

Web Dev + Devops Cohort by 100xDevs

Goal

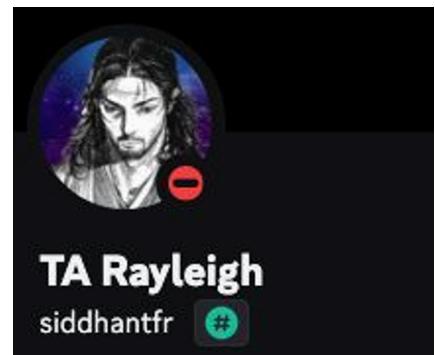
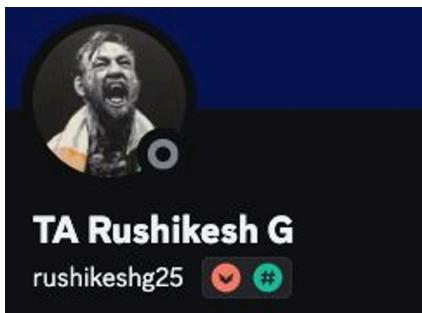
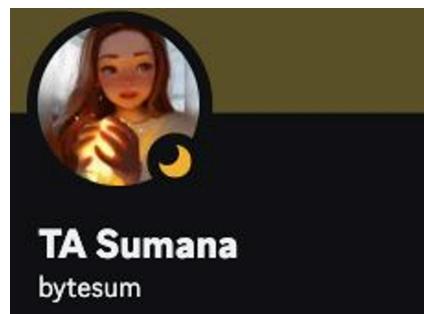
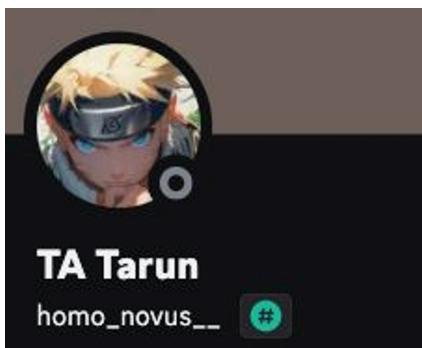
Make you incredibly solid at building and deploying Web apps.

Syllabus

Web Dev - <https://blog.100xdevs.com/Web-dev-6e1c515142e14347ae174c55e6c953c6>

Devops - <https://blog.100xdevs.com/Devops-39f1c2ef45e741e79b1f09f8793d6ad8?pvs=25>

