Getting started with HTML and CSS

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In this session:

How web works?

HTML basic layout

Including CSS

HTML elements and attributes

Comments

HTML Typography

HTML Quotations

HTML inline and block elements

HTML links

Images in HTML and CSS

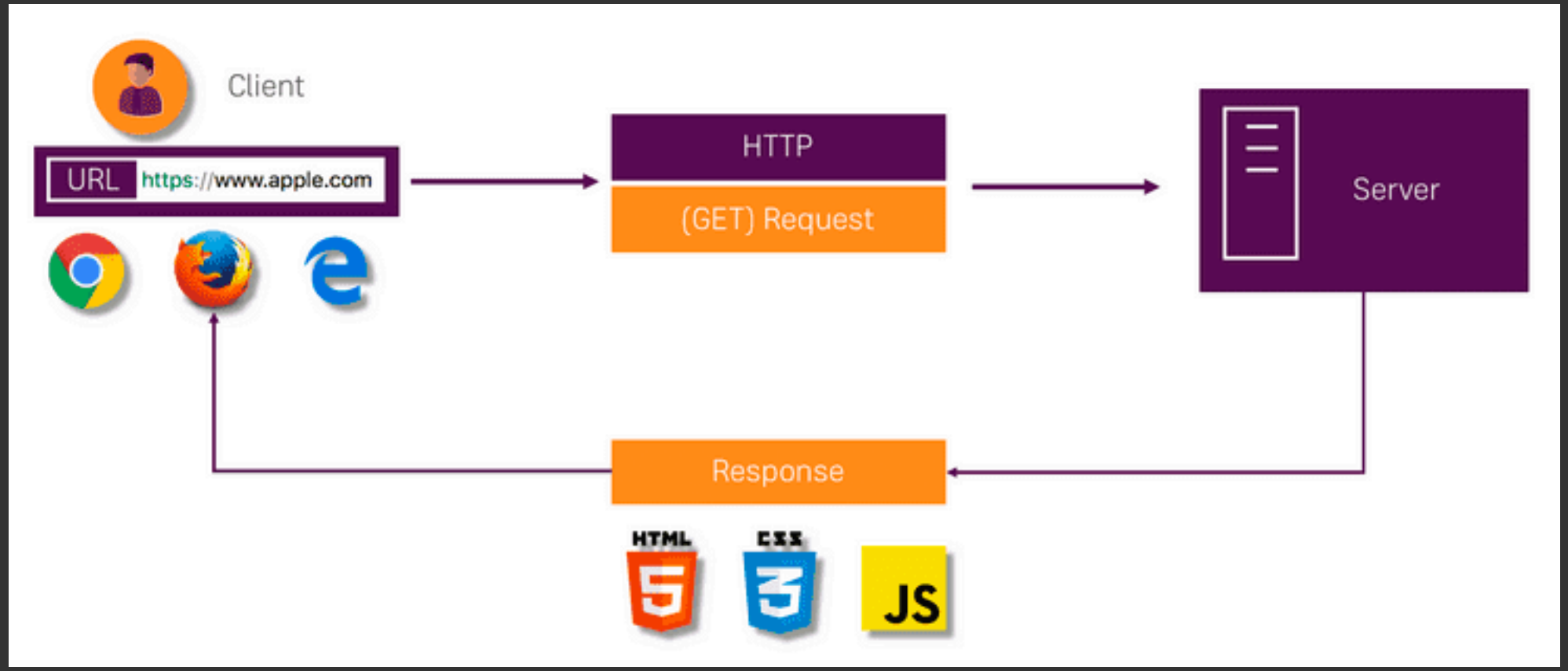
Lists

CSS selectors

CSS combinators

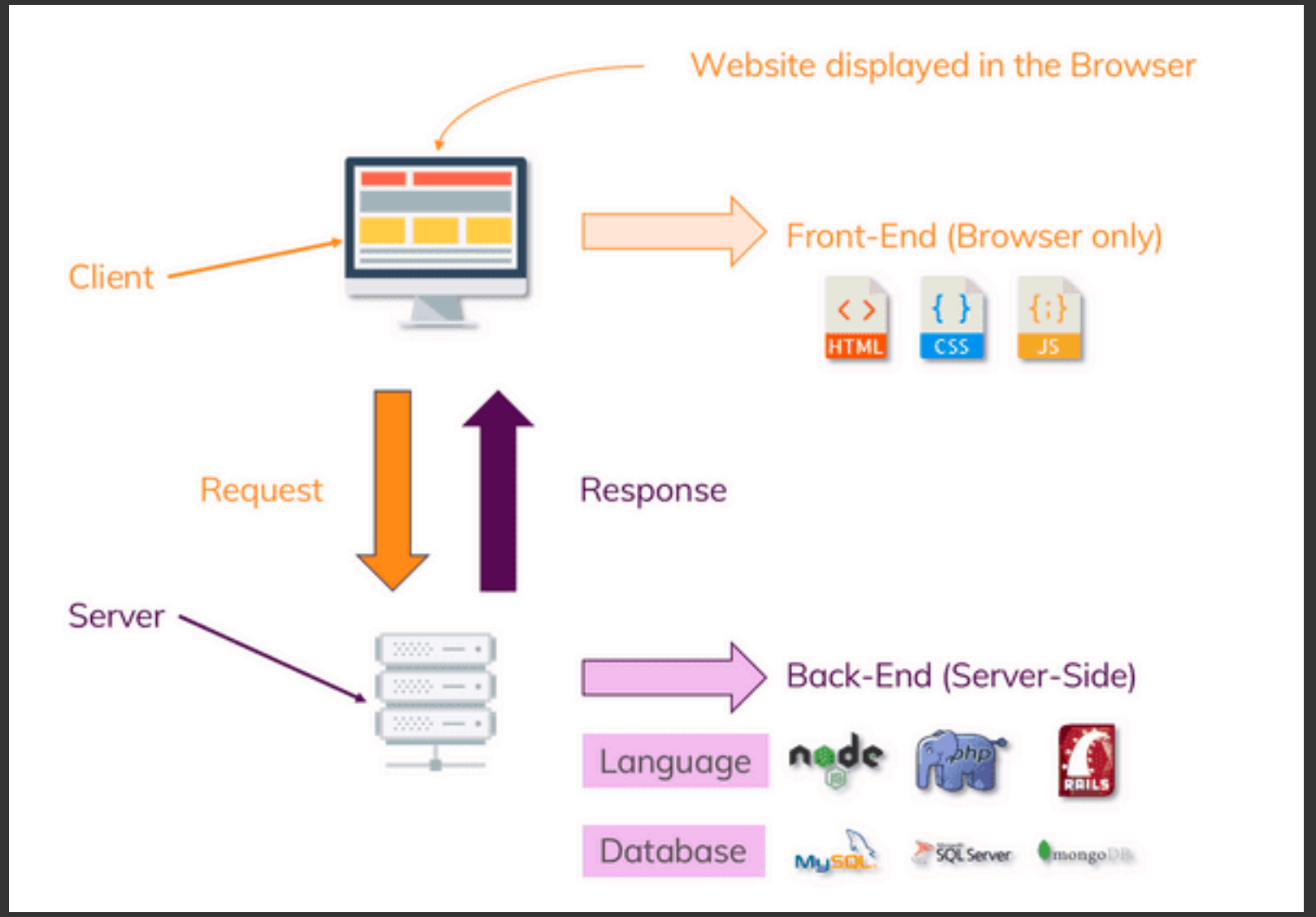
CSS colors

How web works?



