Intro to HTML and CSS Workshop

A Ming Lei Presentation

What will you learn today?

Structure and Syntax of HTML and CSS

~20 min

Important HTML Elements and CSS Properties

~20 min

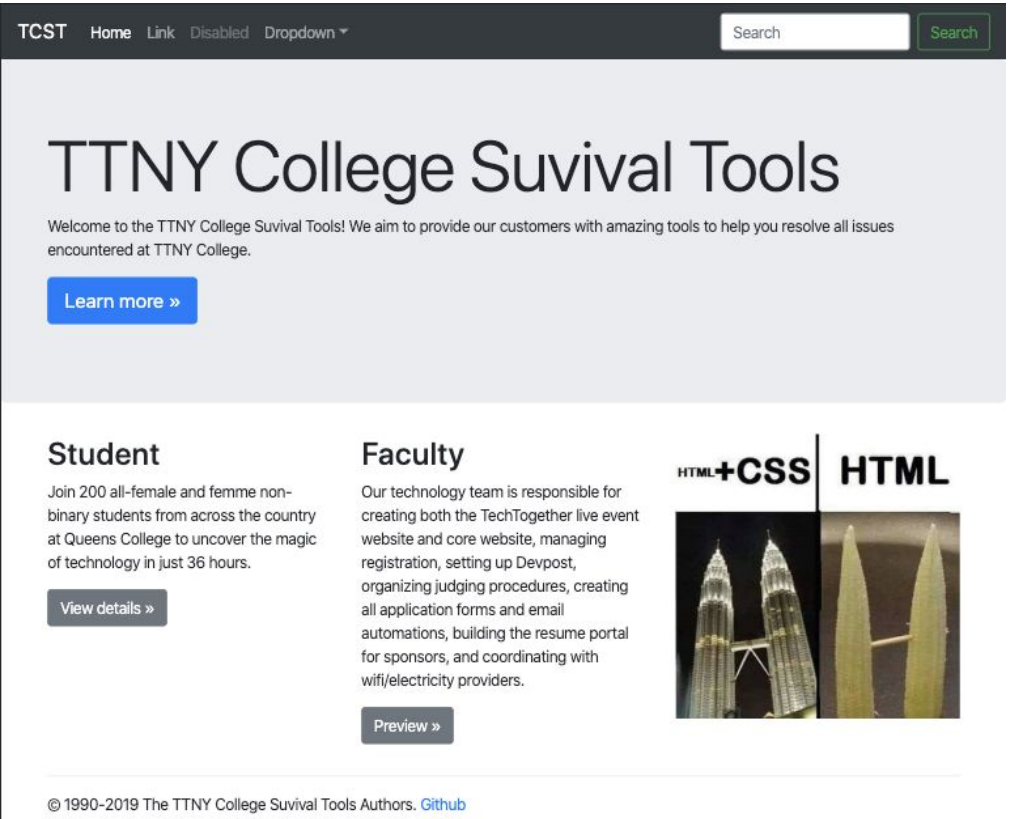
How to use common libraries and tools

~ 15 min

Illustration purposes only

Why does this matter?

- **Widely-used**
  HTML and CSS are used in every website!
- **Foundational**
  HTML and CSS are the foundation of more complicated skills you may learn later.
- **Practical**
  Being able to deploy and share your website helps you success on hackathon!