TAs



Cohort Projects

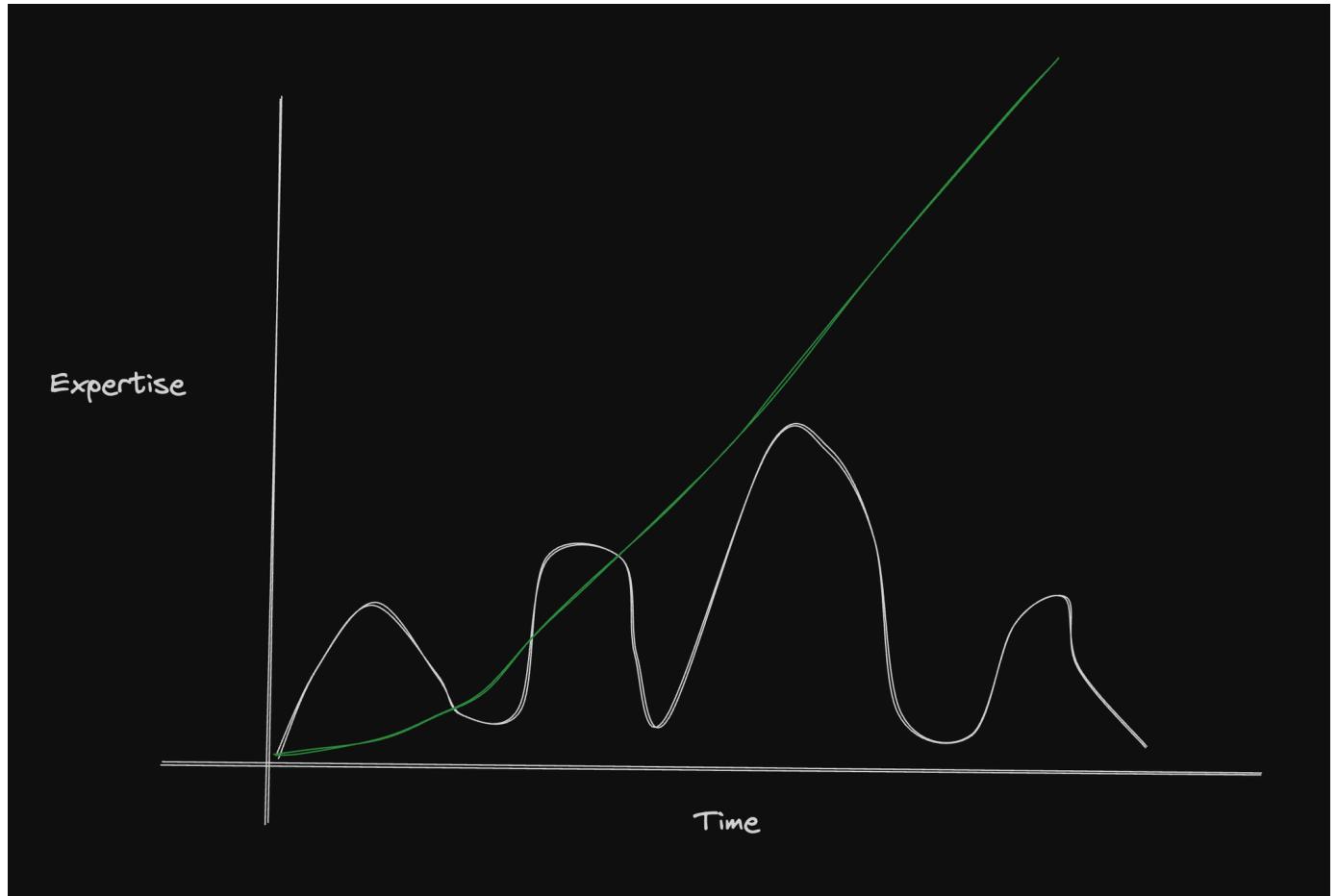
1. <https://github.com/code100x/cms/> - Led by hsingh
2. <https://github.com/code100x/daily-code/> - Led by Sargam
3. <https://github.com/code100x/job-board> - Led by Vineet

4. <https://github.com/code100x/alGORITHMIC-arena> - Led by Nimit

5. Framer like app - Up for grabs

Avoid the spikes

1. We will go slow, today only focussing on HTML/CSS/JS
2. Any topic that you feel is missing / you want we will do polls from time to time we can add
3. Go slow but stay consistent, avoid the spikes



What would I do if I was you?

1. Get to know people in discord, try to find a group of 3-4 motivated people.
2. Look at all the success stories here and how they got a job -
<https://www.youtube.com/@100xDevs-n1w>
3. Repeated advise - GSoC is the best internship you can do. Already start prepping for it competition is high. Tell me how can I help here we're hoping for ~50 GSoC selections from the cohort this year. Good video to watch - <https://www.youtube.com/watch?v=OmzCvb-QBak>



We'll be covering things slowly in Cohort 3, so if you think things are going too slow you can

1. Participate in projects/hackathons
2. Sprint through Cohort 2.0

Select your level

Complete beginner (very basic/no coding before)

Things will be hard. You should spend ~20 hours/week atleast on Cohort material, assignments, other content covering what we're doing in the Cohort. Don't slack off

Intermediate (Done basic JS, HTML and some DSA)

You should be for the first ~10 weeks or so. We see major drop off after the first major project.

