HTML

HTML Recap

- HTML is a language of **tags** (not a programming language) used to display information on the web
- Browsers interpret and display HTML

Starting with HTML

- HTML files start with <!DOCTYPE html> tags - to tell the browser the document type
  - **Pro tip -** in VS Code if you write ! and press enter you can get all of your HTML prefilled 😉
- HTML tags need to be opened and closed. **Example:**

```
<html> </html>
```

- HTML files end with **.html** extension

Developer tools

- Used to help you **debug** your code. In all browsers **F12** opens up the developer tools. The basic tabs needed for starting writing HTML, CSS and

JavaScript are → **Elements and Console** tabs.

- **Elements** → used to debug HTML and CSS
- **Console** → used to debug JavaScript.

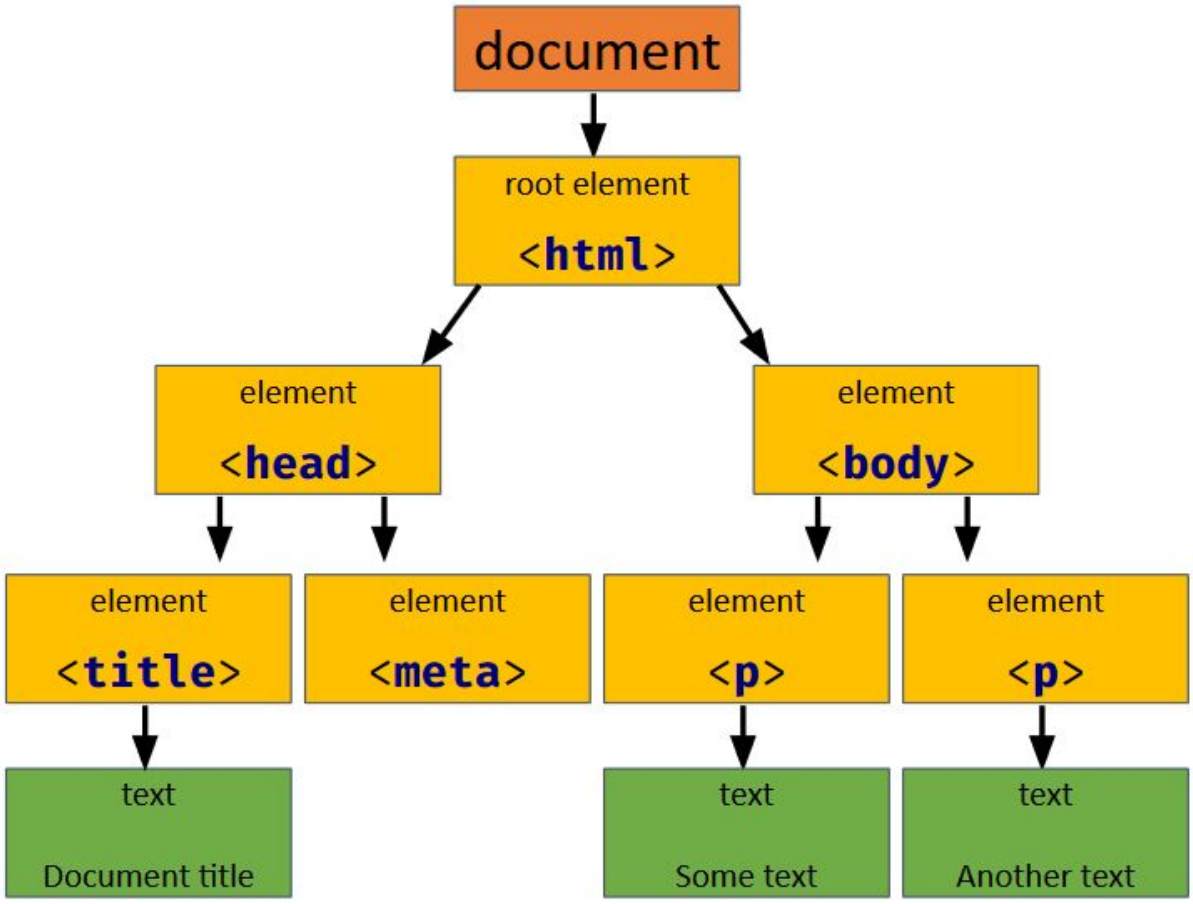
Short HTML recap

- HTML elements can be nested inside one another.
- Nesting means that another element or text can be inside another element.

> Most HTML tags open and close like **<tag> </tag>** with the exception of tags like **<img />** (which self close and do not contain other elements inside them).

HTML tags can be thought as a tree of elements. IMPORTANT

> This structure of objects is called the **DOM**. In it elements contain children elements, which can be visualized as a tree (think a family genealogical tree or a regular tree with roots branching out).



HTML Attributes

- HTML attributes are written using syntax like:

> attribute="value'

Example:

```
<div class="container" id="rightMenu">
</div>
```

> **class** and **id** are div **attributes**. various elements have various possible attributes.

Most common attributes:

- href - used for hyperlinks
- src - (source) of content

- id, class - attributes used for CSS and JS. **most common**

DIV element

```
<div>
</div>
```

In my opinion, this is the most important tag that is neutral and has the most possibilities. It can be though as a **container** for other elements. It is the most common element.

