

# Notes for Students By Geekster



**Geekster**

[www.geekster.in](http://www.geekster.in)

## 1.HTML <frameset> Tag

The HTML <frameset> tag is used to group together frames that can be managed and styled as a single unit. The number of rows and columns in the frameset, as well as how much space they will take up in a frame, are also specified by the <frameset> element.

**NOTE:** Not Supported in HTML5.

### Syntax

```
<frameset cols = "pixels|%|*">
```

**Attributes:** The following is a list of frameset attributes:

**cols:** In a web browser, the cols attribute is used to construct vertical frames. Within the frameset tag, this attribute is used to specify the number of columns and their sizes.

**rows:** In the web browser, the rows attribute is used to generate horizontal frames. Within the frameset tag, this attribute is used to specify the number of rows and their size.

**border:** The frameset tag's border element specifies the width of each frame's border in pixels. When there is no boundary, the value zero is utilized.

**frameborder:** The frameset tag's frameborder attribute is used to describe whether or not a three-dimensional border should be displayed between the frames. It takes two values: 0 and 1, with 0 indicating no border and 1 indicating yes.

**framespacing:** The framespacing attribute of the frameset tag specifies the amount of space between frames in a frameset. Any integer number can be used as a parameter, which basically represents the value in pixels.

## 2.HTML <frame> tag

The HTML <frame> tag specifies a specific space within an HTML document where another HTML web page can be shown.

When combined with a <frameset> tag, a web page is divided into numerous portions or frames, each of which can contain various web pages.

**NOTE:** Instead of using the HTML <frame> tag, which is no longer supported in HTML5, you can use <iframe> or <div> with CSS to achieve comparable results in HTML5.

### 3.HTML Iframes

A web page within a web page is shown using an HTML iframe.

**NOTE:** It is a good practice to always include a title attribute for the <iframe>. This is used by screen readers to read out what the content of the <iframe> is.

#### Syntax

```
<iframe src="URL" title="description"></iframe>
```

#### Attributes value:

It has only one value URL, which is the URL of the content that is displayed in the iframe. There are two kinds of URL links, as shown below.:

- **Absolute URL:** It refers to a different website
- **Relative URL:** It refers to other files on the same website.
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#### Example

```
<!DOCTYPE html>
<html>

<head>
  <title>HTML iframe Tag</title>
</head>

<body style="text-align: center">
  <h1>Geekster</h1>
  <h2>HTML iframe Tag</h2>
  <iframe src=
"https://geekster.in/"
    height="200"
```

```
width="400">

</iframe>
</body>

</html>
```

### Accepted Attribute:

The following attributes can be used with the <iframe> tag in HTML.

**Allow-** For the <iframe>, specifies a feature policy.

**Allowfullscreen** -If the <iframe> may activate fullscreen mode by calling the request, set this property to true. The method Fullscreen() is used to make a full-screen image.

**height**-The height of an iframe is specified here. 150 pixels is the default height.

**Name** -The name of an iframe> is specified here.

**Src** -The URL of the document to be embedded in the iframe>.

**Srcdoc** -The HTML content of the page to be displayed in the iframe>.

**width**-The width of an iframe is specified here. The width is set to 300 pixels by default.

## 4.HTML Audio TAG

On a web page, the HTML <audio> element is used to play an audio file. It's a tool for embedding audio material in documents. It can have one or more audio sources, which are denoted by the src property or the <source> element, with the browser picking the best one.

If you wish to put audio on your websites, such as songs or interviews, this element comes in useful.

**NOTE:-** Currently there are three supported file formats for HTML 5 audio tag. MP3, WAV, and OGG.

### Syntax

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

## Attributes of HTML Audio Tag

**Controls:** Defines which controls should be displayed beside the audio player.

**Autoplay:** This option indicates that the audio file will start playing as soon as the controls are loaded.

**Loop:** Indicates that the audio file will be repeated indefinitely.

**src:** Indicates that the audio file will be repeated indefinitely.

**muted:** This specifies that the audio file is muted.

**preload:** Indicates if and how the audio should be loaded when the page loads, according to the author.

## 5.HTML Video TAG

The <video> element is used to embed video content in an HTML document without the need for a third-party plugin such as Flash.

The video> element is supported differently by different browsers. At the moment, there are three main video formats that are supported for the video element: MP4, Ogg and WebM.

### Syntax

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

## Attributes of HTML Video Tag

**Autoplay:** It instructs the browser to begin downloading and playing the video as soon as possible.

**Preload:** Its purpose is to give the browser a suggestion about what the author believes will provide the optimal user experience.