Try chewing some glass after week 10, that is where you will actually learn things that differentiate you from a typical MERN developer

Advance (Know MERN decent/well)

Feel free to drop off for the first few weeks. I'll see you on Github. Participate in the Superteam hackathon , aim for GSoC this year. Already start looking at orgs

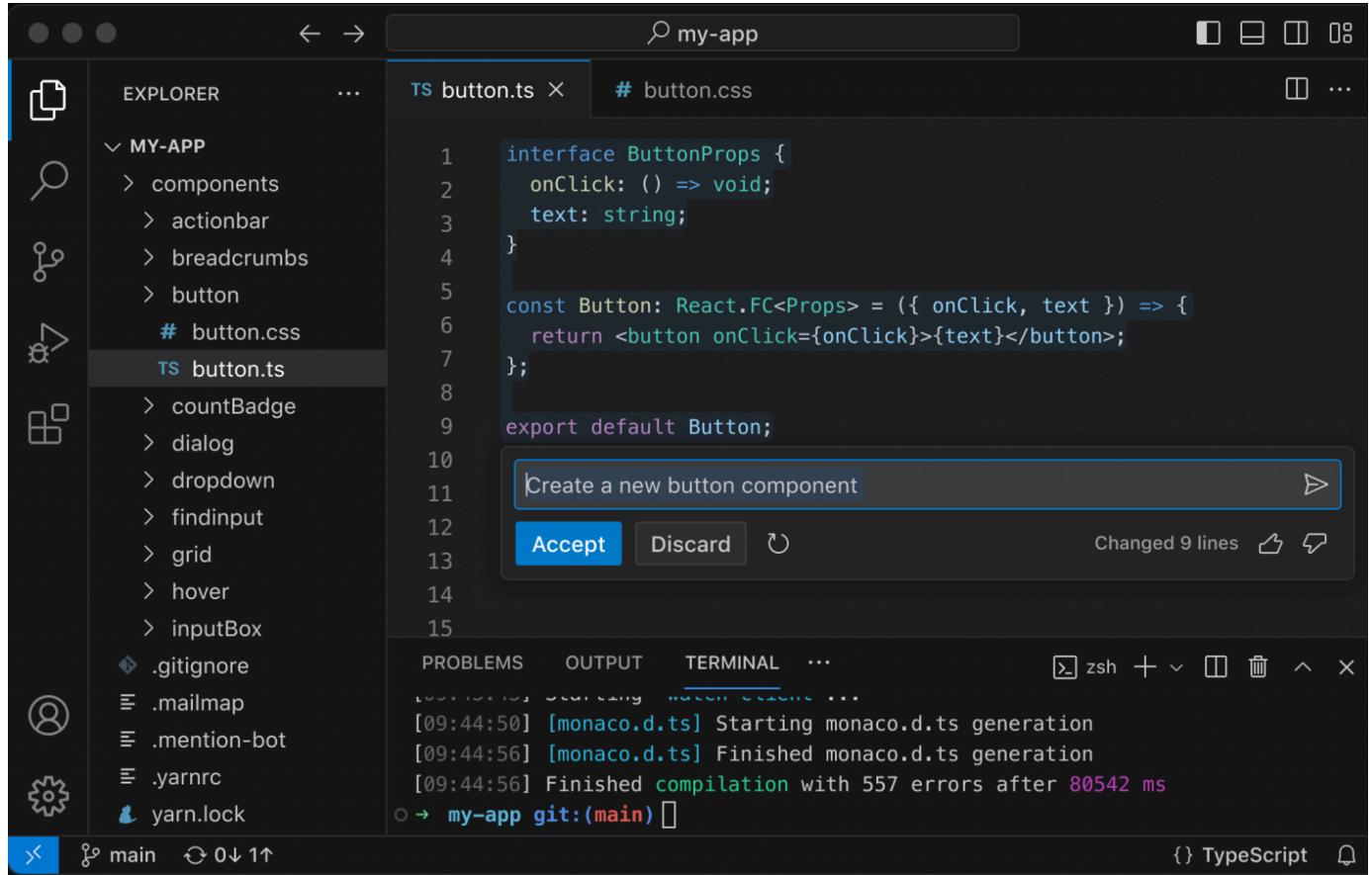
Good things to hash out

1. Installing VSCode locally
2. HTML/CSS
3. Cloning the landing page of a simple website

VSCode Installation

Download from here - <https://code.visualstudio.com/>

