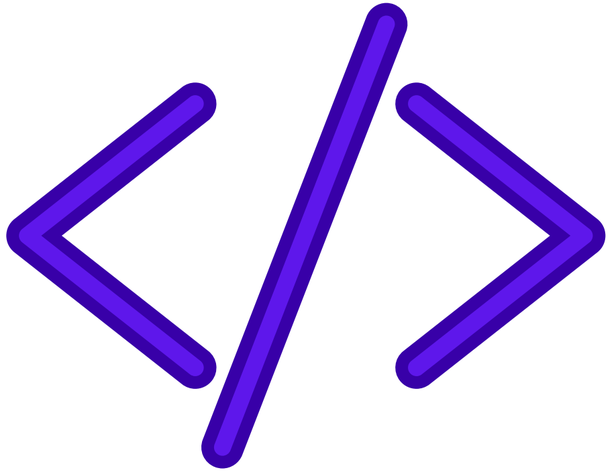
Intro to HTML, CSS and JS

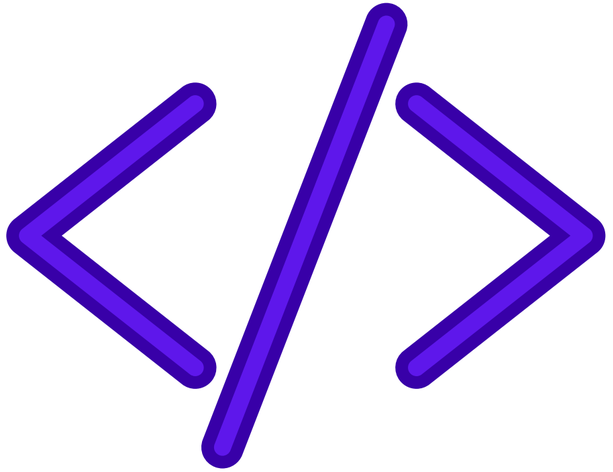
Why?

- How website pages actually work.
- You won't become a web developer, but you will gain essential skills to use in bigger projects.
- Basics of HTML, CSS, Javascript.



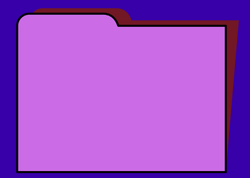
Overview

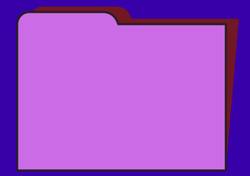
- **HTML** provides the basic structure of sites, which is enhanced and modified by other technologies like CSS and JavaScript.
- **CSS** is used to control presentation, formatting, and layout.
- **JavaScript** is used to control the behavior of different elements.



We hope you are having fun! ;)

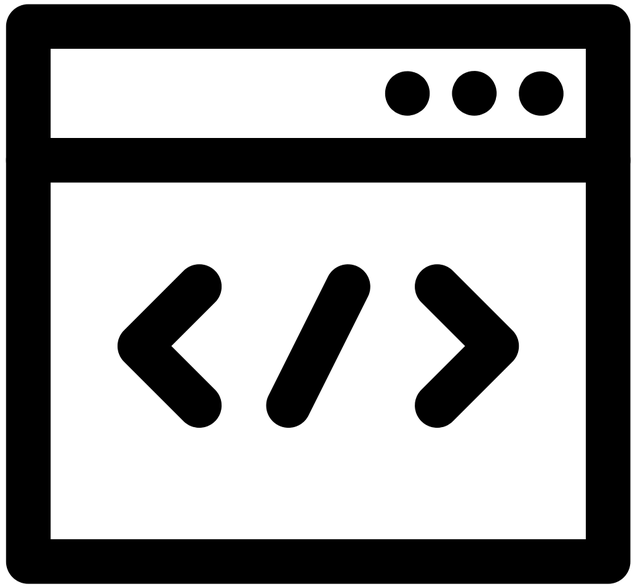
Intro to HTML! :)





