

Course

HTML

Presented by Software Development Club



The Three Layers of Web Design



HTML: Structuring web pages. With tags and elements, we can define the headings, paragraphs, and other contents of a web page

CSS is the language for describing the presentation of Web pages, including colors, layout, and fonts.

Adding interactive behavior to web pages. JavaScript allows users to interact with web pages

**DYNAMIC
WEB PAGE**



Three layers of web design:

Structure

HTML markup



Style

CSS



Behavior

JavaScript



What is HTML?

- HTML stands for Hyper Text Markup Language it is not a programming language
- The structure of a Web page is described in HTML.
- HTML elements tell the browser how to display the content
- HTML is Not Case Sensitive
HTML tags are not case sensitive: **<P> means the same as <p>.**

HTML tags

The HTML tag is the basic building block of any webpage different tags format the way that information and text are displayed.



what do you need?



- Any Web Browser:

Google Chrome, firefox.

- Google Chrome
- Mozilla Firefox
- Safari
- Edge
- IE (Please Don't)

- integrated development environment IDE:

Visual Studio, Brackets , NetBeans ,

To Download VS:

<https://visualstudio.microsoft.com/downloads/>

- Sublime Text
- Atom.io
- Visual Studio Code
- Brackets
- Notepad++ (Windows)
- TextMate (Mac)

What is an HTML Element?

An HTML element is defined by a start tag, some content, and an end tag:

<tagname> Content goes here... </tagname>

The HTML element is everything from the start tag to the end tag:

```
<h1>My First Heading</h1>
<p>My first paragraph.</p>
```

<tagname>content</tagname>

<h1>About Us</h1>

<p>This is a paragraph</p>

**
** (self closing)

**
** (Fine in HTML5)

- Element names surrounded by angle brackets
- Normally come in pairs (start tag and end tag)
- End tag is usually the same but with a forward slash
- Some tags close themselves (*Remnant of XHTML*)



----- Tags Attributes -----

Tag Attributes

```
<tagname  
attributename="attributevalue">content</ta  
gname>
```

```
<h1 title="My Company" >About Us</h1>
```

- All tags can have attributes
- Provide information about an element
- Placed within the start tag
- Key/value pairs (id="someId")

----- Main HTML Tags -----

```
<html>  
  
<head>  
  
    <title>Page title</title>  
  
</head>
```