When you open it locally, you should see something like this



HTML

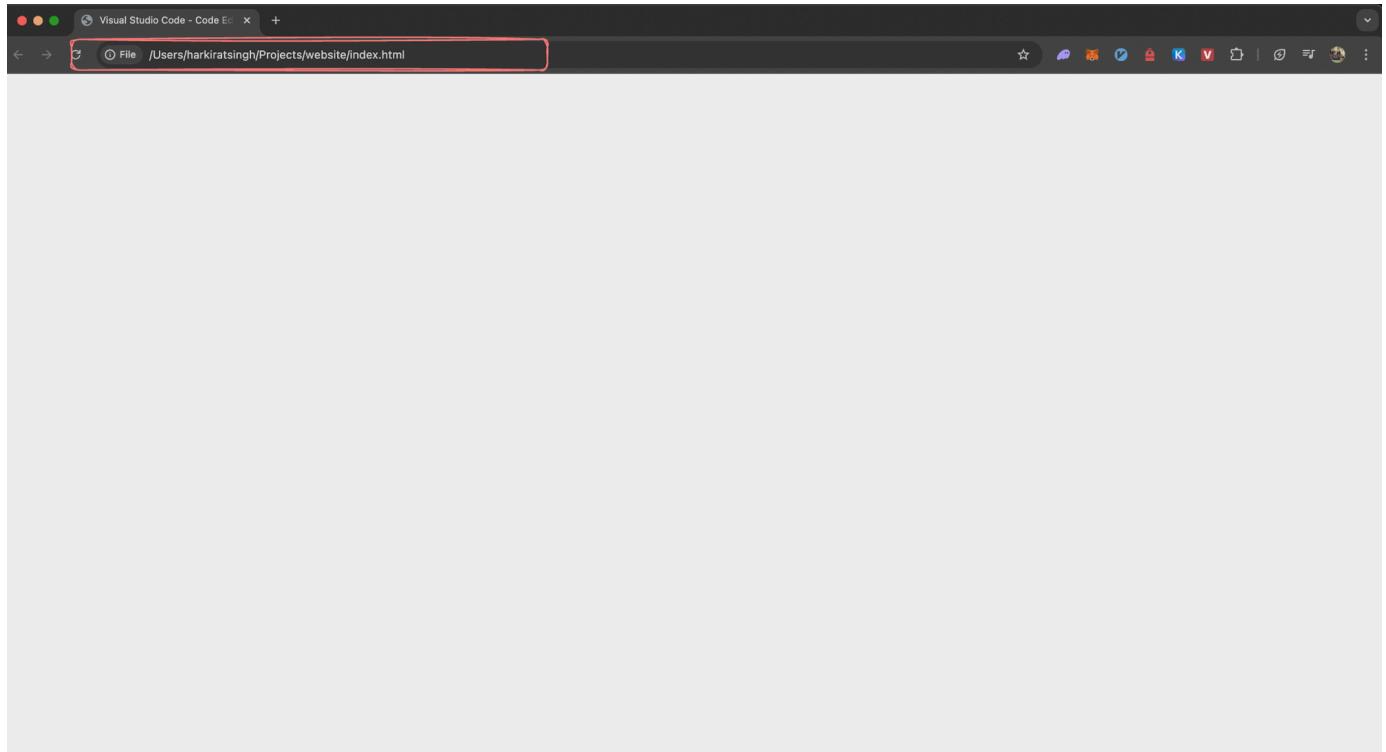
HTML stands for hyper text markup language. It is the foundation of building `unstyled` websites.

Step 1 - Creating a simple HTML file locally

1. Create a folder on your machine called `website`
2. Add a `index.html` file inside it
3. Write the following code in it -

```
<html>
  <title>
    Visual Studio Code - Code Editor
  </title>
</html>
```

Now open this in your browser



Step 2 - Tags

1. div, span
2. head
3. body
4. h1, h2, h3, h4, h5, h6
5. b, i, u
6. a
7. img
8. input
9. button
10. br