https://www.academind.com/learn/html/beginner-s-guide/how-the-web-works/

Front-End and Back-End



https://www.academind.com/learn/html/beginner-s-guide/how-the-web-works/

HTML

HyperText Markup Language

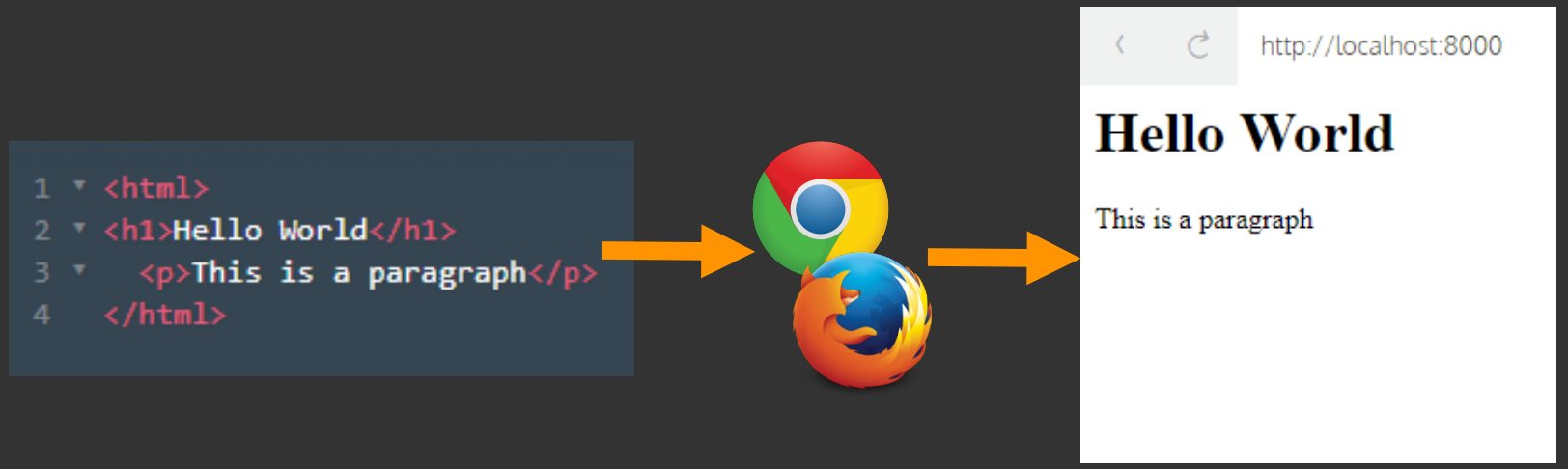
Markup language! = computer language that defines the structure and presentation of raw text. Markup surrounds the raw text with information the computer can interpret, "marking it up" to be processed.

HTML elements are represented by tags. Semantic HTML elements names describe what that element does "heading", "paragraph", "table", and so on.

Browsers do not display the HTML tags but use them to render the content of the page.

HTML

Browser reads the HTML file and transforms it into an interactive document



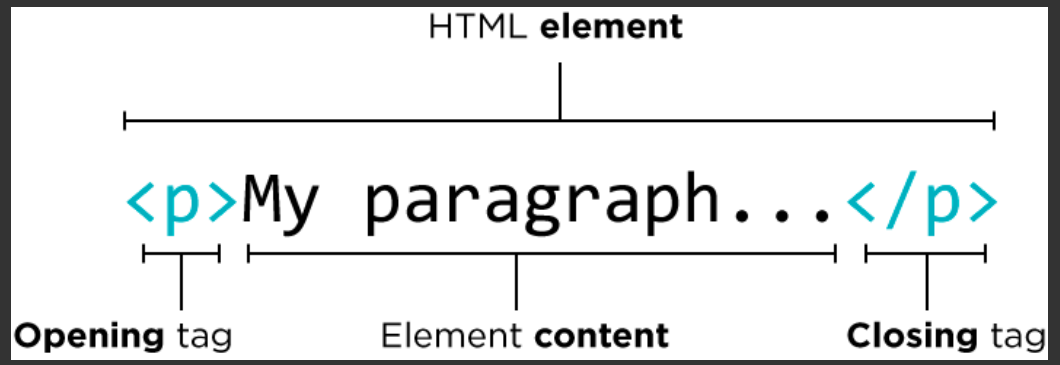
How it works?

Browser can interpret text that is wrapped in HTML elements. These can be nested inside one another, each containing information about the type and structure of information to be displayed in the browser

HTML tags normally come in pairs like and .