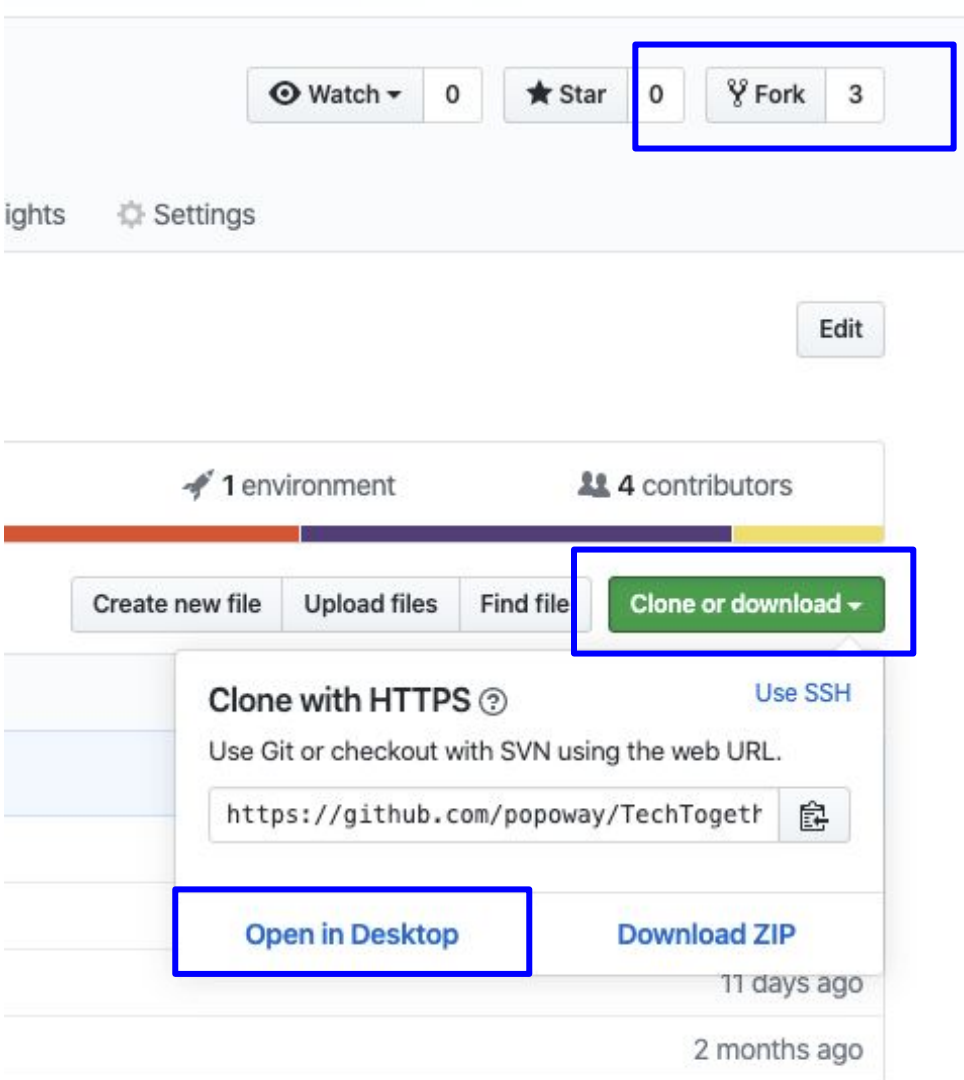
What are we building today?

To preview the what you'll be building, go to this URL:

ming.fyi/ttny2

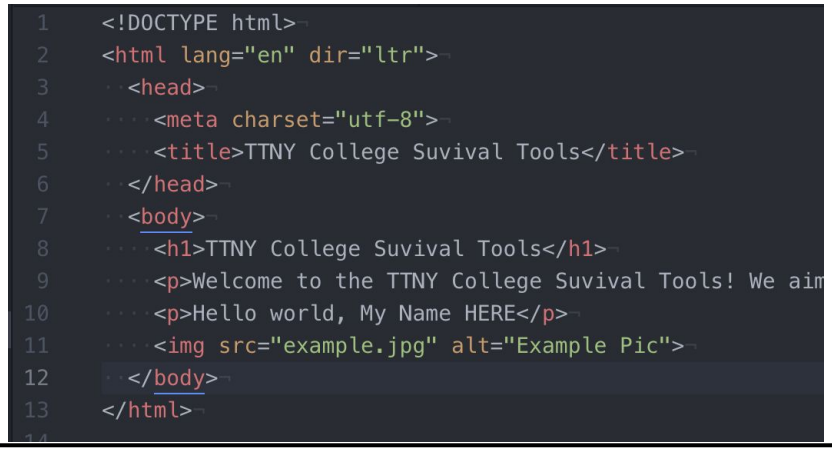
Remix the Starter Code

1. Go to **ming.fyi/ttny1**
2. Click on “fork” to make your own copy of the code
3. Click on “Clone or download” -> “Open in Desktop” to download code to your local machine
4. Alternatively, “git clone”