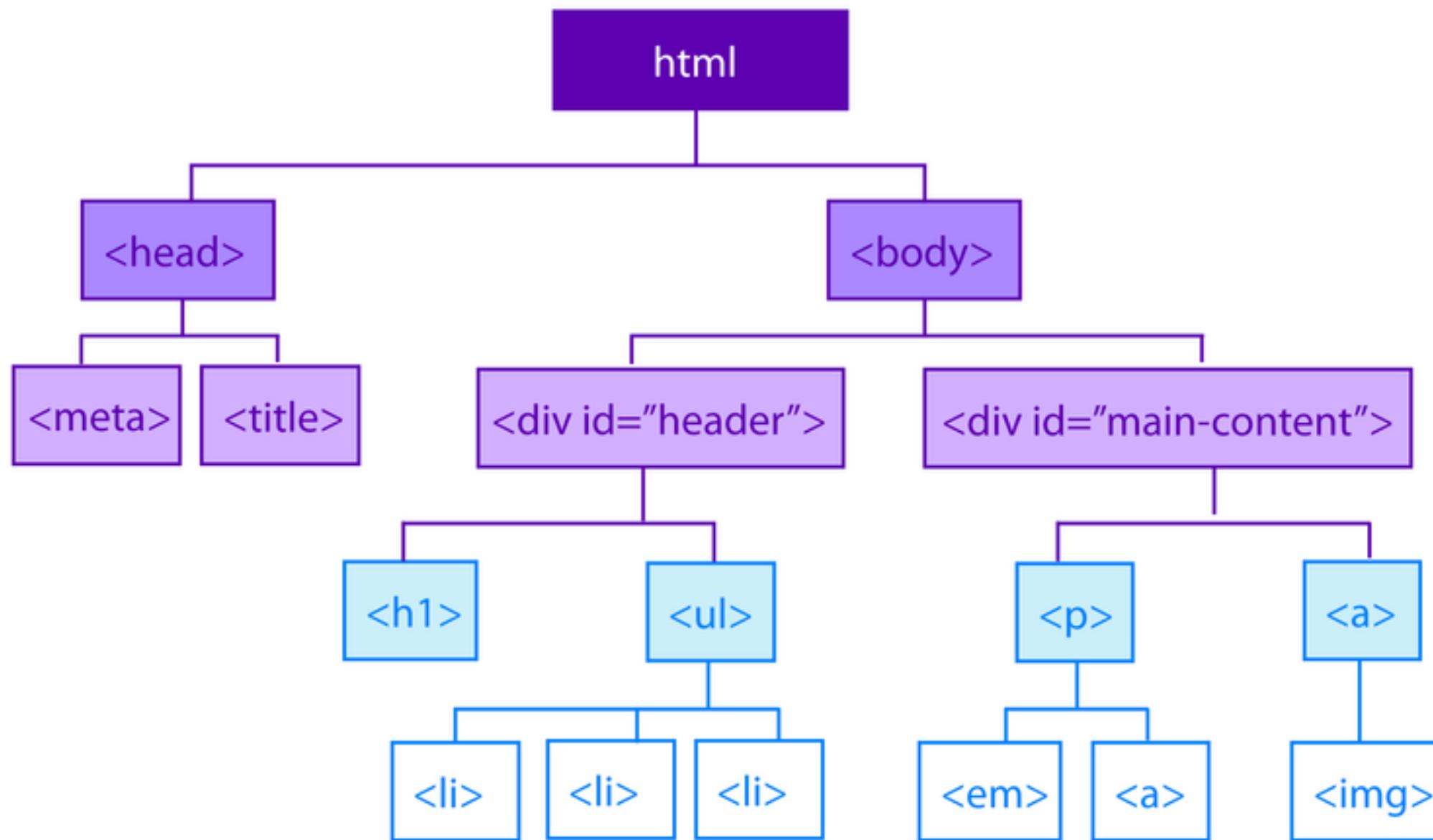
```
<body>  
  
    <h1>This is a heading</h1>  
  
    <p>This is a paragraph.</p>  
  
    <p>This is another paragraph.</p>  
  
</body>
```

```
</html>
```

DOM Tree In Web



Simple Document Tree



HTML Web Page Structure

- **<!DOCTYPE html>** declaration defines that this document is an HTML5 document
- **<html>** element is the root element of an HTML page
- **<head>** element contains meta information about the HTML page
- **<body>** element defines the document's body, and is a container for all the visible



Head Tag

the head tag has nothing to do with the output in the browser the head has things like the page title and links to CSS files and JavaScript files etc.

```
<title>Software development club</title>
```

the tag contains metadata (document title, character set, styles, links, scripts),

Meta tags

```
<meta charset="utf-8" />  
<meta name="description" content="">
```

style tag

```
<style></style>
```

link tag

```
<link rel="stylesheet" href="" />
```



HTML COMMENTS

<!-- Write your comment here! -->

HTML Headings

HTML headings are defined with the `<h1>` to `<h6>` tags.

```
<h1>This is heading 1</h1>
<h2>This is heading 2</h2>
<h3>This is heading 3</h3>
```



HTML Paragraphs

The `<p>` HTML element represents a paragraph.

```
<p>This is a paragraph.</p>
```

```
<p>This is another paragraph.</p>
```

`<u> underline </u>`

`<ins>underline</ins>`

`<s>delete</s>`

`delete`

`Bold Text`

`Bold Text`

`<i>italic</i>`

`italic`

TIP

- To generate a random text just type `lorem` then hit tap.



sup vs sub tags in html

The `<sub>` tag defines **subscript** text. Subscript text appears half a character below the normal line

The `<sup>` tag defines **superscript** text. Superscript text appears half a character above the normal line, a

2²

H₂O

```
<p align="right">Test</p>
<p align="center">Test</p>
<p align="left">Test</p>
```

```
<center>Hello</center>
```



Tables

Use **<table>** tag to defines an HTML table.