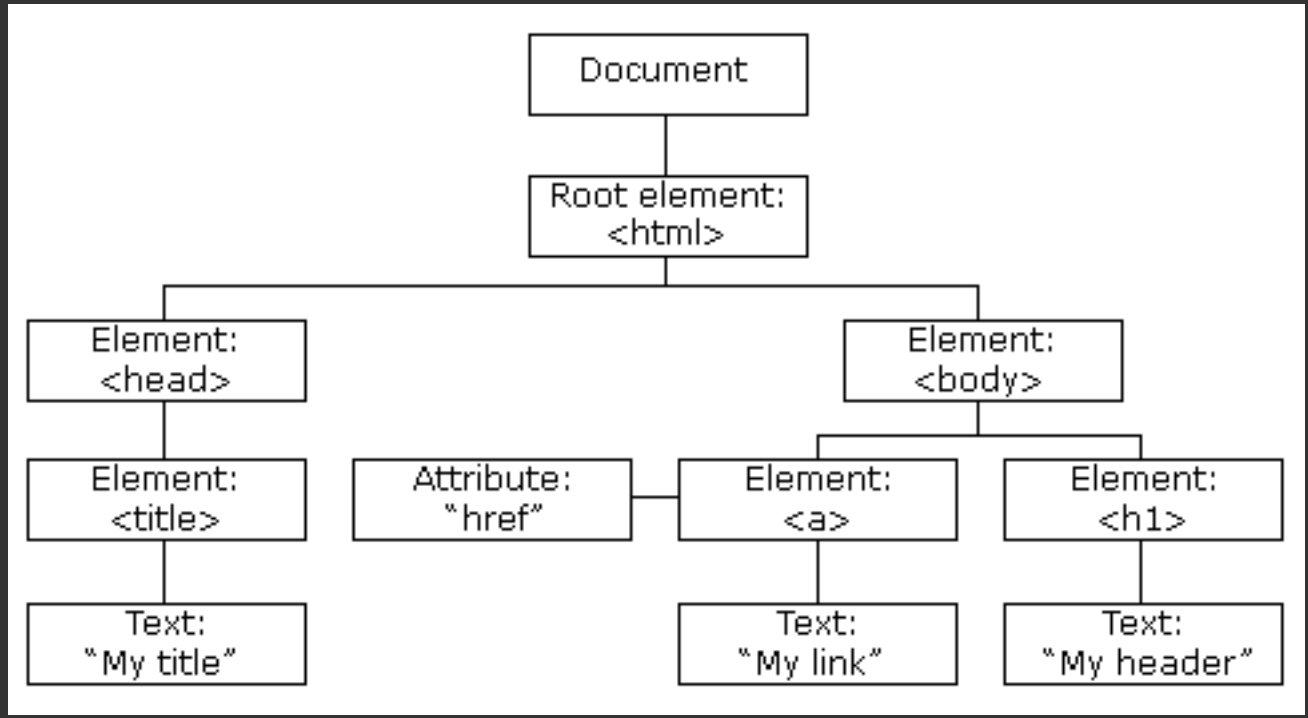
The first tag in a pair is the start tag, the second tag is the end tag

Some html tags close themselves



HTML DOM

HTML Document Object Model – HTML page is constructed as a tree of Objects



https://www.w3schools.com/whatis/whatis_htmldom.asp

Learn by doing – Task 1

<!DOCTYPE html> declaration defines this document to be HTML5

<html> element is the root element of an HTML page

<head> element contains meta information about the document

<title> element specifies a title for the document

<body> element contains the visible page content

<h1> element defines a large heading

<p> element defines a paragraph

What is CSS?

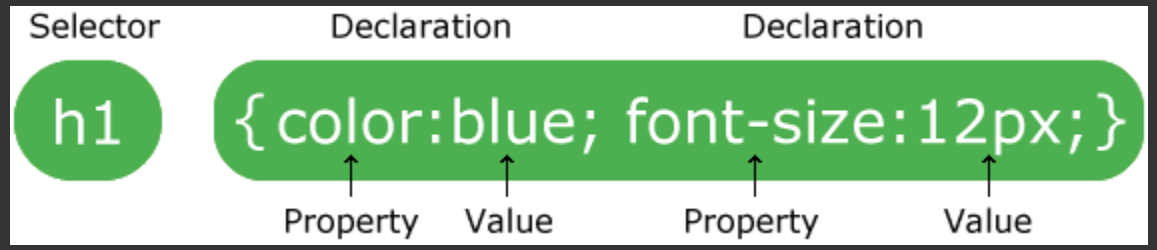
CSS describes how HTML elements are to be displayed on screen, paper, or in other media

CSS saves a lot of work. It can control the layout of multiple web pages all at once

External stylesheets are stored in CSS files

Cascading Style Sheets

CSS Syntax and Selectors



Selectors can be:

- HTML elements
- IDs #
- Classes .