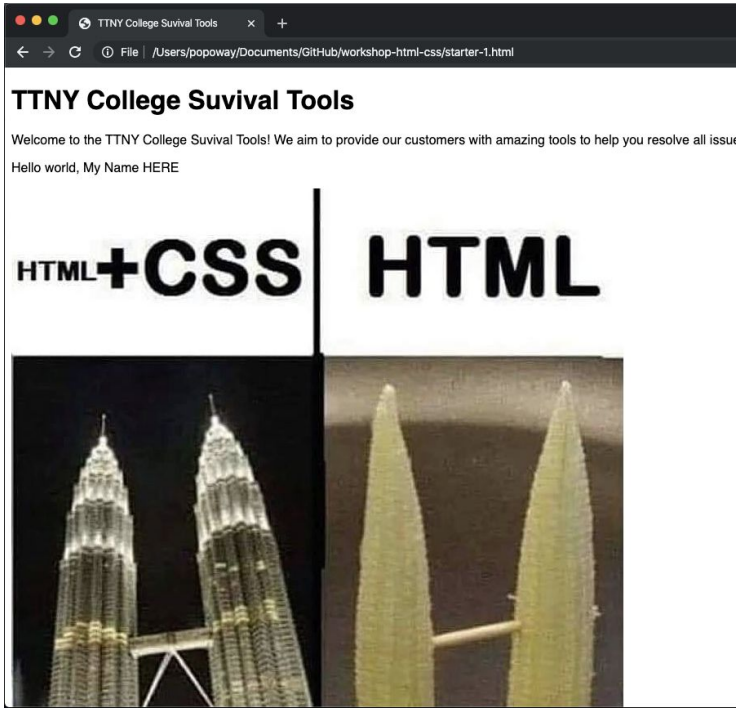
Remix the Starter Code

1. Open starter-1.html in your favorite text editor (no Notepad or TextEdit please)
2. Open the same file in Chrome.



```
<!DOCTYPE html>
<html lang="en" dir="ltr">
  <head>
    <meta charset="utf-8">
    <title>TTNY College Suvival Tools</title>
  </head>
  <body>
    <h1>TTNY College Suvival Tools</h1>
    <p>Welcome to the TTNY College Suvival Tools! We aim
    <p>Hello world, My Name HERE</p>
    <img src="example.jpg" alt="Example Pic">
  </body>
</html>
```

Remix the Starter Code

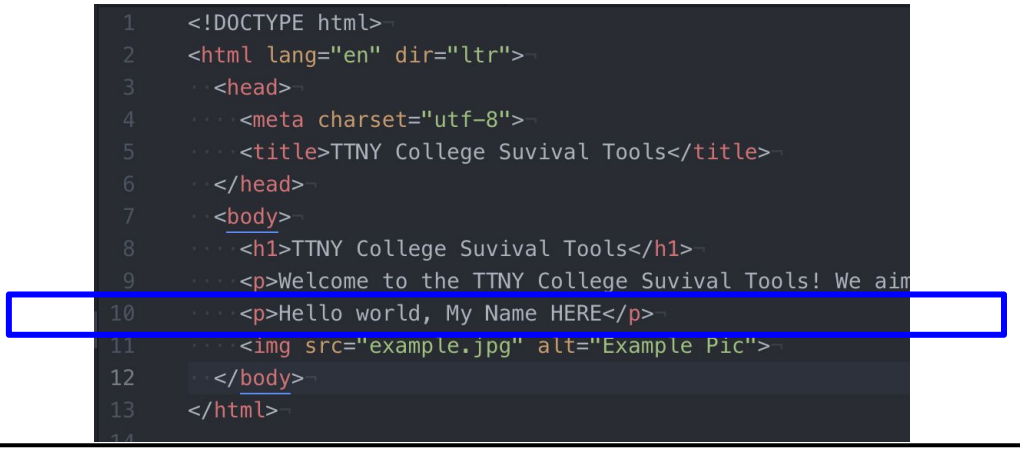


That was what your website looks like right now.

Let's change it!

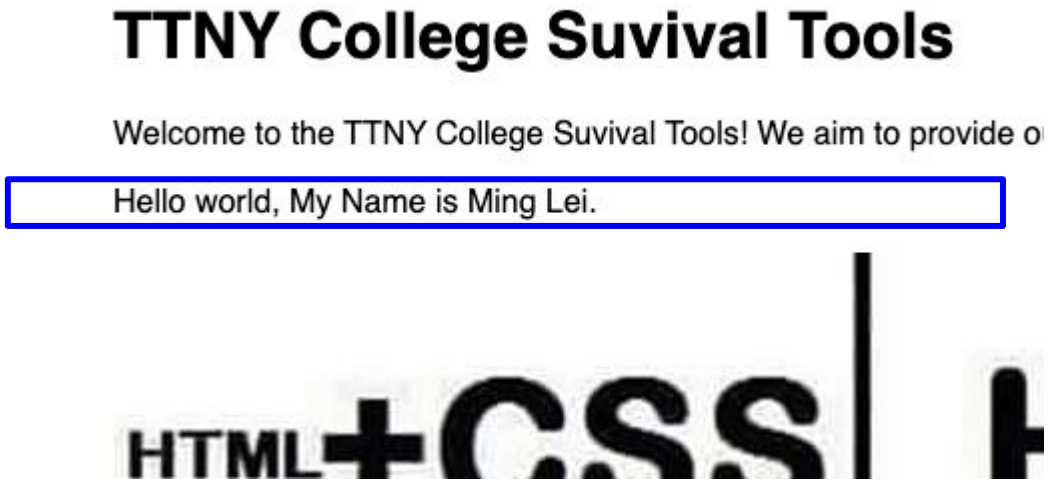
Remix the Starter Code

1. In the tab with your code, replace Your Name Here (line 10) with your name.
2. Reload the page (Ctrl + R or Cmd + R) to see the changes!



