**Module 3 (HTML5)**

1. What are the new tags added in HTML5?

* There has been a few elements introduced in HTML5. Some of them were imported from XHTML2, others from large statistical surveys on made by Google, Opera and other people. The analysis of **class** names and **id** names helped defining what were the most common semantic patterns. These new elements are not yet completely imported in all browsers at this time.
* (MOVED) [article](https://www.w3.org/wiki/HTML/Elements/article), (MOVED) [aside](https://www.w3.org/wiki/HTML/Elements/aside), [audio](https://www.w3.org/wiki/HTML/Elements/audio), [canvas](https://www.w3.org/wiki/HTML/Elements/canvas), [command](https://www.w3.org/wiki/HTML/Elements/command), [datalist](https://www.w3.org/wiki/HTML/Elements/datalist), [details](https://www.w3.org/wiki/HTML/Elements/details), [embed](https://www.w3.org/wiki/HTML/Elements/embed), [figcaption](https://www.w3.org/wiki/HTML/Elements/figcaption), [figure](https://www.w3.org/wiki/HTML/Elements/figure), [footer](https://www.w3.org/wiki/HTML/Elements/footer), [header](https://www.w3.org/wiki/HTML/Elements/header), [hgroup](https://www.w3.org/wiki/HTML/Elements/hgroup), [keygen](https://www.w3.org/wiki/HTML/Elements/keygen), [math](https://www.w3.org/wiki/HTML/Elements/math), [meter](https://www.w3.org/wiki/HTML/Elements/meter), [nav](https://www.w3.org/wiki/HTML/Elements/nav), [output](https://www.w3.org/wiki/HTML/Elements/output),[progress](https://www.w3.org/wiki/HTML/Elements/progress), [rt](https://www.w3.org/wiki/HTML/Elements/rt), [ruby](https://www.w3.org/wiki/HTML/Elements/ruby), [section](https://www.w3.org/wiki/HTML/Elements/section), [source](https://www.w3.org/wiki/HTML/Elements/source), [summary](https://www.w3.org/wiki/HTML/Elements/summary), [svg](https://www.w3.org/wiki/HTML/Elements/svg) ,[time](https://www.w3.org/wiki/HTML/Elements/time) ,[track](https://www.w3.org/wiki/HTML/Elements/track), [video](https://www.w3.org/wiki/HTML/Elements/video), [wbr](https://www.w3.org/wiki/HTML/Elements/wbr)
* Note also that the [input](https://www.w3.org/wiki/HTML/Elements/input) element has been extended with several new types as well.

1. How to embed audio and video in a webpage?

* To embed video in HTML, we use the <video> tag. It contains one or more video sources at a time using <source> tag.
* It supports MP4, WebM, and Ogg in all modern browsers. Only Ogg video format doesn't support in Safari browser.
* How to embed video in HTML?
* HTML allows playing video in the web browser by using <video> tag. To embed the video in the webpage, we use src element for mentioning the file address and width and height attributes are used to define its size. Example: In this example, we are using <video> tag to add video into the web page.
* An easy way to embed audio on a website is by using a sound hosting site, such as SoundCloud or Mixcloud. All you need to do is upload the file and receive an HTML embed code.
* Then copy and paste the embed code into the web page's code or WYSIWYG site editor. This works for most CMS platforms and website builders.
* The <source> element allows you to specify alternative audio files which the browser may choose from. The browser will use the first recognized format. The text between the <audio> and </audio> tags will only be displayed in browsers that do not support the <audio> element.

1. Semantic element in HTML5?

* Semantic HTML elements are those that clearly describe their meaning in a human- and machine-readable way.
* Elements such as <header> , <footer> and <article> are all considered semantic because they accurately describe the purpose of the element and the type of content that is inside them.



1. Canvas and SVG tags?

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| --- | --- |
| SVG | Canvas |
| SVG has better scalability. So it can be printed with high quality at any resolution | Canvas has poor scalability. Hence it is not suitable for printing on higher resolution |
| SVG gives better performance with smaller number of objects or larger surface. | Canvas gives better performance with smaller surface or larger number of objects. |
| SVG can be modified through script and CSS | Canvas can be modified through script only |
| SVG is vector based and composed of shapes. | Canvas is raster based and composed of pixel. |

* The <svg> tag defines a container for SVG graphics. SVG has several methods for drawing paths, boxes, circles, text, and graphic images.
* The <canvas> tag is used to draw graphics, on the fly, via scripting (usually JavaScript). The <canvas> tag is transparent, and is only a container for graphics, you must use a script to actually draw the graphics.