Step 3 - Building a basic HTML page

```
<html>
    <title>
        Visual Studio Code - Code Editor
    </title>
</html>
<body>
    <div>
        <span>Visual Studio Code</span>
        <a href="/">Docs</span>
        <a href="/">Updates</span>
        <a href="/">Blog</span>
        <a href="/">API</span>
        <a href="/">Extensions</span>
        <a href="/">FAQs</span>
        <a href="/">Learn</span>

        <input type="text" placeholder="Search Docs">
        <button>Download</button>
    </div>
    <br/>

    <div>
        <a href="/">Version 1.82</a> is now available! Read about the new
    </div>
```

```
<br/>  
</body>
```

CSS

CSS stands for Cascading Style Sheets. It is used to style our applications

You can add CSS to your HTML app by using -

1. The `style` attribute (inline styles)
2. In an external css file

Approach #1 - Inline styles

Try updating the `body` tag in the last style as follows -

```
<body style="background-color: black;">  
... rest of the code  
</body>
```



Approach #2 - External styles

1. Add a new file called index.css
2. Add the following code in it

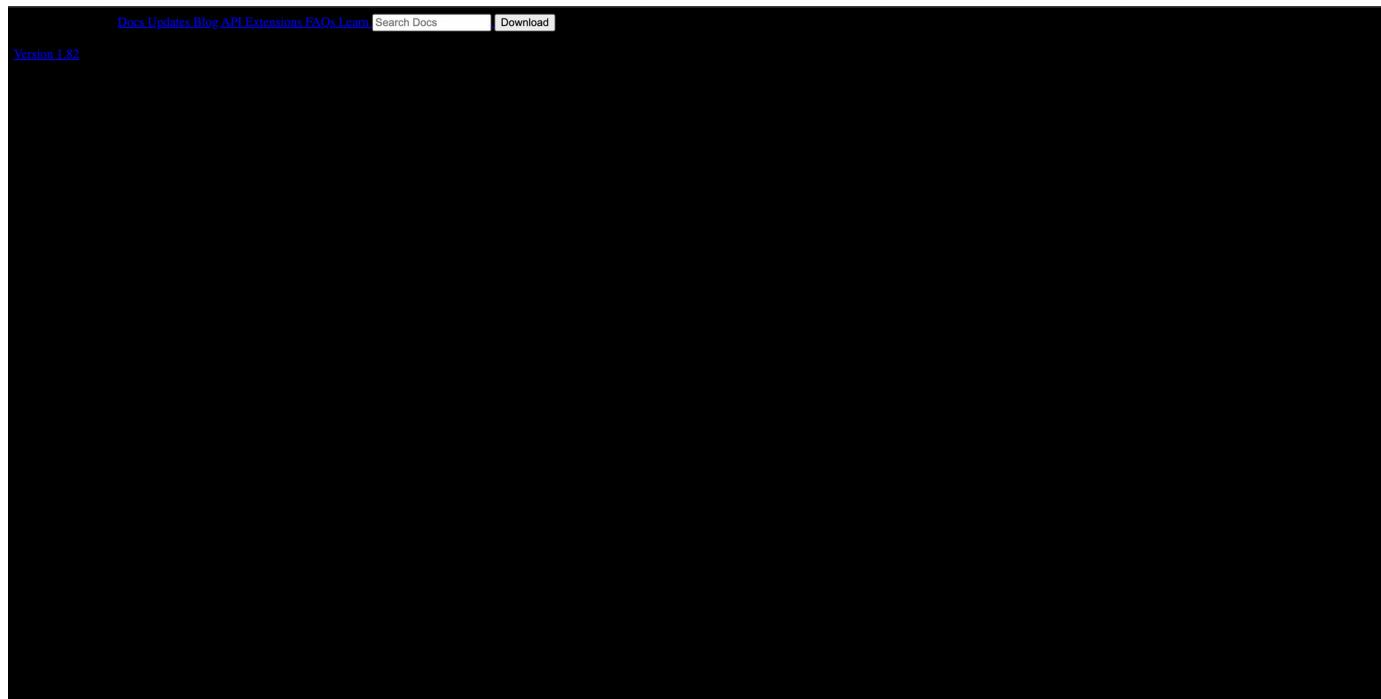
```
body {  
    background-color: black;  
}
```



- Update index.html



```
<html>
  <title>
    Visual Studio Code - Code Editor
  </title>
  <link rel="stylesheet" href="index.css">
</html>
<body>
  ... rest of the code
</body>
```



Common style attributes

- **color** : Sets the text color.
- **background-color** : Sets the background color.
- **font-size** : Sets the size of the text.
- **margin** : Sets the outer space around an element.
- **padding** : Sets the inner space within an element.
- **border** : Sets the border around an element.