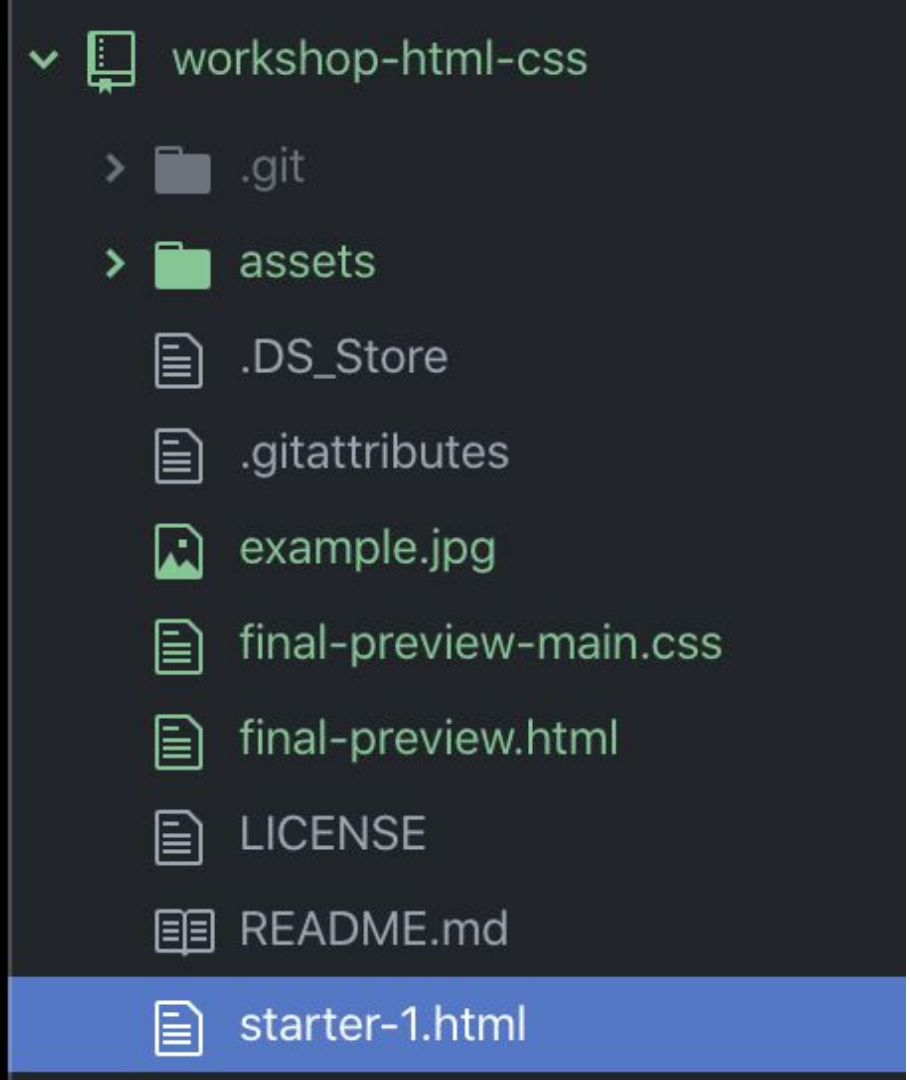
Remix the Starter Code

1. Make sure the website says your name, not my name!



Just one! Your own.

Let's dive into the project to understand what you just did!



What are all these files?