Other popular HTML tags (without explanation)

- , <ol>, <li> - lists
  - ul - unordered (dots) list
  - ol - ordered (numbers) list
- <p> - paragraph text
- <h1> - headings
  - ranges from <h1> to <h6>. from largest to smallest.
- <img/> → image tag. we provide it an image using the **src attribute**
- <a> → anchor tag used for links (we provide a **href attribute** to specify the link address)
- <table> - for tables
  - <th> will create the table header cell.
  - <td> will create a regular cell
  - <tr> will create a **table row**
  - Example:

```
<table>
  <tr>
    <th>
      Name
    </th>
    <th>
      Surname
    </th>
```

```
  </tr>
  <tr>
    <th>
      John
    </th>
    <th>
      Smith
    </th>
  </tr>
</table>
```

- HTML5 tags like
  - <header>
  - <footer>
  - <article>
  - <section>
  - <nav>

  Can be useful too maybe. They are used only for **semantics -** to distinguish different areas of the HTML. If there was a navigation bar, we would wrap it in a **<nav>** tag → but it's only for semantic reasons and sometimes used in SEO.
- of course <body>, <head>, <html>, <link> and <script> 🙂

HTML Forms

HTML forms are created using the <form> tag, for example:

```
<form>
  <input type="text" name="firstName"/>
  <input type="submit" name="save"/>
</form>
```

Here everything inside will be a form. Forms usually have **action** and **method** properties but you'll learn more about that later.

Input elements

Input elements hold data and are a way of inputting information by the user.

It's one of the most basic form elements and they have different types set using the **type** attribute.

There are many of them but the most popular are:

- <input type="text"/> → text input
- <input type="number"/> → number input (only allows digits)
- ☐ → radio button input (must have more radio inputs with the **name** property)
- <input type="submit"/> → creates a submit button which triggers the forms save action.
- ☐ → checkbox type input (allows to be checked or unchecked, think of it as true false).

Other form elements

- <select> → select input which allows one or many options from a supplied dropdown list
- <textarea> → similar to <input type="text"/> but allows longer text with more lines
- <button> → clickable button that can be used instead of <input type="submit"> and can be used to do some Javascript defined actions.

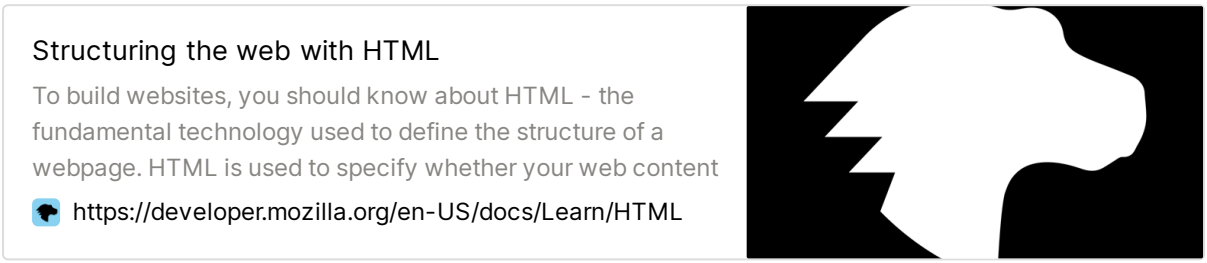
Honorable mentions

- Always try to write clean **HTML** structures just like with anything else. Use ID, class attributes wisely. ID should be unique and class should be used for many items.
- Try to reuse classes so there'd be less code in CSS.
- Refactor. If there's a difficulty or a problem with your structure, change it and it may help with **CSS** styles or **JS** code.

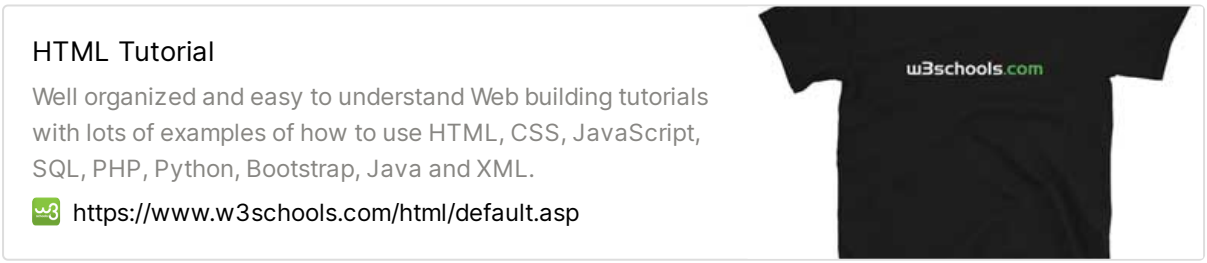
Conclusion

That's a short recap of **HTML**. The important part is not to know everything but the basics and a general understanding and additional information is all around the web for you to find 🙂

I'd recommend these places:



More sophisticated with references, guides and even tutorials.



More beginner friendly and may seem easier to find things

I'd recommend to get used to finding things on the internet. But be vary of blatant copying. You should use the web as a tool that helps you think but you should not use it as a tool that things for you 😉

If you remember basic topics from here you can easily find things online, for example → if you want to know more about forms you would write HTML Forms or look for it in the 2 websites given below and so on...

Good luck!