**Loop:** It instructs the browser to loop the video automatically.

**Height:** It specifies the video's height in CSS pixels.

**Width:** It specifies the video's width in CSS pixels.

**Controls:** It displays the standard video controls such as play, pause, volume, and so on.

**Muted:** The audio from the video is muted.

**Poster:** It first loads a picture to serve as a preview before loading the video.

**src:** It's used to specify the video file's URL.

## 6.HTML Elements

An HTML element is made up of a set of start and end tags with content put in between. These components are in charge of building web pages and specifying the content that appears on them.

**Note:** Some elements do not have end tag and content, these elements are termed as empty elements or self-closing elements or void elements.

### Syntax

```
<tagname > Contents... </tagname>
```

### Block-level and Inline HTML elements

#### Block-level element

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

An element at the block level always takes up all of the available space (stretches out to the left and right as far as it can).

#### Example

```
<p>Geekster</p>
<div>Geekster</div>
```

Following are the block-level elements in HTML.

<address>, <article>, <aside>, <blockquote>, <canvas>, <dd>, <div>, <dl>, <dt>, <fieldset>, <figcaption>, <figure>, <footer>, <form>, <h1>-<h6>, <header>, <hr>, <li>, <main>, <nav>, <noscript>, <ol>, <output>, <p>, <pre>, <section>, <table>, <tfoot>, <ul> and <video>.

## Inline Elements

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

Example

```
<span> Hello Geeks! </span>
```

Following are the inline elements in HTML.

`<a>`, `<abbr>`, `<acronym>`, `<b>`, `<bdo>`, `<big>`, `<br>`, `<button>`, `<cite>`, `<code>`, `<dfn>`, `<em>`, `<i>`, `<img>`, `<input>`, `<kbd>`, `<label>`, `<map>`, `<object>`, `<q>`, `<samp>`, `<script>`, `<select>`, `<small>`, `<span>`, `<strong>`, `<sub>`, `<sup>`, `<textarea>`, `<time>`, `<tt>`, `<var>`.

## 7.HTML Semantics

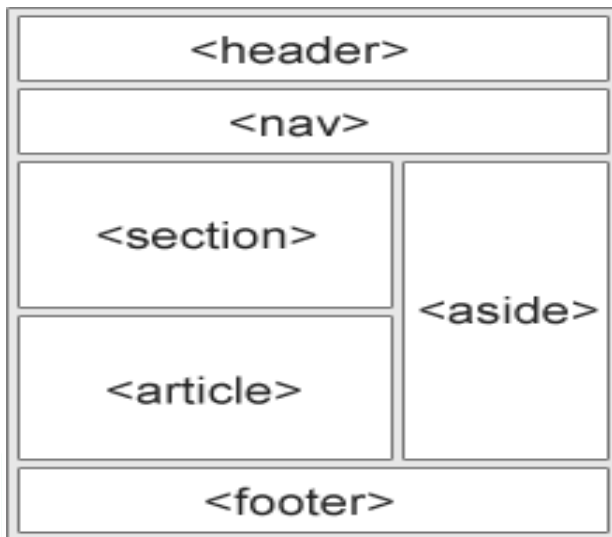
A semantic element can be understood by both the browser and the developer. A `<p>` tag, for example, denotes that the contained text is a paragraph. This is both semantic and presentational because people understand what paragraphs are and how to display them.

There are several semantic components in HTML that can be used to specify various portions of a web page:

### HTML Semantic Tag Structure

To divide your page into distinct sections, use the HTML tags below:

- **<header>**: A header for a web page is defined by this tag.
- **<nav>**: A container for navigation links is defined by this tag.
- **<section>**: This identifies a web page area.
- **<article>**: This element holds the major part of the web page, which contains information about it.
- **<aside>**: The content of an `<aside>` is frequently used as a sidebar in a document.
- **<footer>**: It specifies a document or section's footer.



## 8. What is the difference between `<section>` and `<div>` tags in HTML ?

Both tags (`<div>` and `<section>`) are used on the webpage; the `<section>` tag indicates that the content inside is related to a single subject, whereas the `<div>` tag indicates that the content inside is utilized as a block part of the webpage and has no special meaning.

**HTML `<div>` Tag:** A division tag is what it's called. The `<div>` tag is a block-level element with no specific function other than to represent its child elements. It utilizes the entire width of the screen. It's usually used in conjunction with the title and class attributes. One of the most commonly used tags in website development is the `<div>` element. Use the `<div>` element to style paragraphs within a section or to wrap paragraphs within a section with similar properties. The concluding `</div>` tag is also required.