assets/ – a folder where you can store images you want on your page

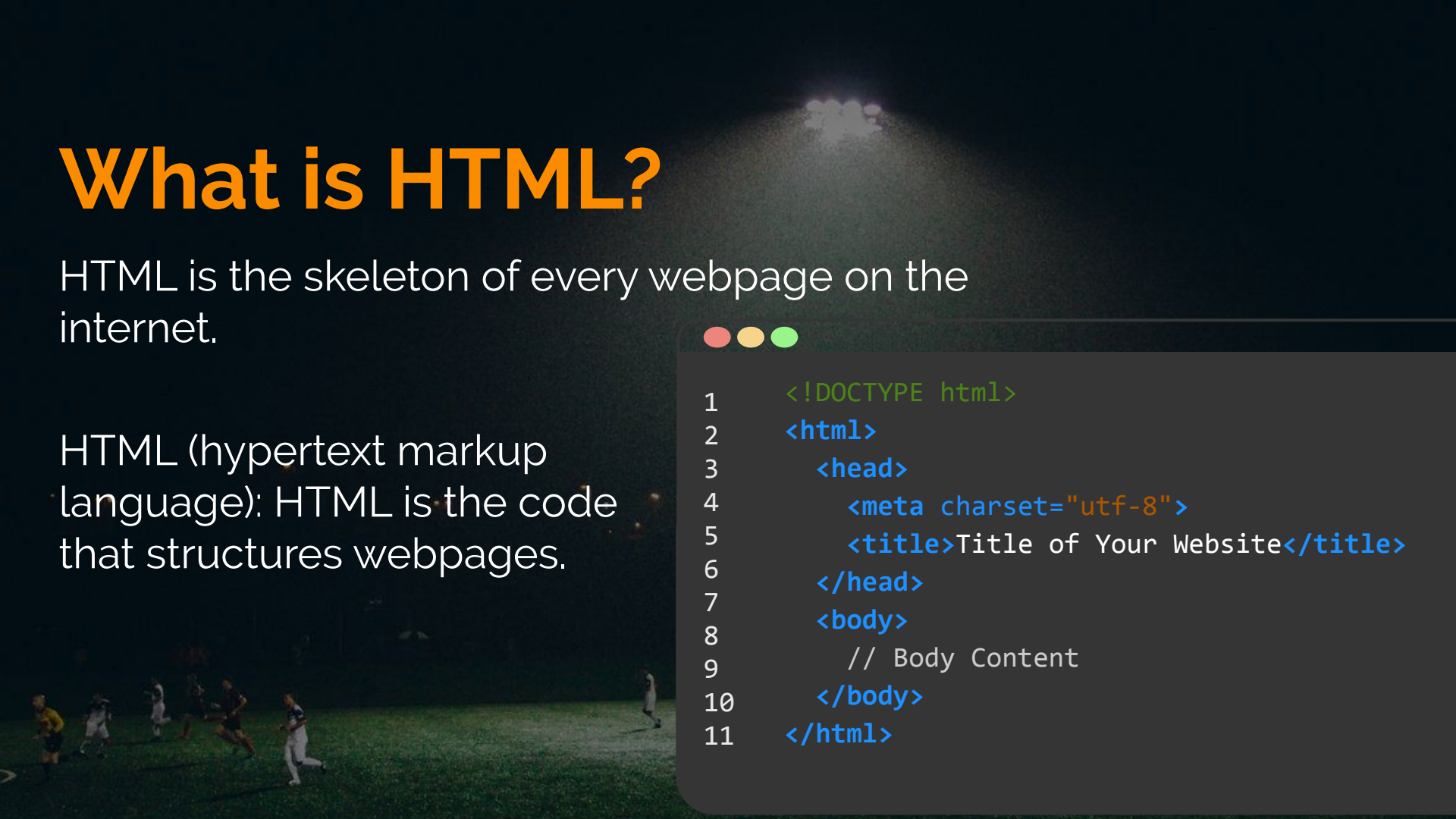
README.md – information about your website

style.css – a file that contains the main styling for your website (you will be editing this file)

What is HTML?

HTML is the skeleton of every webpage on the internet.

HTML (hypertext markup language): HTML is the code that structures webpages.

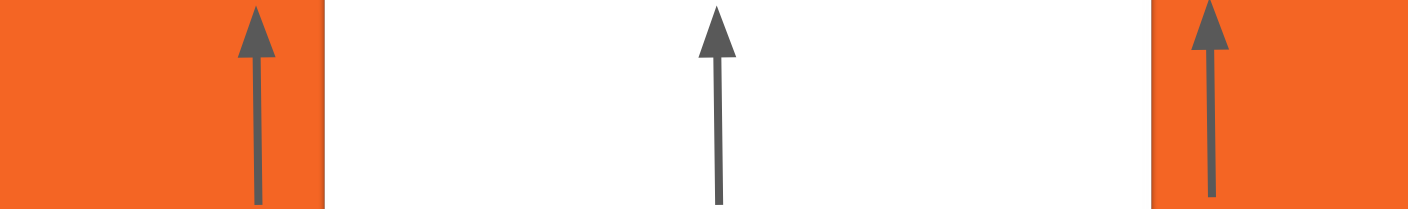


```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>Title of Your Website</title>
  </head>
  <body>
    // Body Content
  </body>
</html>
```

HTML Syntax

Most HTML elements consist of an opening tag, content, and a closing tag. Important exceptions include the <**link**> and <**img**> tags, which are called "self-closing" tags.

```
<body>    /* Content */    </body>
```



Every website needs the code below

What does this code mean?

Line 1: Specifies that the code below is HTML.

Line 2: This is an opening <html> tag.

Line 3: The <head> tag contains information about your website. This isn't visible to users.

```
1   <!DOCTYPE html>
2   <html>
3     <head>
4       <meta charset="utf-8">
5       <title>Title of Your Website</title>
6     </head>
7     <body>
8       // Body Content
9     </body>
10  </html>
11
```

Every website needs the code below

What does this code mean?