Flexbox

Flexbox is a CSS layout model designed to help with the arrangement of items within a container.

Update the website to the following -



```
<html>
  <title>
    Visual Studio Code - Code Editor
  </title>
</html>
<body>
  <div style="display: flex;">
    <div>Visual Studio Code</div>
    <a href="/">Docs</span>
    <a href="/">Updates</span>
    <a href="/">Blog</span>
    <a href="/">API</span>
    <a href="/">Extensions</span>
    <a href="/">FAQs</span>
    <a href="/">Learn</span>
  </div>
  <div>
    <input type="text" placeholder="Search Docs">
    <button>Download</button>
  </div>
  <br/>

  <div>
    <a href="/">Version 1.82</a> is now available! Read about the new
  </div>

  <br/>
</body>
```

Notice that the elements are positioned right next to each other even though `Visual Studio code` is inside a `div`

Justify content

Try experimenting with the `justify-content` property

⌚ justify-content

flex-start



flex-end



center



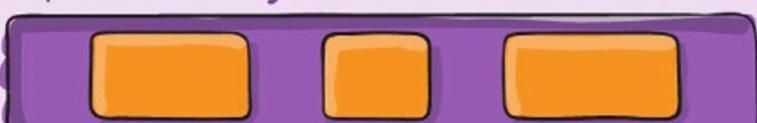
space-between



space-around



space-evenly



```
<html>
  <title>
    Visual Studio Code - Code Editor
  </title>
</html>
<body>
  <div style="display: flex; justify-content: space-between;">
    <div>Visual Studio Code</div>
    <a href="/">Docs</span>
    <a href="/">Updates</span>
```



```
<a href="/">Blog</span>
<a href="/">API</span>
<a href="/">Extensions</span>
<a href="/">FAQs</span>
<a href="/">Learn</span>
</div>
<div>
    <input type="text" placeholder="Search Docs">
    <button>Download</button>
</div>
<br/>

<div>
    <a href="/">Version 1.82</a> is now available! Read about the new
</div>

<br/>
</body>
```

Another example

```
<html>
</html>
<body>
    <header>

        </header>
        <section>
            <div style="border-width: thick; border-style: solid; display: flex; justify-content: space-between; align-items: center; width: 100%; height: 100px; background-color: red; margin-bottom: 10px;">
                <div style="background: red; width: 10px; height: 100%; margin-right: 10px;"></div>
                <div style="flex-grow: 1; padding: 10px; text-align: center; color: white; font-weight: bold; font-size: 1.2em;">
                    <h1>Code with GitHub Copilot</h1>
                    <h2>Write code faster and smarter with GitHub Copilot, your AI code completion partner. Try it free for 30 days.</h2>
                    <p>Completions present suggestions automatically to help you code faster. Copilot Chat understands the context of your code, workspace, and system state, so you can focus on writing better code. Try it free for 30 days.</p>
                </div>
            </div>
            <div style="background-color: #f0f0f0; padding: 10px; border-radius: 10px; width: fit-content; margin: auto; max-width: 400px; height: fit-content; width: fit-content; height: fit-content; margin-top: 20px;">
                <h3>Copilot Chat</h3>
                <img alt="Copilot Chat logo" style="width: 100px; margin-bottom: 10px;">
                <p>Copilot Chat is a large language model that can understand the context of your code, workspace, and system state. It can suggest completions, fix bugs, and even generate entire functions for you. Try it free for 30 days.</p>
            </div>
        </section>
    </body>

```

Inline Chat enables you to iteratively generate edits and get

```
</div>
<div style="background: green;">
  
</div>
</section>
<footer>

</footer>
</body>
```

Classes and ids

In CSS, classes and IDs are used as selectors to apply styles to HTML elements. They help in targeting specific elements for styling and can be used to enhance the modularity and reusability of CSS code.