CSS selectors

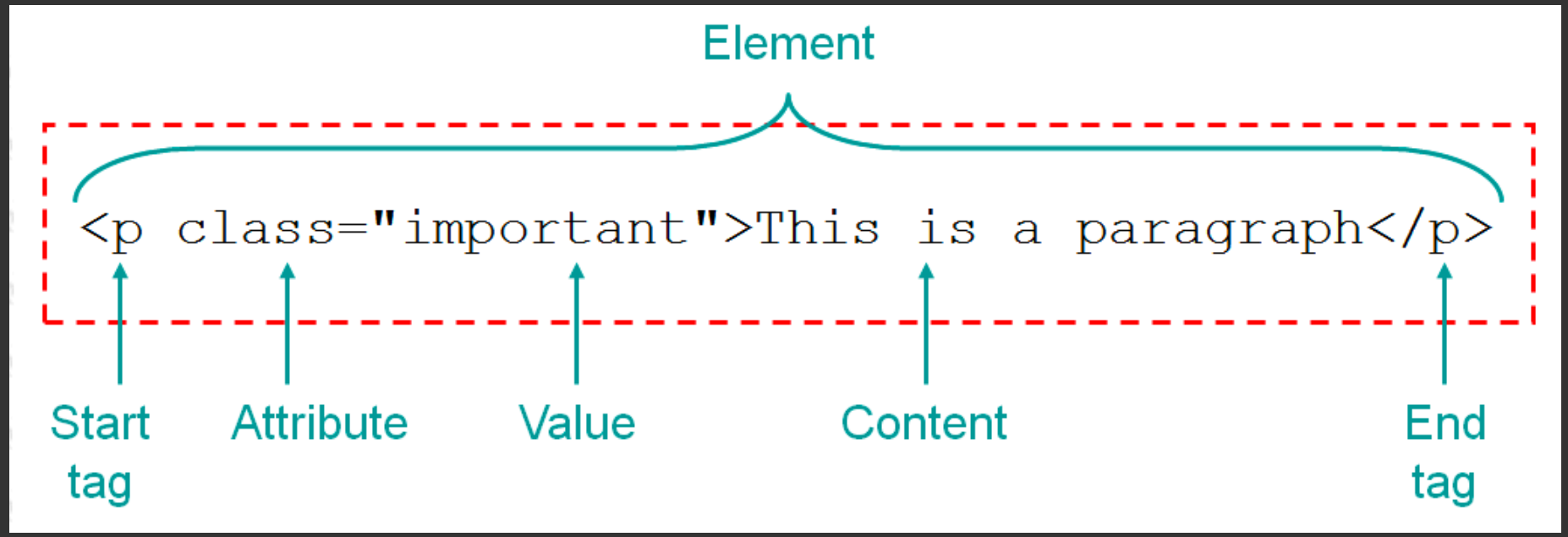
HTML element	p {color:blue}
id	#my_id {color:blue}
class	.my_class {color:blue}

The difference between an ID and a class is that an ID can be used to identify one element, whereas a **class** can be used to identify more than one.