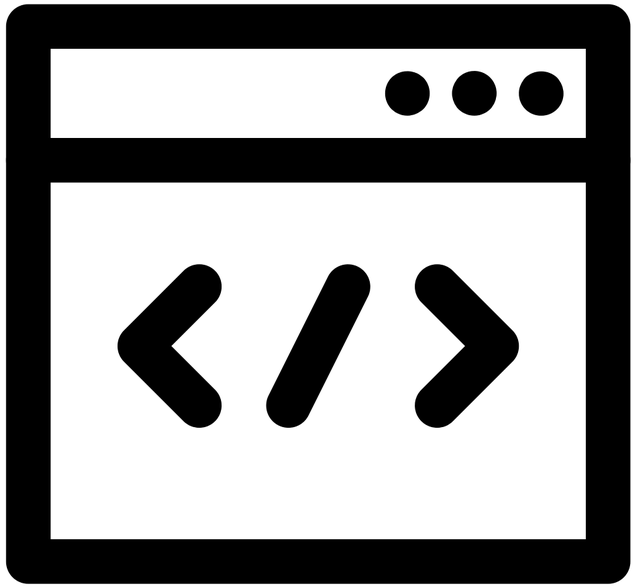
HTML

- **HTML**
  - HyperText Markup Language
  - "Markup language"
  - tags to identify different types of content and the purpose
  - structure of your web page



HTML

- Each webpage is made up a bunch of hidden HTML tags
- Some HTML tags, known as elements, are:
  - header
  - body text
  - images
  - classes
- Look at Developer Tools

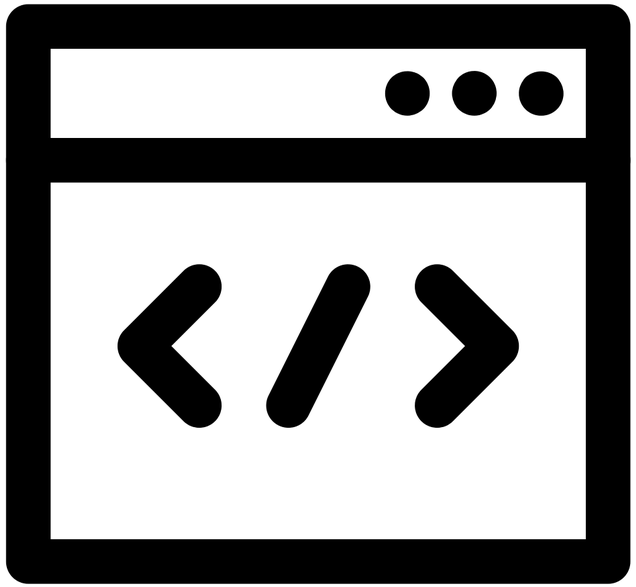


HTML

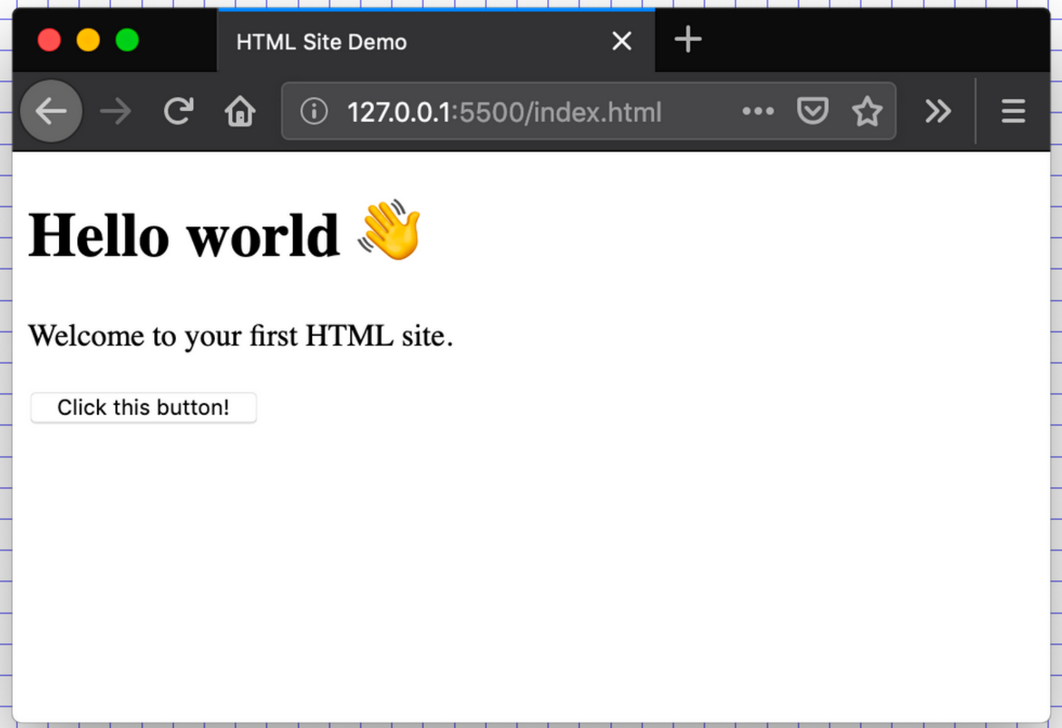
- Important tags:
  - : Division
  - <h1></h1>: Header
  - : Paragraph

- You can also assign a tag a **class attribute**. This points to a class defined in your CSS!