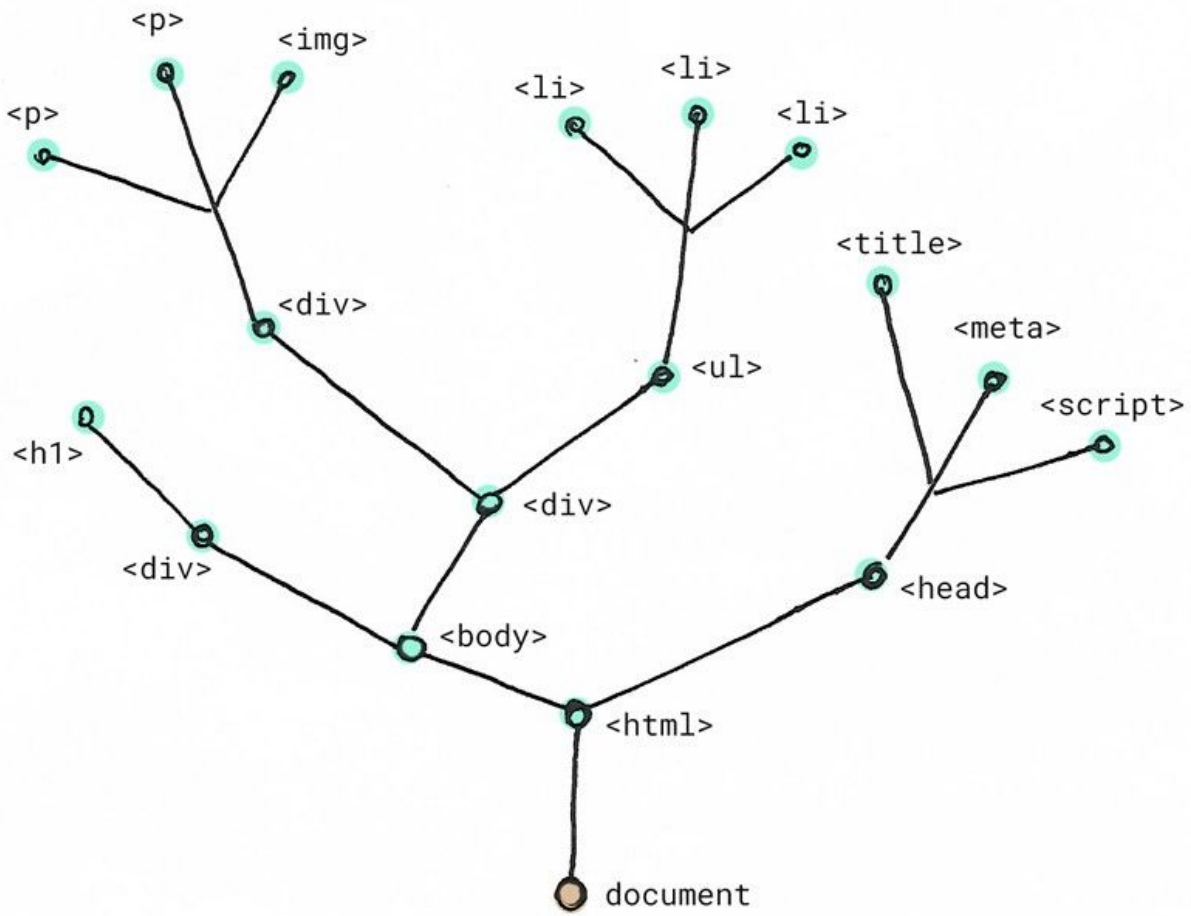
Line 5: This is the title of your website that users see in the browser tab

Line 6: This is a closing </head> tag. This ends element.

Line 7-10: This is the <body> of your website.

Line 11: This tag closes your <html> element.

```
1   <!DOCTYPE html>
2   <html>
3     <head>
4       <meta charset="utf-8">
5       <title>Title of Your Website</title>
6
7     </head>
8     <body>
9       // Body Content
10    </body>
11  </html>
```


<p>
<img>
<p>
<li>
<li>
<li>
<title>
<meta>

<ul>
<script>
<h1>

<head>
<body>
<html>
document

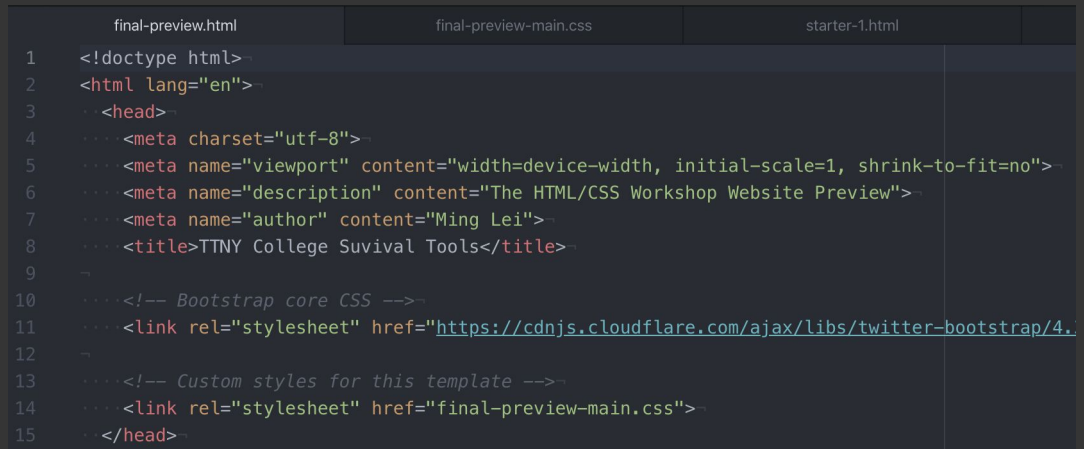
final-preview.html

What does this code mean?

