML 2.0: Released by adding some new features to HTML 1.0, this was the standard application for website development.

HTML 3.0: Due to improper standards of the existing version of HTML,  popular browser developer Netscape Navigator had some of its own tags. This is when HTML 3.0 was introduced.

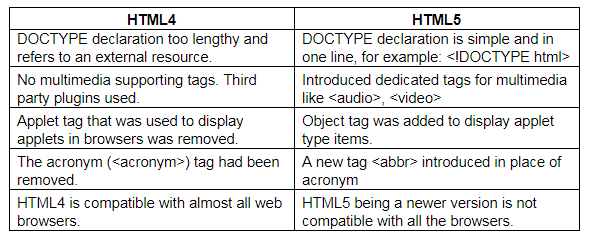
HTML 3.2: This version stopped the non-standardized HTML by introducing World Wide Web Consortium (in short W3C) to keep the language standardized.

HTML 4.0: Created an evolution as the browser support was undertaken by Microsoft in their Internet Explorer (IE).

HTML 5.0: The current version of HTML which was introduced especially to work with any type of devices like mobile, tablets, large monitors etc.

**Explore**[Complete Information About HyperText Markup Language](https://www.greycampus.com/blog/programming/complete-information-about-hypertext-markup-language" \t "_blank)

### **Difference between HTML4 and HTML5**



## HTML5 Interview Questions and Answers

### **1. What is the need of mentioning <!DOCTYPE HTML> at the beginning of an HTML page?**

The <!DOCTYPE HTML> indicates the version of HTML which in this case is 5. The earlier versions like HTML4 were based on Standard Generalized Markup Language (SGML) and required a Document Type Definition (DTD). HTML5 however, is not based on SGML and doesn’t need a DTD.

### **2. List out the new Structural Elements in HTML5.**

HTML5 introduced few structural elements to define different parts of a web page like article, header, footer, main, mark and many more.

These are sections in which a web page is usually divided into. In HTML4, the same was implemented using div with an id/class name to it.

### **3. What is the use of the article tag?**

It defines space for an article that is independently distributable. For example, A magazine or newspaper article.

### **4. How can we produce a horizontal line on a webpage?**

A horizontal line can be produced on a web page using the <hr> tag. The other point to note about the hr tag is that it doesn’t have an end tag as most of the HTML tags do.

### **5. Why is the div tag so useful in developing HTML web pages?**

The HTML div tag (ie <div>...</div>) is used to create a section of a web page. It can hold another sections or elements in it. It is also possible to hold direct text in it, but not the one that is used.

### **6. Define the types of HTML Headings.**

HTML holds 6 types of headings starting from h1 to h6. The heading one (h1) is the maximum font and h6 is the minimum font.

### **7. How can we group heading elements?**

All the heading tags or elements can be grouped together in hgroup tag:

<hgroup>

* <h1>Main heading</h1>
* <h2>Subheading</h2>

</hgroup>

### **8. Define span tag.**

A span tag is similar to div section but is used to divide the screen into even smaller sections. <span>...</span>

### **9. Define Meta tags.**

Meta tags are the tags that provide more information to our web pages. Some of the tags that are examples for meta are:

* **Link**: Defines a relation between the web page and an external source.
* **Style**: Inserts styles (CSS) details to the web page.
* **Title**: Provides a title to the web page.

### **10. What are the most commonly used List tags?**

The list tags are used to list out any information. There are types in listing out the information using the tags, these are:

* **Ordered List**: Used as <ol>...</ol> and provides the list in a numbered format.
* **Unordered List**: Used as <ul>...</ul> and provides the list in a bullet format.

NOTE: both the above use list item tags ie <li>...</li> in them

* **Definition List**: Used as <dl>...</dl> which provides a list in it and takes Definition Term (ie <dt>...</dt>) and a detailed definition (ie <dd>...</dd>).

### **11. What is the best way to group form elements?**

The <fieldset> tag can be used to group some of the form elements. When the purpose is to provide some HTML elements as a group to the user then, fieldset tag is the best one to use. It takes another tag in it <legend> which provides a title to the grouped elements.

### **12. List few input type attributes that are new in HTML5.**

An input tag can take some attributes based on the requirement. ie <input type=”text”> creates a textbox that takes text/number/special characters into it. The attribute type can take more values, these are:

* **Datetime**: Gives a datetime accepted textbox.
* **Placeholder**: Places an editable text in the textbox.
* **Number**: Takes only numbers and no text and special characters.
* **Tel**: Takes inputs like a telephone number.
* **Email**: Takes text with email format.