An HTML table consists of one **<table>** element and one or more **<tr>**, **<th>**, and **<td>** elements.

```
<table>
```

```
  <tr> <td></td> <td></td> <td></td> </tr>
  <tr> <td></td> <td></td> <td></td> </tr>
  <tr> <td></td> <td></td> <td></td> </tr>
  <tr> <td></td> <td></td> <td></td> </tr>
```

```
</table>
```



Name	Email	Phone Number
Lama Khalied	LamaKhalied@gmail.com	0798545255
Rama Khalied	RamaKhalied@gmail.com	0798545255
Nour Ali	Nour@gmail.com	079652558

```

<table border="2">
  <tr> <th>Name</th> <th>Email</th> <th>Phone Number</th></tr>
  <tr> <td>Lama Khalied</td><td>LamaKhalied@gmail.com</td>
  <td>0798545255</td> </tr>
  <tr><td>Rama Khalied</td><td>RamaKhalied@gmail.com</td>
  <td>0798545255</td></tr>
  <tr> <td>Nour Ali</td> <td>Nour@gmail.com</td><td>079652558</td>
  </tr>
</table>

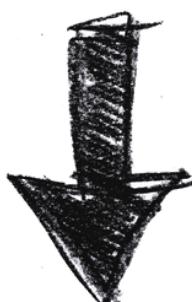
```



Merge two columns into one column.

informations	Phone Number	
Lama Khalied	LamaKhalied@gmail.com	0798545255
Rama Khalied	RamaKhalied@gmail.com	0798545255
Nour Ali	Nour@gmail.com	079652558

issue



Fix: use colspan attribute

informations		Phone Number
Lama Khalied	LamaKhalied@gmail.com	0798545255
Rama Khalied	RamaKhalied@gmail.com	0798545255
Nour Ali	Nour@gmail.com	079652558



Merge two rows into one row.

informations		Phone Number
Lama Khalied	LamaKhalied@gmail.com	0798545255
Rama Khalied	RamaKhalied@gmail.com	
Nour Ali	Nour@gmail.com	079652558

issue



Fix: use rowspan attribute

informations		Phone Number
Lama Khalied	LamaKhalied@gmail.com	0798545255
Rama Khalied	RamaKhalied@gmail.com	
Nour Ali	Nour@gmail.com	079652558

To be more organized, use the following tags:

An HTML table with a `<thead>`, `<tbody>`, and a `<tfoot>` element:

```
<table>
  <thead>
    <tr>
      <th>Month</th>
      <th>Savings</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>January</td>
      <td>$100</td>
    </tr>
  </tbody>
  <tfoot>
    <tr>
      <td>Sum</td>
      <td>$180</td>
    </tr>
  </tfoot>
</table>
```



THE END OF HTML

PART 1

SDC



HTML PART 2

SDC



HTML Links

- The `<a>` tag defines a hyperlink, which is used to link from one page/website to another.
- `Google`
`Login`

HTML Images

```

```

```

```



HTML Videos

```
<video src="road.mp4" width="700" controls  
poster="./thumbnail.jpeg"></video>
```

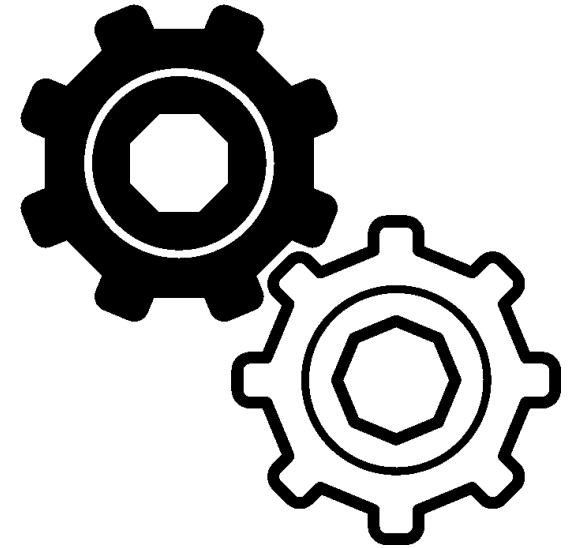
HTML Audio

```
<audio src="Kiss_the_Rain_Yiruma.mp3" controls  
width="400" height="300" ></audio>
```

