



# TapIn

"Build a Digital Business Card"

**TAP Expo**



# Pre-Survey

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Scan QR code



# TECHNOLOGY AMBASSADOR PROGRAM (TAP)



The Technology Ambassadors Program (TAP) aligns with GGC's four pillars

Scholarship  
Leadership  
Service  
Creativity



This award-winning program also addresses a need to increase the number of students who persist in an IT major or minor, particularly those underrepresented in computing.





# Our Goals for this Project

- Create a detailed Digital Business Card with general information that would be on a resume.
- Motivate individuals to use/engage with technology to benefit their future.
- Encourage individuals to continue working on their business card as they progress in their education.

"Forgot my resume.. No Problem!"



# Cameron Ventimiglia

## Courses Taken

- Programming Fundamentals
- Intermediate Programming
- Advanced Programming
- Advanced Databases
- System Analysis & Design
- Software Development 1
- Software development 2
- Software Testing & QA
- Professional Practice & Ethics
- Introduction to Networks
- Introduction to Programming

## About Me

I am a student at Georgia Gwinnett College, and I am a senior majoring in Software Development. I started off college as a cell biology major, but that changed when I took a programming class. In the programming class, I realized that I really did not like biology anymore and that I wanted to progress further in software development.

## Interesting Projects I have Worked On

### Create an API that implements the category-partition method

The API we made allowed us to apply a testing method called the category-partition method to a JSON file submitted by a user. The JSON file contained information about function and its parameters. Our job was to parse this file and create all the possible combination of parameters for a given function. We did this by creating an algorithm that would populate a matrix with the correct combinations. Once this was done, the API would write contents to a text file and return it back to the user. For more information, visit our page: [Category-partition method API](#)

### Database that tracks a working train system

In this project, I worked with another classmate to design a database that stores information regarding a train system. It tracked information such as: the trains, their cargo, and even their destination.

### Text-based Adventure Game Using Java

In this Project, I worked with a team to create a text-based adventure game designed by another team. This game used a database to store information about new and returning players. It tracked each player's health, points, location items, and monsters defeated.

## My Goals

- Get Job
- Finish school with GPA higher than 3.2
- Always try my best
- Improve python

## My Contact Information



"Take your experience and store it in your pocket"

## About Workshop

In this workshop, you will be creating a digital business card that you will link to an NFC chip (QR code if not in person) that you can share with anyone you come across in the future.

Technology used:

- Near Field Communication (NFC) Chips

What you will learn:

- What NFC chips are and how they work
- HTML, CSS

# NFC



Near Field Communication



Unlike Wi-Fi or Bluetooth,  
NFC is limited to an extremely  
short range.



An example of this kind of  
technology would be apple  
pay.



(radio frequency  
identification)

Navigate To  
Our GitHub  
Repository

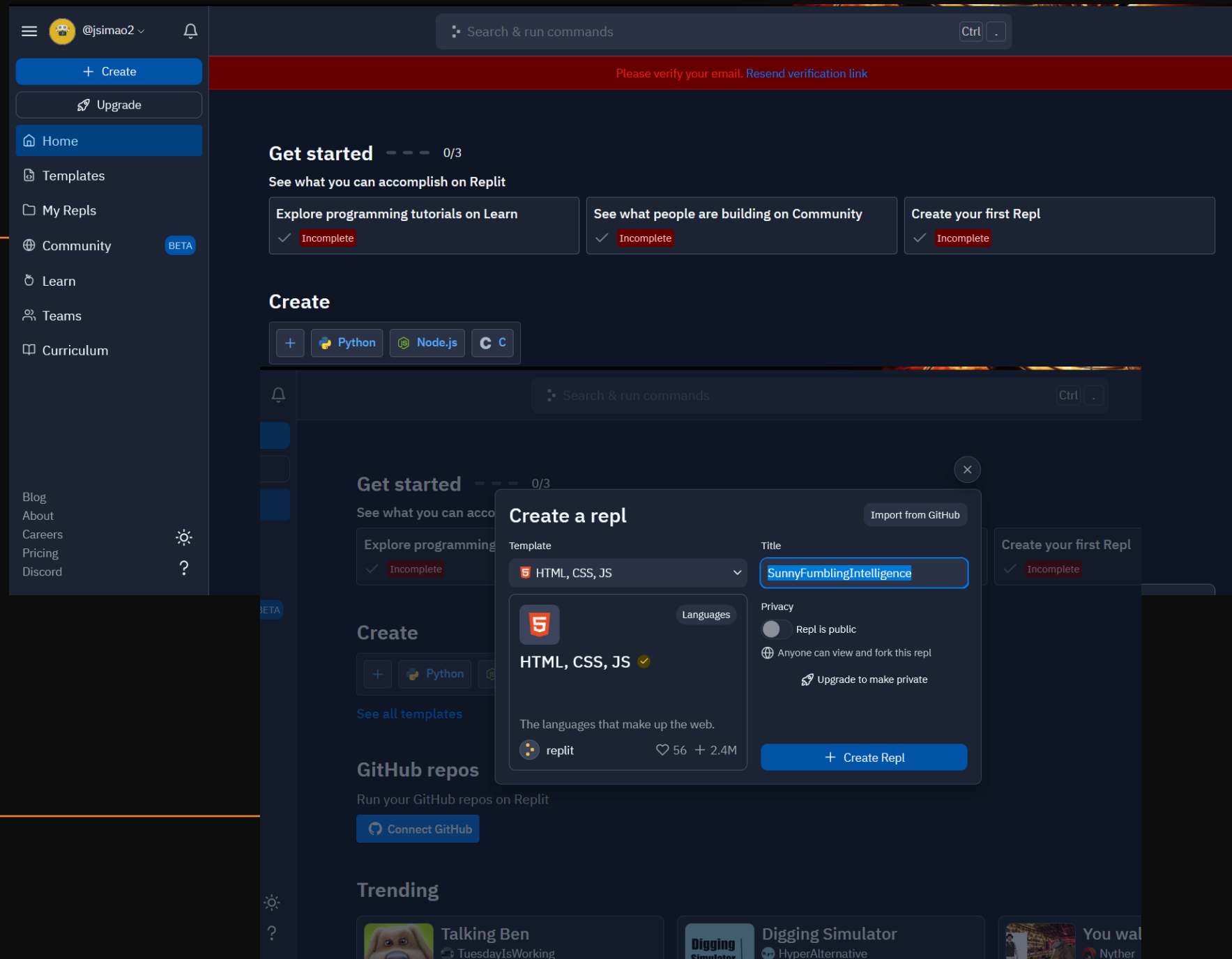
<https://github.com/TechAmbassadors-GGC/TapIn>