### **13. How is it possible to insert a copyright symbol in a web page?**

As there is no direct key to type and insert the copyright symbol in a web page, it has to be given by combining different characters. This can be done in multiple ways like:

* &copy.
* & #169.

### **14. What is a hyperlink?**

A hyperlink is a text/image on a webpage, which when clicked redirects to a new webpage.

### **15. Explain the type and value attributes for a list item (ie <li>).**

The type attribute helps to change the listing/numbering of the list items. It is also used to change the numbering index the value attribute is used.

### **16. Describe the way in which color can be applied to an element in an HTML page.**

HTML elements can be colored in three ways:

* Color name ie red/blue etc.
* Hex Color ie #efefef, and
* RGB(10,234,128) which is a combination of red, green, blue.

### **17. Explain the two web storage in HTML5.**

In HTML 5 data storage can be done in two ways:

* **Session Storage**: The current session (i.e., a user who is browsing the website) details are stored. Once the user closes the browser, the storage is cleared.
* **Local Storage**: Data stored in local storage will not be cleared automatically or when the user closes the browser.

### **18. Explain Graphics in HTML5.**

HTML5 has two types of providing graphics, SVG and Canvas. SVG is helpful when using devices like tablets, iPads etc. Whereas, Canvas is an area in the document or HTML page where graphics can be drawn.

### **19. What are the Server-Sent Events (SSE)?**

The events that come from the server to the browser are termed as Server Side Events.

### **20. List out the new attributes provided in HTML5 for the form tag.**

HTML5 has introduced two new attributes for the form tag which are:

* autocomplete.
* non-validate.

### **21. What is the usage of a novalidate attribute for the form tag that is introduced in HTML5?**

The form attribute novalidate is a Boolean type which takes true/false values. If disabled or made false, the form data is not validated when submitted.

### **22. Why do we need to autocomplete attribute for the form tag?**

The autocomplete attribute is usually applied to text boxes with which the user can fill the textboxes with the previous values given to it.

### **23. How can you hide  HTML source code?**

It is not possible to hide the HTML source code as the browser needs to understand the code.

### **24. How can a static HTML page redirect the visited a new page?**

The meta tag has an attribute called URL which takes you to a redirected link.

### **25. What is Cell Padding?**

Cell Padding refers to the space between the cell wall and cell border.

### **26. What are the different kinds of Doctypes available?**

The three kinds of Doctypes which are available:

* Strict Doctype
* Transitional Doctype
* Frameset Doctype

### **27. How do we comment HTML code in an HTML page?**

HTML code can be commented using <!-- all the code written here will be commented -->

### **28. List the API’s available in HTML5.**

The available API’s in HTML are:

* DOM Level 1
* DOM Level 2 Core
* DOM Level 2 HTML
* DOM Level 3

### **29. Explain Application Cache.**

Application Cache is a mechanism in which the web applications can also run offline. One of the advantages of using the application cache is that the resources load faster.

### **30. When do we use a meter tag?**

This tag is also known as a gauge and is used to define a scalar measurement which is in a known range.

### **31. What is the usage of the cite tag?**

The cite tag is used to represent the title of a work (like a book, paper, poem etc). This tag is mostly used as an inline tag.

### **32. What is a contenteditable attribute?**

This attribute is a new feature in HTML5 using which any element can be edited directly from the browser.

### **33. How are Web Workers APIs used in HTML5?**

Using Web Workers APIs provide a way to run something in the background with which certain tasks can be performed without distracting the user interface.

### **34. What is MathML in HTML5?**

MathML stands for Mathematical Markup Language and is used to show mathematical and scientific content on the web page. This expression should be inserted in a math tag.

### **35. Explain WHATWG.**

WHATWG stands for **Web HyperText Application Technology Working Group** which is an organization that develops and also maintains the HTML and API for web applications.

### **36. Explain Microdata in HTML5.**

Using Microdata, the metadata is nested within existing content on web pages. Search engines extract the microdata from a web page to provide a good browsing experience.

### **37. List some of the formatting elements in HTML5.**

HTML5 holds some new and old formatting elements, all together here is the list:

* Marked text
* Emphasized text
* Subscripts
* Superscripts
* Small text
* Deleted text
* Inserted text

### **38. What is the difference between HTML and XHTML?**

HTML stands for HyperText Markup Language and XHTML stands for eXtensible HyperText Markup Language which is defined in XML format.