**THE WIDTH AND HEIGHT
DO NOT AFFECT THE
AUDIO TAG.**



Lists



An **unordered** HTML list:

- Item
- Item
- Item
- Item



An **ordered** HTML list:

1. First item
2. Second item
3. Third item
4. Fourth item

- An unordered list starts with the `` tag. Each list item starts with the `` tag.
- The list items will be marked with bullets (small black circles) by default
- Ordered HTML List
- An ordered list starts with the `` tag. Each list item starts with the `` tag.
- The list items will be marked with numbers by default





Order List - Type attribute

The `type` attribute of the `` tag, defines the type of the list item marker:

Type	Description
<code>type="1"</code>	The list items will be numbered with numbers (default)
<code>type="A"</code>	The list items will be numbered with uppercase letters
<code>type="a"</code>	The list items will be numbered with lowercase letters
<code>type="I"</code>	The list items will be numbered with uppercase roman numbers
<code>type="i"</code>	The list items will be numbered with lowercase roman numbers





unordered list style values

Value	Description
disc	Sets the list item marker to a bullet (default)
circle	Sets the list item marker to a circle
square	Sets the list item marker to a square
none	The list items will not be marked



HTML Description Lists

HTML also supports description lists.

A description list is a list of terms, with a description of each term.

The `<dl>` tag defines the description list, the `<dt>` tag defines the term (name), and the `<dd>` tag describes each term:



Example of HTML List.

Unordered List

- Java
- PHP
- .NET

Ordered List

1. Java
2. PHP
3. .NET

Definition List

Java

It is oop language.

PHP

It is open source.

.NET

.Net is also a programming language.



HTML details Tag

- The <details> tag specifies additional details that the user can open and close on demand.

In order to build an interactive widget that the user may open and shut, the <details> tag is frequently utilized.

The widget is closed by default.

When it is opened, it expands to reveal the contents.

HTML embed Tag

```
<embed src=".//React.JS Training.pdf" type="" width="50%" height="500">  
<embed src=".//anime-flowers.gif" type="" width="50%" height="500">
```



HTML iframe Tag

A web page inside another web page is shown using an HTML iframe.

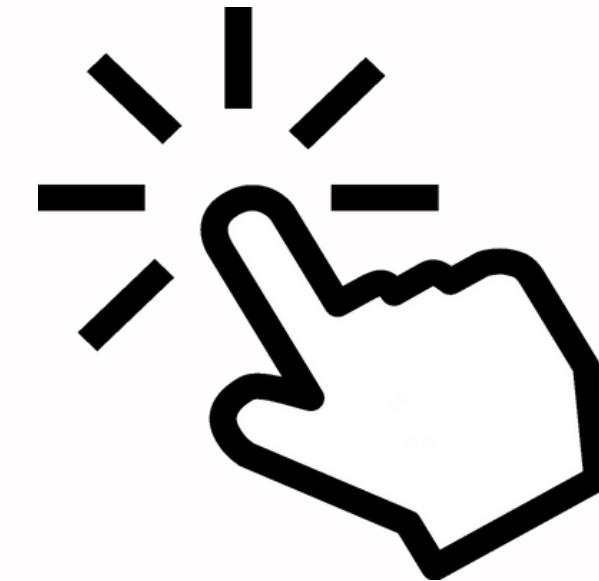
```
<iframe src="./flower.jpg" width="50%></iframe>
<iframe src="Kiss_the_Rain_Yiruma.mp3" width="50%></iframe>
<iframe src="React.JS Training.pdf" width="50%></iframe>
<iframe width="560" height="315"
src="https://www.youtube.com/embed/Ke90Tje7VS0"
title="YouTube video player" frameborder="0"
allow="accelerometer; autoplay; clipboard-write; encrypted-media;
gyroscope; picture-in-picture" allowfullscreen></iframe>
```



Button Element

A web page inside another web page is shown using an HTML iframe.

```
<input type="button" value="Click Here!">  
<input type="submit" >  
<input type="reset" >  
<button type="submit">Click Here</button>  
<button type="reset">Reset values</button>
```