(Don't worry - you'll see this later in the templates for the project!)



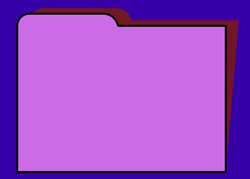
HTML Example

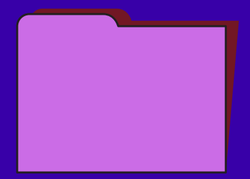



```
<!DOCTYPE html>
<html lang="en">
 <head>
  <title>HTML Site Demo</title>
 </head>
 <body>
  <h1 id="hello">Hello world   </h1>
  <p>Welcome to your first HTML site.</p>
   <div class = 'click-button'>
      Click this button!
   </div>
 </body>
</html>
```

We hope you are having fun! ;)

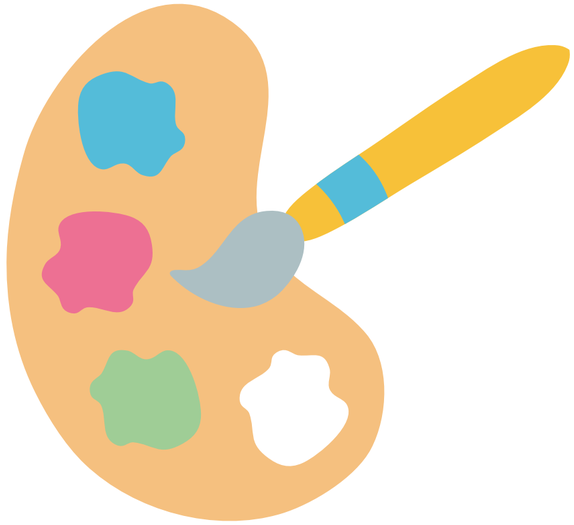
Some basic CSS...