### **39. What is an API in HTML5?**

API stands for Application Programming Interfaces and is a way to create applications. They use pre-built components. Using the available APIs, developers can integrate the features into their websites.

### **40. List the API’s available in HTML5.**

The HTML5 standard introduced a number of new APIs. Here is a small list:

* Constraint Validation API
* Text Track API
* Media API
* Command API
* User Interaction
* Data Transfer API
* History API
* Application Cache API

### **41. What is a manifest file in HTML?**

With the introduction of application cache, a web application is accessible without an internet connection. Every page of the web application should hold the manifest attribute to get cached.

### **42. What is the difference between the font size units em and rem?**

By default, the font size in a browser is 16px and can be increased or decreased in the browser settings. 1em equals the font-size given in the browser. Whereas, the rem value depends on root element that is HTML tag.

### **43. What are the two methods that are used in form elements action attribute?**

A form has an action attribute that takes two values, Post and Get (default). The Post method is used to submit (insert\update\delete) data whereas, Get method is used to get some data.

### **44. What is Web SQL?**

HTML5 has introduced a database connection to store values on the client side. Web SQL is such a database in the browser which holds client information. It is important to note that Web SQL does not store critical data (like passwords) in it.

### **45. What are the minimum number of HTML tags are required to create an HTML page?**

A minimum of 3 tags (HTML, head, and body) are required to create a working HTML page.

**46.What is the minimum number of HTML5 tags that are required to create a Web page?**

**Answer:** Minimum 3  HTML5 tags are required to create a Web page, such as (<HEAD>, <BODY>, <HTML>).

**47. What is the importance of Drag and Drop in HTML5?**

**Answer:** Drag and Drop is the most important User Interface concept which makes it easy to grab an object and Drag it at the place you want with the help of a mouse click.

Some common features that are mostly used by Drag and Drop operation include move, link or copy.

We can drag an image using elements, type = **<img draggable = “true”>**, to make an image draggable and set the draggable image attribute to true.

**48. Explain new Form input types in HTML5.**

**Answer: HTML5 has 14 new forms input types:**

* **Date:**This is a Date picker, we can pick a date by using type = **“date”.**
* **Week:**This is a Week picker, we can pick a week by using type = **“week”.**
* **Month:**This is a Month picker, we can pick a month by using type = **“month”.**
* **Time:**This is a Time picker, we can pick the time by using type = **“time”.**
* **Datetime:**This is a combined date and time, we can pick the combination of date and time by using type = **“datetime”.**
* **Datetime-local:**A combined local date and time, we can pick the combination of local date and time using type = **“DateTime-local”.**
* **Email:**Allows one or more Email Addresses, we can enter multiple email addresses using type = **“email”.**
* **Tel:**Allows different phone numbers around the world. A phone number is validated by the client-side. We can enter a phone number using type = **“tel”.**
* **Search:**Allows to search queries by input text. We can enter multiple queries using type = **“search”.**
* **Number:**Allows inserting a numerical value with additional attributes such as min, max. etc., and we can enter multiple numerical values using type = **“number”.**
* **Url:**A url input type, that is used for the web address. In a single url, we can use multiple attributes using type = **“url”.**
* **Color:**Allows to select multiple colors, we can pic multiple color using type = **“color”.**
* **Range:**Allows to insert a numerical value within a specific range, Range is similar to the number but it is much specific. We can enter a numerical value within a range using type = **“range”.**
* **Placeholder:**Allows to display a short hint (usually in a light color) in the input fields, before we enter the value. We can write a short hint in the input field by using type = **“placeholder”.**

49. **What are the various formatting tags in HTML5?**

**Answer: HTML5 has some old and new formatting tags as given below:**

* **Marked text:**Represents highlighted text for Reference purposes. We can use **<marks**> tags for text highlight.
* **Deleted text:**Specifies the deleted block of text. We can use **<del>** tags to implement a deleted text.
* **Emphasized text:** Defines the emphasized text. We can use **<em>** tags to implement an emphasized text.
* **Inserted text:**Inserts a block of text into a document. We can use **<ins>** tags to implement an inserted text.
* **Small text:** Display inserted text in a small size. We can use **<small>** tags to implement a small text.
* **Superscript text:**This is a superscripted text. We can use **<sup>** tags to implement a superscript text.
* **Subscript text:** This is a subscripted text. We can use **<sub>** tags to implement a superscript text.

**50.Why do we use HTML5?**

**Answer:** HTML5 supports animation, drawing, audio, video, etc and it easily embeds a video on the web page. It does not require any additional software like Flash for watching videos.