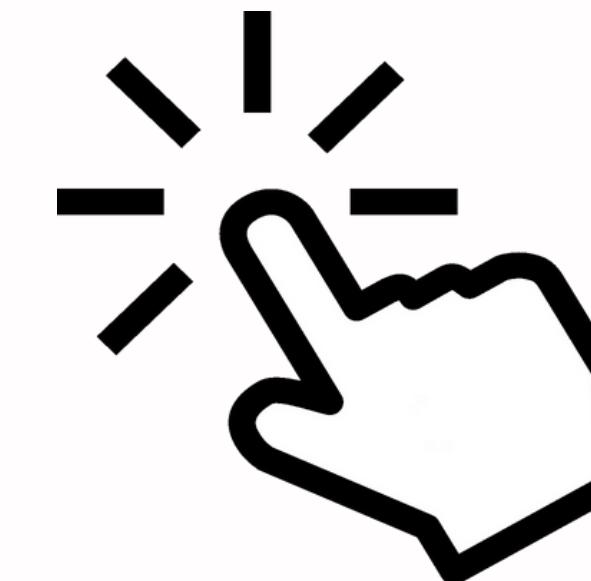


Form Tag

The `<form>` tag is used to create an HTML form for user input.

The `<form>` element can contain one or more of the following form elements:

- `<input>`
- `<textarea>`
- `<button>`
- `<select>`
- `<option>`
- `<legend>`
- `<fieldset>`
- `<label>`
- `<output>`



End Of HTML

PART 2

SDC



HTML PART 3

SDC



**Inline
Elements**

VS

**Block
Level
Elements**

Block-level vs. inline

- Elements come with a default style.
Some elements are block level by default, and some are inline elements by default.

A Block-level element occupies the entire space of the parent (container) such as `<div>` and `<p>`. Block-level elements begin on new lines.

Inline elements occupy the space as needed within the space defined by the main element. Unlike block-level elements, they do not begin on new lines.



Block VS Inline

- A block-level element always begins on a new line, and browsers add a margin (a space) before and after the element by default.

A block-level element always occupies the entire available width (stretches out to the left and right as far as it can).

P and div are block-level tags.
span is an inline-level tag.

IMPORTANT!



Div Tag

- In an HTML document, the div element designates a division or section.
- HTML components are contained within the div tag.

span Tag

The tag is an inline container used to mark up a part of a text, or a part of a document.

The tag is easily styled by CSS or manipulated with JavaScript using the class or id attribute.

The tag is much like the <div> element, but <div> is a block-level element and is an inline element.