**Note:** It is suggested to use the `<div>` element as a last resort and to use other tags such as `<main>`, `<article>`, or `<nav>` instead, as this is more user-friendly.

### Syntax:

```
<div>
  <h1>Title</h1>
  <p>Information goes here....</p>
</div>
```

**Example:** This example shows `<div>` tag.



```
<!DOCTYPE html>
<html>
  <head>
    <title>Div example</title>
  </head>
  <body>
    <h1 style="color:green">Geekster</h1>
    <div style="background-color:#189">
      <h2>This is heading inside Div tag</h2>

<p>This is paragraph inside Div tag.</p>

    </div>

    <p style="color:red">This is outside div tag</p>

  </body>
</html>
```

**Html <section> Tag:** A web page's <section> tag is not a generic container. The material contained within the <section> element will be grouped, i.e. it will be linked to a single subject and shown as an entry in the page's outline. The <section> element is valid only if the element's contents are explicitly mentioned in the document's outline, according to a common rule. The section tag is used to group together content that has a common theme. The section tag's key benefit is that it explains what it means in a web page. It's typically utilized when a web page needs headers, footers, or any other component of a document. Requires closing </section> tag too.

### Syntax:

```
<section>
  <h1>Title</h1>
  <p>Information goes here....</p>
</section>
```

**Example:** This example shows <section> tag

```
<!DOCTYPE html>
<html>
  <head>
    <title>Title of the document</title>
  </head>
  <body>
    <h1 style="color:green">Geekster</h1>
    <section>
      <h2>Geekster</h2>
      <ul>
        <li>Machine learning</li>
        <li>DSA</li>
        <li>Competitive programming</li>
        <li>Web-Development</li>
        <li>Java</li>
      </ul>
    </section>
    <section>
      <h3>Books</h3>

<p>Learn Machine learning</p>

<p>Learn DSA</p>

<p>Learn Competitive programming</p>

<p>Learn Web-Development</p>
```

```
<p>Learn Java</p>

</section>
</body>
</html>
```

## 9.HTML <Figure> tag

Self-contained information, such as illustrations, diagrams, pictures, code listings, and so on, is specified by the figure> tag.

It is related to the main flow, but it can be used at any position of a page, and the figure is consistent with the document's flow, so removing it should not disrupt the document's flow. This tag is new in HTML5.

**NOTE:** The <figcaption> element is used to add a caption for the <figure> element.

### Syntax

```
<figure> Image content... </figure>
```

Attributes: It mostly has two tags, which are given below:

**img src:** This element is used in the document to add an image source.

**figcaption:** This tag is used to give the image a caption.

## 10.HTML <details> tag

The <details> tag specifies additional data that the user can access and close at any moment.

It's widely used to create an open-and-close user-interactive widget. By default, the widget is closed. It expands when you open it, revealing what's inside.

The <details> tag can include any type of material.

### Syntax

```
<details>
```

```
<summary> Text content </summary>
<div> Content . . . >
</details>
```

## Attributes:

**details open:** By default, the open attribute of the detail element is utilised to show the hidden information.

## 11.HTML <Summary> tag

The <summary> tag gives the <details> element a visible heading. By clicking the heading, you may see or hide the details.

**NOTE:** The <summary> element should be the first child element of the <details> element.

## Syntax

```
<summary> Content </summary>
```

## Reference links :

[https://www.tutorialspoint.com/html/html\\_frames.htm](https://www.tutorialspoint.com/html/html_frames.htm)

[https://www.w3schools.com/tags/tag\\_frame.asp](https://www.w3schools.com/tags/tag_frame.asp)

[https://www.w3schools.com/tags/tag\\_audio.asp](https://www.w3schools.com/tags/tag_audio.asp)

[https://www.w3schools.com/tags/tag\\_video.asp](https://www.w3schools.com/tags/tag_video.asp)

[https://www.w3schools.com/html/html5\\_video.asp](https://www.w3schools.com/html/html5_video.asp)

[https://www.w3schools.com/tags/tag\\_nav.asp](https://www.w3schools.com/tags/tag_nav.asp)

[https://www.w3schools.com/tags/tag\\_section.asp](https://www.w3schools.com/tags/tag_section.asp)

<https://www.geeksforgeeks.org/what-is-the-difference-between-section-and-div-tags-in-html/>