**Some of the important reasons to use HTML5 are given below:**

* Legacy and cross-browser support
* Better interactions
* Smarter storage
* Cleaner code

**51. What is a hyperlink? Does it only apply to text?**

**Answer:** The hyperlink is a link that allows a user to move from one web page to another web page when clicked. Hyperlink concept is used on text and as well as image, and we can convert an image into a link with the help of <a href = “ ”….</a>> tags.

**52.Explain the concept of web storage in HTML5.**

**Answer:** Web storage provides the facility to store the data of our web applications locally into the user’s browser. It can store up to 10 MB data. Web storage helps to increase the performance of our applications.

**There are two types of web storage that are used to store data locally in HTML5:**

* **Local storage:**This stores the data that will not expire or clear automatically when a user closes or reopens a browser.
* **Session Storage:** This stores data for one session only(i.e, a user who is surfing the internet or website). Once the browser is closed, session data will automatically delete from the web browser.

**53. Explain Geolocation API in HTML5.**

**Answer:** Geolocation API is used to locate a user’s geographical position.

For privacy reasons, the user is asked for permission to report the location information. Use the **navigator.geolocation.get current position()** method to get the user’s position and geographical coordinates (longitude and latitude number).

54. **Explain HTML5 Graphics.**

**Answer:** HTML5 supports two types of graphics i.e. Canvas and SVG.

**#1) Canvas:**<canvas> element is used to design graphics on the web page, and it has several methods available for drawing circles, boxes, adding images and text. 300 px X 150 px (width X height) is the default pixel size of canvas.

|  |
| --- |
| !DOCTYPE HTML> |

|  |  |
| --- | --- |
| 2 | <html> |

|  |  |
| --- | --- |
| 3 | <head> |

|  |  |
| --- | --- |
| 4 | <style> |

|  |  |
| --- | --- |
| 5 | #mycanvas{border:2px solid pink;} |

|  |  |
| --- | --- |
| 6 | </style> |

|  |  |
| --- | --- |
| 7 | </head> |

|  |  |
| --- | --- |
| 8 | <body> |

|  |  |
| --- | --- |
| 9 | <canvas id = “mycanvas” width = “150” height = “150”></canvas> |

|  |  |
| --- | --- |
| 10 | </body> |

|  |  |
| --- | --- |
| 11 | </html> |

**SVG: <svg>**Scalable Vector Graphics, are mostly used for graphical application and scalable vector type diagrams, such as X, Y coordinate system, two-dimensional and pie charts. This makes it faster and lightweight. SVG follows XML format.

**Example to draw a Rectangle using SVG element is shown below.**

|  |
| --- |
| <!DOCTYPE html> |

|  |  |
| --- | --- |
| 2 | <html> |

|  |  |
| --- | --- |
| 3 | <body> |

|  |  |
| --- | --- |
| 4 | <svg width = “400” height = “150”> |

|  |  |
| --- | --- |
| 5 | <rect width = “400” height = “150” style = “fill:rgb(200,220,255);stroke-width:10;stroke:rgb(0,0,0)”/> |

|  |  |
| --- | --- |
| 6 | </svg> |

|  |  |
| --- | --- |
| 7 | </body> |

|  |  |
| --- | --- |
| 8 | </html> |

**55.What are the advantages of using HTML5?**

**Answer:** HTML5 is the advanced version of HTML. HTML5 enables to create easier or interactive websites by embedding video, audio, and graphics on the web page.

HTML5 support multimedia technology and graphical content to the web without using any third party plugins.

**Some of the most important features added by HTML5 include:**

* Geolocation
* Offline Application Cache
* Client-side database
* Error Handling
* New Structure and new multimedia elements.
* Browser Support and compatibility.

56. **How many web browsers does HTML5 support?**

**Answer:** Most of the latest version of Apple Safari, Google Chrome, Opera, Internet Explorer, and Mozilla Firefox are supported by HTML5.

57. **How many tags were removed in HTML5?**

**Answer:**

**The list of the tags that are removed completely in HTML5 include:**

* <frame>
* <frameset>
* <noframes>
* <big>
* <basefront>
* <applet>
* <center>
* <bigcenter>
* <acronym>
* <basefont>
* <dir>
* <tt>
* <font>
* <strike>

**58. Which video and audio formats are used for embedding on web page?**

**Answer: Formats of video and audio that are used for embedding on the web page are given below:**

* **Video:**MPEG4, Ogg, WebM.
* **Audio:** WAV, Ogg Vorbis, MP3.