Semantic Elements in HTML

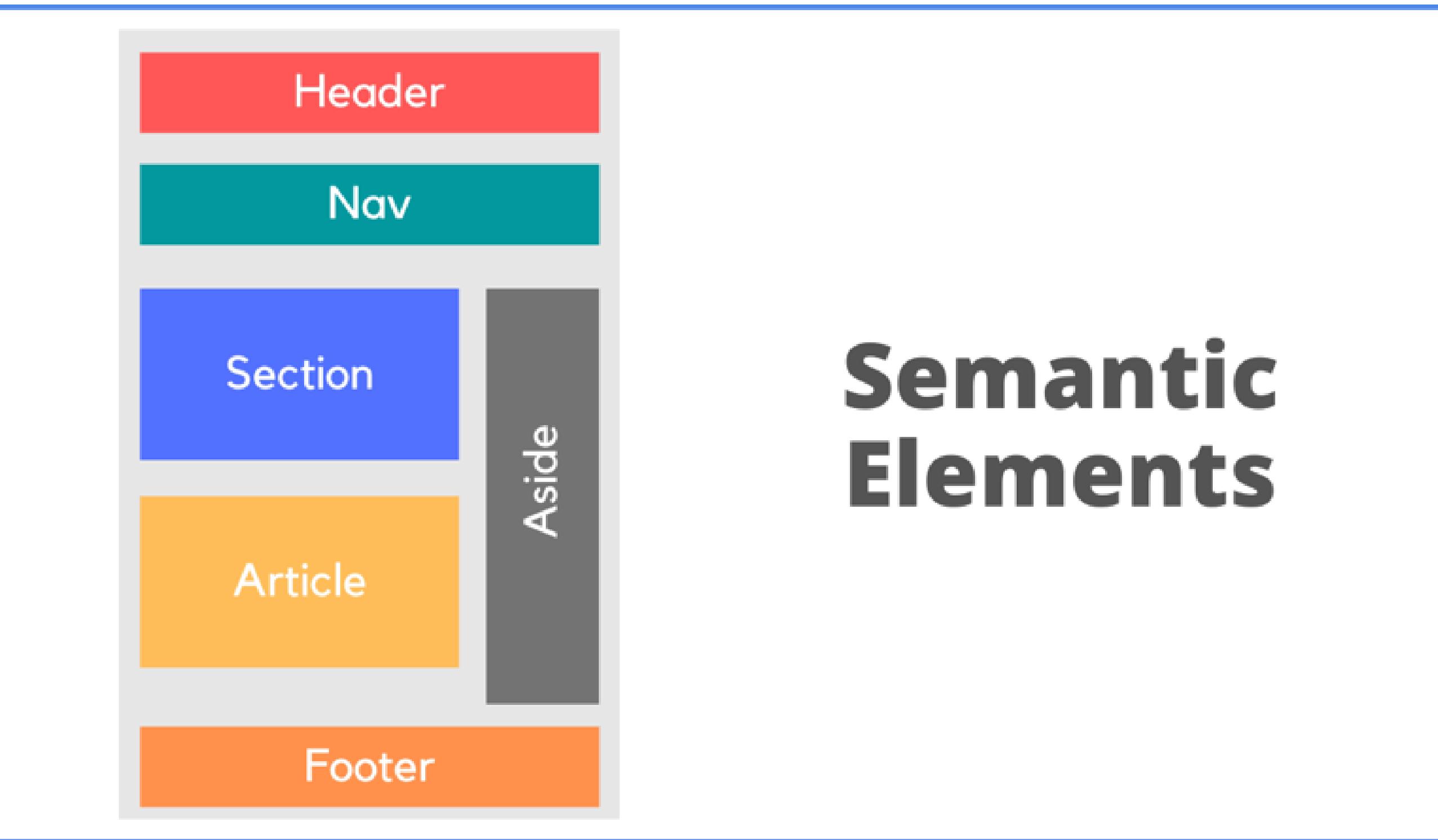
- A semantic element is one that the developer and browser can both understand exactly what it means.

Examples of non-semantic elements: <div> and - Tells nothing about its content.

Examples of semantic elements: <form>, <table>, and <article> - Clearly defines its content.



Semantic Elements in HTML



Semantic Elements

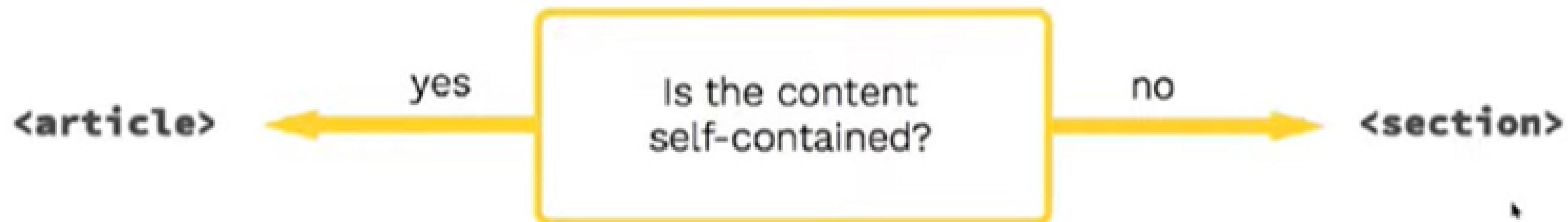
Semantic Elements in HTML

In HTML there are some semantic elements that can be used to define different parts of a web page:

- `<article>`
- `<aside>`
- `<details>`
- `<figcaption>`
- `<figure>`
- `<footer>`
- `<header>`
- `<main>`
- `<mark>`
- `<nav>`
- `<section>`
- `<summary>`
- `<time>`



Semantic Elements in HTML



THE END