HTML Attributes

Attributes provide additional information about an element

name="value"



https://www.onlinedesignteacher.com/2016/03/html-attributes.html

Including CSS

1. External style sheet
2. Internal style sheet
3. Inline style

1
```
<head>
 <link rel="stylesheet" type="text/css" href="mystyle.css">
</head>
```

2
```
<head>
 <style>
  body {background-color: linen;}
  h1 {color: maroon; margin-left: 40px;}
 </style>
</head>
```

3
```
<h1 style="color:blue;margin-left:30px;">This is a heading</h1>
```

CSS

style.css

```
body {
  background-color: lightblue;
}

#my_id {
  color: white;
  text-align: center;
}

.my_class {
  font-family: verdana, sans-serif;
  font-size: 20px;
}
```

Comments

<!-- Write your HTML comments here -->

/* Write your CSS comments here */

Task 1 continues

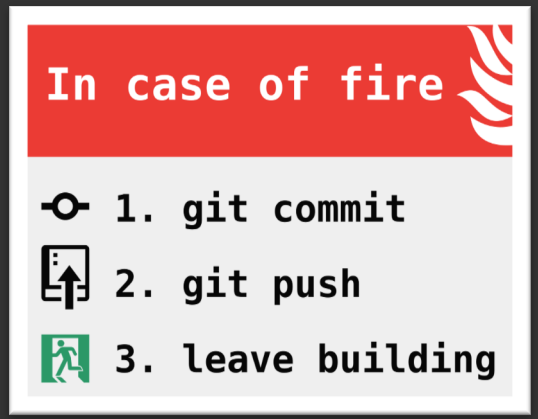
- Connect CSS with HTML
- Add background color
- Change text to white
- Change font
- Change text size to 20px
- Add some comments in HTML and CSS
- Add your Task 1 files to GitHub

Github connection

Create a new repository in GitHub.

Connect your HTML lessons folder (empty) and GitHub repository

- Open cmd / terminal and locate HTML_CSS folder
- git init
- git add .
- git commit -m „first commit“
- git remote add origin URL
- git push origin master



https://kbroman.org/github_tutorial/pages/init.html

HTML typography

Headings

<h1>Heading 1</h1> should be used for main headings (only once on page)

<h2>Heading 2</h2> then second level headings

<h3>Heading 3</h3> following third level

<h4>Heading 4</h4> and so on....

<h5>Heading 5</h5>

<h6>Heading 6</h6>

HTML typography

Paragraphs and text formatting

This is a paragraph.

 - Important text

 - Emphasized text

<mark> - Marked text

<small> - Small text

<del> - Deleted text

<ins> - Inserted text

<sub> - Subscript text

<sup> - Superscript text

<pre> - pre-formatted text

<b> - Bold text (dont't use it, instead use CSS)

<i> - Italic text (dont't use it, instead use CSS)