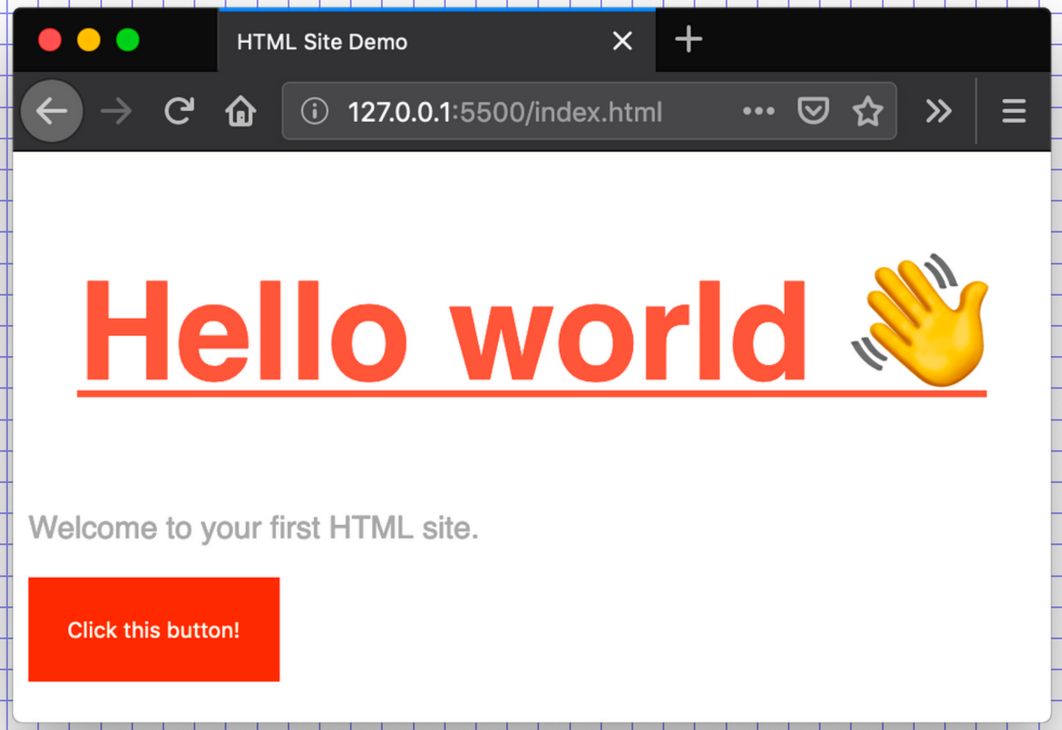


CSS

- CSS
  - Cascading Style Sheets
  - How the HTML elements of a website should actually appear
  - Includes color, fonts, background images....
  - Connecting to HTML
    - Class
    - Type
  - Special Action
    - hover
    - visited
    - active



CSS Example



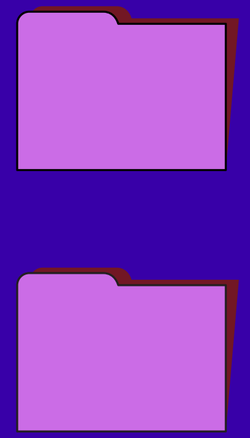

```
h1 {
color: tomato;
font-size: 70px;
font-family: sans-serif;
text-decoration: underline;
text-align: center;}

p {
font-family: sans-serif;
color: darkgray;}

.click-button {
background-color: orangered;
color: white;
border: 0;
padding: 20px;}
```

We hope you are having fun! ;)

And finally... Javascript!



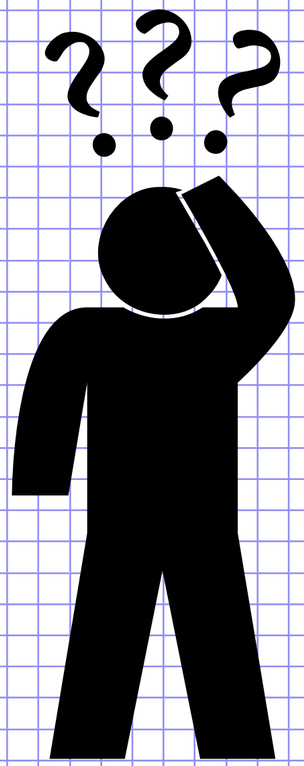
Javascript

- JavaScript is a **logic-based** programming language that can be used to modify website content and make it behave in different ways in response to a user's actions. Common uses for JavaScript include confirmation boxes, calls-to-action, and adding new identities to existing information.
- In summary: Javascript is used for functionality!

Javascript

- Program actions, conditions, calculations, network requests.
- Document Object Model (DOM) API: tree-like representation of a webpage that is loaded into the browser
    - methods such as getElementById()

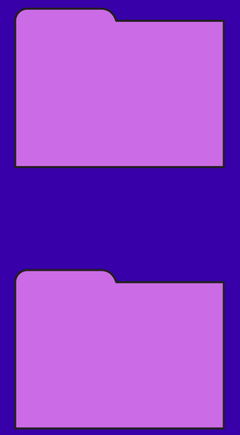
JS Example



What do you think this function does?

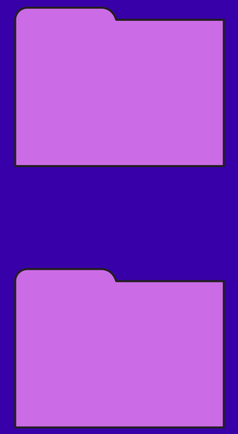
```
function changeText() {
    let headerTitle = document.getElementById('hello');
    headerTitle.textContent = 'Hello you   ';
}
```

Let's start with the project! :)



Now it is your turn!

Fork the following repository: https://github.com/infpals/ip2022-big-project-template



Try to do things listed in the window!

Fork the following repository: https://github.com/infpals/ip-2022-big-project-template

1. Install Visual Studio Code.
2. Install Live Server: https://marketplace.visualstudio.com/items?itemName=ritwickdey.LiveServer
3. Fork the repository onto your GitHub account.
4. Pull it to your local compute and analyze the files it contains.
5. Change the title to be: Your Name's Kanban Board.
6. Find where the trees.jpg is located in the code. Choose your favorite picture, add it to the same folder, and replace the background!

Now it is your turn!

If you want extra practice with HTML, CSS, Javascript: https://www.freecodecamp.org/news/html-css-and-javascript-explained-for-beginners/