<**meta**> tags contain information about how the page should be rendered.
<**Link**> tags connect your HTML to other files.

style.css – our main stylesheet

cdnjs.cloudflare.com – allows us to use an layout library called Bootstrap



final-preview.html

What does this code mean?

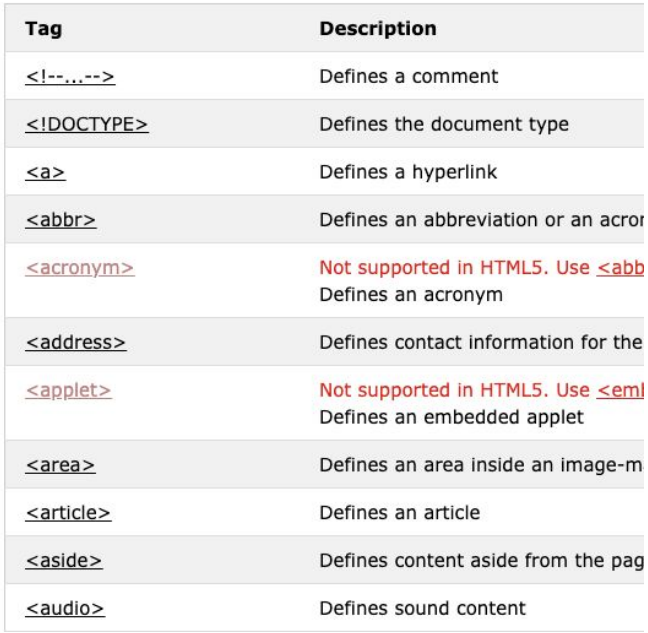
All of the visible content of our website is between the opening and closing **<body>** tags.

- <h1> is a header tag. These range from <h1> to <h6>.
- <p> is a paragraph tag.

```
7       <body>
8           <h1>TTNY College Suvival Tools</h1>
9           <p>Welcome to the TTNY College Suvival Tools
10          <p>Hello world, My Name HERE</p>
11          <img src="example.jpg" alt="Example Pic">
12      </body>
13  </html>
```

HTML Tag Cheatsheet

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



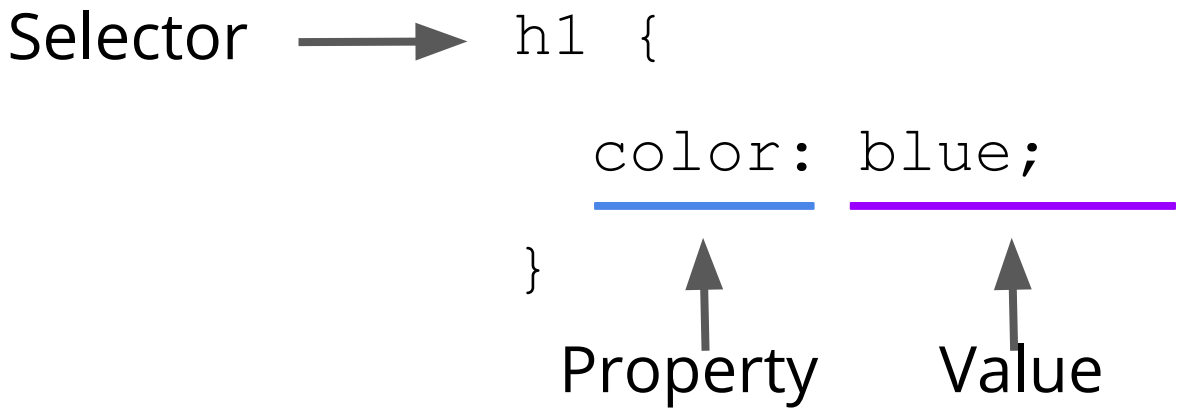
Tag	Description
<!--...-->	Defines a comment
<!DOCTYPE>	Defines the document type
<a>	Defines a hyperlink
<abbr>	Defines an abbreviation or an acror
<acronym>	Not supported in HTML5. Use <abb Defines an acronym
<address>	Defines contact information for the
<applet>	Not supported in HTML5. Use <emb Defines an embedded applet
<area>	Defines an area inside an image-m
<article>	Defines an article
<aside>	Defines content aside from the pag
<audio>	Defines sound content

That was a deep dive, but...
How do we style HTML elements?

Using CSS!