**59. List out the page structure elements of HTML5.**

**Answer: Page structure elements of HTML5 are given below:**

* **<header>:**Represents the header section and stores the starting information about the web page.
* **<footer>:**Represents the footer section (last portion) of the page.
* **<nav>:**Represents the navigation elements of the HTML page.
* **<article>:**It is a set of information.
* **<section>:**It is a set of instruction that is used inside the article block to define the basic structure of a page.
* **<aside>:**Sidebar content of the page.

**60. Explain some of the common lists to design a web page.**

**Answer: The common lists to design a web page include:**

* Directory list
* Definition list
* Ordered list
* Menu list
* Unordered list

**Different**– Different tags are used to compose each list.

**61. What is the use of output tag in HTML5?**

**Answer:** **<output>** tag is used to represent the different types of output and result.

**62. Which element provides the autocomplete feature in a textbox?**

**Answer:** In HTML5 **<Datalist>** element, provides the autocomplete feature in a textbox.

**63. How to Embed Video and Audio in Html5?**

**Answer:**

**Video:**

**Example** to Embed a video in HTML5 is shown below.

|  |  |  |
| --- | --- | --- |
| 1 | <!DOCTYPE html> | |
| 2 | <html> |

|  |  |
| --- | --- |
| 3 | <body> |
| 4 | <video width = “300” height = “250” controls> | |

|  |  |  |
| --- | --- | --- |
| 5 | <source src = “MyMovie.mp4” type = “video/mp4”> | |
| 6 | </video> |

|  |  |
| --- | --- |
| 7 | </body> |
| 8 | </html> |

**Audio:**

**Example** to Embed an Audio in HTML5 is shown below.

|  |  |  |
| --- | --- | --- |
| 1 | <!DOCTYPE html> | |
| 2 | <html> |

|  |  |
| --- | --- |
| 3 | <body> |
| 4 | <audio controls> | |

|  |  |  |
| --- | --- | --- |
| 5 | <source src = “song.mp3” type = “audio/mpeg”> | |
| 6 | </audio> |

|  |  |
| --- | --- |
| 7 | </body> |
| 8 | </html> |

**64. What are the migrated tags from HTML4 to HTML5?**

**Answer:**

**List of the migrated tags from HTML4 to HTML5 are given below:**

**Typical HTML4**         **Typical HTML5**

<div id = “footer”>                <footer>  
<div id = “header”>              <header>  
<div id = “menu”>                <nav>  
<div id = “post”>                   <article>

65. **What are the part of HTML5 Technologies?**

**Answer: List of the part of HTML5 Technologies are given below:**

* Web Workers
* Web Storage
* SVG
* CSS3
* Server-Sent Events(SSE)
* Microdata
* Web Intents
* Web Sockets
* Offline Application
* Geolocation
* File API
* Web Messaging
* Drag and Drop
* Canvas 2D

**66. What is the difference between SVG and Canvas elements?**

**Answer:**

| **SVG** | **Canvas elements** |
| --- | --- |
| It is Object Model-based. | It is pixel based. |
| Is suitable for using large rendering areas. | Is suitable for using small rendering areas. |
| SVG provides any support for event handlers . | Canvas does not provide any recourse for event handlers. |
| Modification is allowed through script and CSS. | Modification is allowed through script only. |
| SVG has Better scalability | Canvas has poor scalability. |
| SVG is Vector based (composed of shapes). | Canvas is Raster based (composed of a pixel). |
| SVG is not suitable for Games graphics. | Canvas is suitable for games graphics. |
| SVG does not depend on resolution. | Canvas is completely dependent on resolution. |
| SVG is capable for API animation. | Canvas has no any API for animation. |
| SVG is suitable for printing with high quality and any resolution. | Canvas is not suitable for printing high quality and high resolution. |

**67. What is the use of <figure> tag in HTML5?**

**Answer:** The figure tag is used to add an image in the document on a web page.

**68. What is Microdata in HTML5?**

**Answer:** Microdata is a new simple semantic syntax, that is used to add the nested groups of name and value pair of data to documents, that are commonly based on the page content. Microdata is used for new global attributes.

**69. Explain Meta tags.**

**Answer:** Meta tags are used to provide useful information to our web pages.

**Some of the tags include:**

* **Title:** Provides a title to the web page.
* **Style:**Inserts some styles and CSS details to the web page.
* **Link:** Defines the relationship between one page to another page and an external source.