HTML Quotations

<abbr title=“”> - Defines an abbreviation or acronym

<address> - Defines contact information for the author/owner of a document

<bdo dir=“rtl”> - Defines the text direction

<blockquote> - Defines a section that is quoted from another source

<cite> - Defines the title of a work

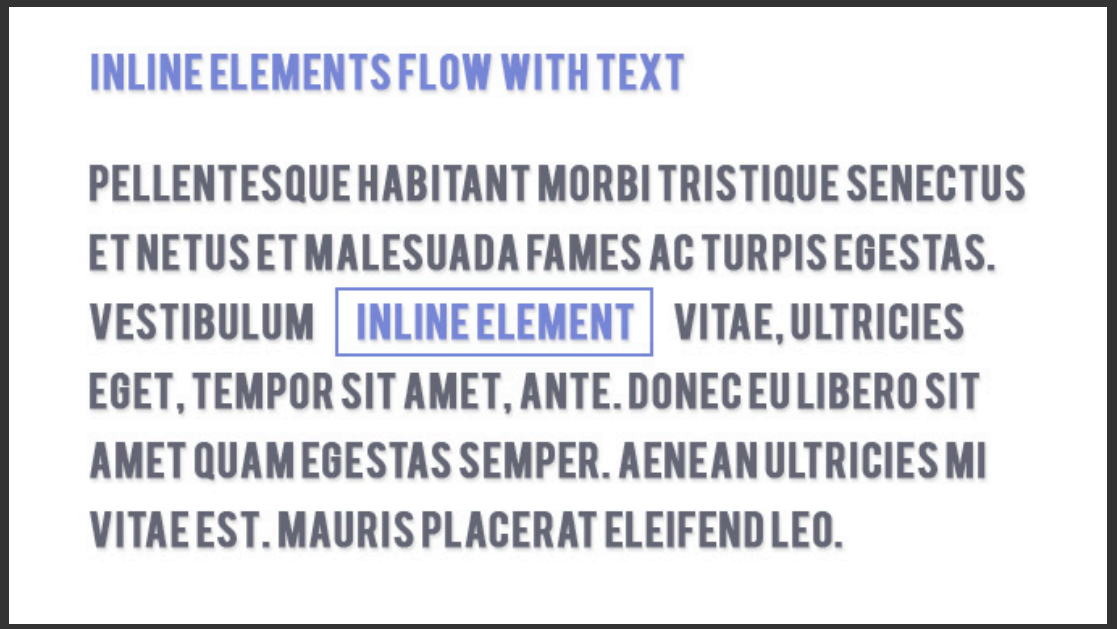
<q> - Defines a short inline quotation

HTML breaks

 line break

<hr> horizontal rule

Block and inline elements



https://www.impressivewebs.com/difference-block-inline-css/

HTML Block Elements

<address><article><aside><blockquote><canvas><dd>
<dl><dt><fieldset><figcaption><figure><footer>
<form><h1><h6><header><hr>
<main><nav>
<noscript>
<p><pre><section><table><tfoot>
<video>

HTML Inline Elements

<a><abbr><acronym><b><bdo><big>
<button>

<cite><code><dfn><i><img><input><kbd>

<label><map><object><output><q><samp><script>

<select><small><sub><sup><textarea>

<time><tt><var>

But what if I want to use something else...

 - Defines a section in a document (block-level)

 - Defines a section in a document (inline)

HTML links

Anchor/links connect two different documents, or locations.

Usually you can recognize by hovering link and mouse arrow turns to cursor.

link text

HTML Links - The target Attribute

The target attribute specifies where to open the linked document.

The target attribute can have only one of the following values:

_blank - Opens the linked document in a new window or tab

_self - Opens the linked document in the same window/tab as it was clicked (this is default)

_parent - Opens the linked document in the parent frame

_top - Opens the linked document in the full body of the window

framename - Opens the linked document in a named frame

Links

External links

```
<a href="http://google.com">Click For Google</a>
```

Internal links

```
<a href="/about.html">Typography</a>
```

```
<a href=”#footer">Footer</a>
```

Images

Internal image

```
<img src="/images/sample.jpg" alt="My Image">
```

External image

```
<img src="https://source.unsplash.com/200x200/?building" alt="My Image 2">
```

Images

Internal image:

```
background-image: url('/images/sample.jpg');
```

External image:

```
background-image: url('https://source.unsplash.com/200x200/?building');
```

Lists

Unordered lists

- first item
  - first item first subitem
  - first item second subitem
- second item
- third item

Ordered lists

1. first item
   1.1. first item first subitem
   1.2. first item second subitem
2. second item
3. third item

Lists

```
<ul>
  <li>First item
    <ul>
      <li>first item first subitem</li>
      <li>first item second subitem</li>
    </ul>
  </li>
  <li>second item</li>
  <li>third item</li>
</ul>
```

Use of lists

An unordered list is one common method for creating a

navigation

CSS combinators

descendant selector (space)	main p {background:green}
child selector (>)	main > p {background:green}
adjacent sibling selector (+)	main + p {background:green}
general sibling selector (~)	main ~ p {background:green}

https://www.w3schools.com/css/css_combinators.asp

CSS colors

Hexadecimal colors	#ff0000;
RGB colors	rgb(255, 0, 0);
RGBA colors	rgba(255, 0, 0, 0.3);
HSL colors	hsl(120, 100%, 50%);
HSLA colors	hsla(120, 100%, 50%, 0.3);
Cross-browser color names	green

https://htmlcolorcodes.com/color-names/

Before we continue – organize your file structure

```
Documents/Desktop etc
  REAT21K (optional)
   HTML_CSS
   JS
   UI_UX
   Agile_software
```

Portfolio project – week 1

HTML

- Add navigation with links
- Three different level headings
- Paragraph text
- Image in HTML

CSS

- Background color
- Img size
- Text color
- Font family

Manuals

https://www.w3schools.com/tags/default.asp

https://devdocs.io/

https://zealdocs.org/

To use manuals, learn language first!