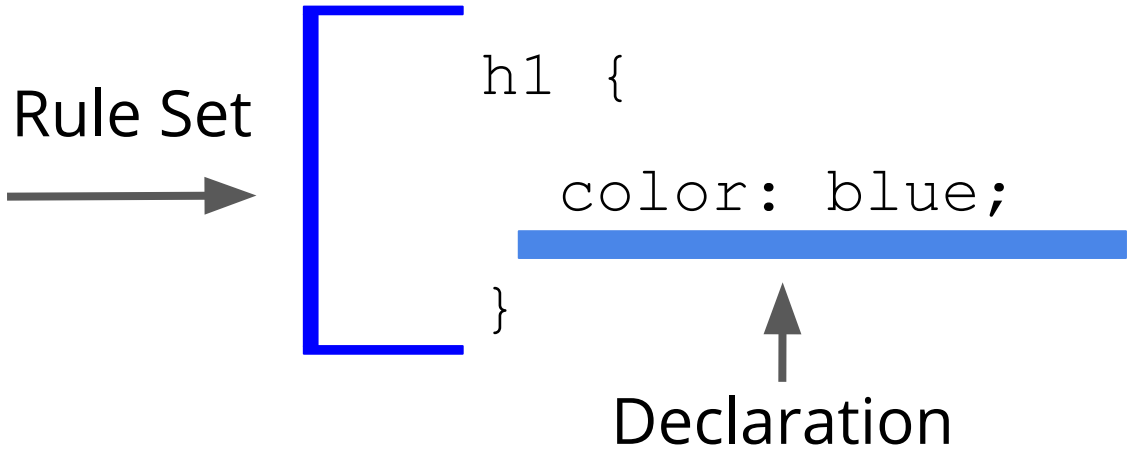
CSS Syntax

- The selector specifies which elements to style.
- A property is a characteristic of an element we can set.
- A value is how that property should appear.



CSS Syntax

- A **value** and a **property** together are a **declaration**
- A **selector** and its **declarations** together make a **rule set**



CSS Properties Cheatsheet

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

Tag	Description
<!--...-->	Defines a comment
<!DOCTYPE>	Defines the document type
<a>	Defines a hyperlink
<abbr>	Defines an abbreviation or an acror
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<article>	Defines an article
<aside>	Defines content aside from the pag
<audio>	Defines sound content

Customize your site!

Let's use what you've just learnt!

Customize your site!

- Open starter-2.html
- Add a Headline
- Add an <h2> element after line 10
- Add a <p> element on line 12. Add some information about yourself.

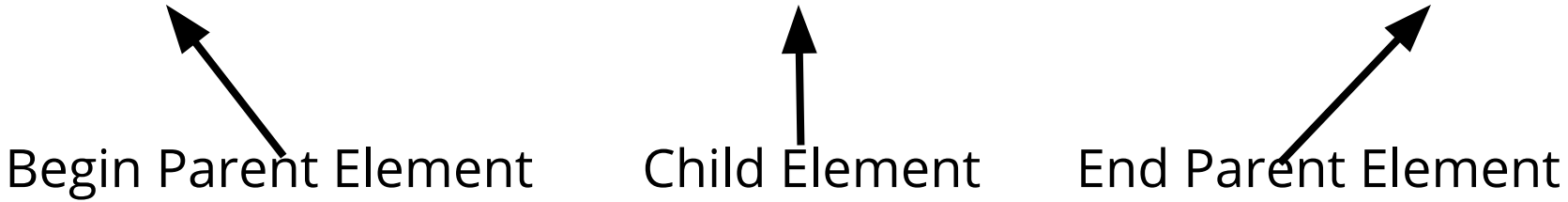
Customize your site!

- Add a <ul> element before <img>. Leave it empty for now.
- Inside the <ul> element, add 3 <li> elements.
- Inside each <li> element, add an <p> element.
- Inside each <p> element, list a project or accomplishment you'd like to highlight.

Elements Can Be Nested

HTML elements that are inside of other HTML elements are called **child** elements. The outer element is the **parent** element. **<li>** elements are children of **<ul>** elements and **<ol>** elements.

```
<ul>    <li>Item Number One</li>    </ul>
```



Customize your site!

- Add another Image <img>
- Note: Your image might be huge. We'll fix this later.

Customize your site!

- Below the closing </ul> tag, add a <footer> element.
- Inside the <footer> element, add an <a> tag.
- Add an href attribute inside of the opening <a> tag. Set it equal to the URL of your LinkedIn profile.
- Add target="_blank" inside the opening <a> tag as well.

Customize your site!

- Below the closing </ul> tag, add a <footer> element.
- Inside the <footer> element, add an <a> tag.
- Add an href attribute inside of the opening <a> tag. Set it equal to the URL of your LinkedIn profile.
- Add target="_blank" inside the opening <a> tag as well.

Libraries & Tools

There are many great libraries out there for building website,, but here are a few:

- **Font Awesome**
  https://fontawesome.com/
- **Bootstrap**
  https://getbootstrap.com/
- **fonts.google.com**
- **Google Chrome DevTools**
- **GitHub Pages**
  https://pages.github.com/

THANK YOU!