QR code for Pre-survey



# Getting Started

- Go to link and Create a Replit account for free
- Verify email if you want
- Click create
- Choose HTML, CSS, JS
- Rename file with your name
- + Create repl







## Forking the Repl

To fork this repl into your account, click on the blue button called “Fork repl”.



# What is HTML?

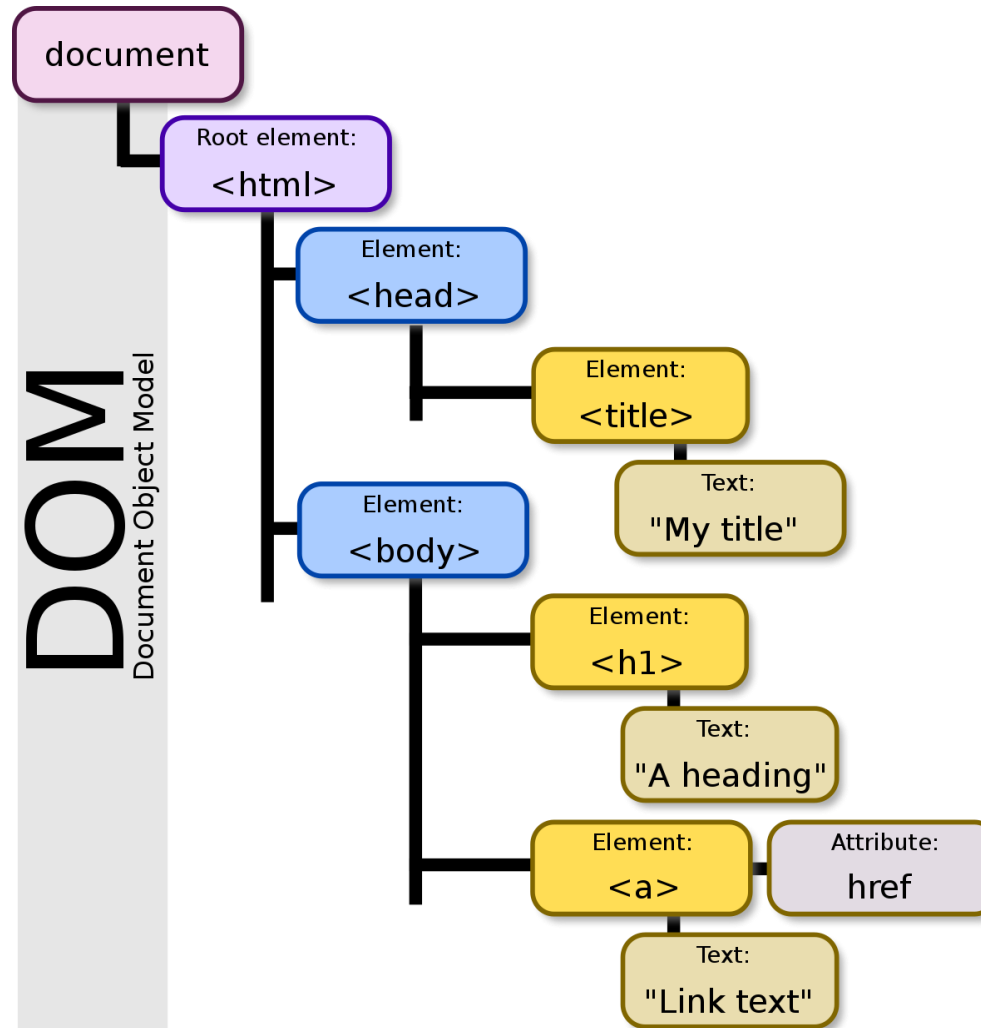


HTML stands for Hypertext  
Markup Language



It is the standard language for  
creating documents that can  
be displayed in a web browser.

# Structure of an HTML Document



# Key points of an HTML file

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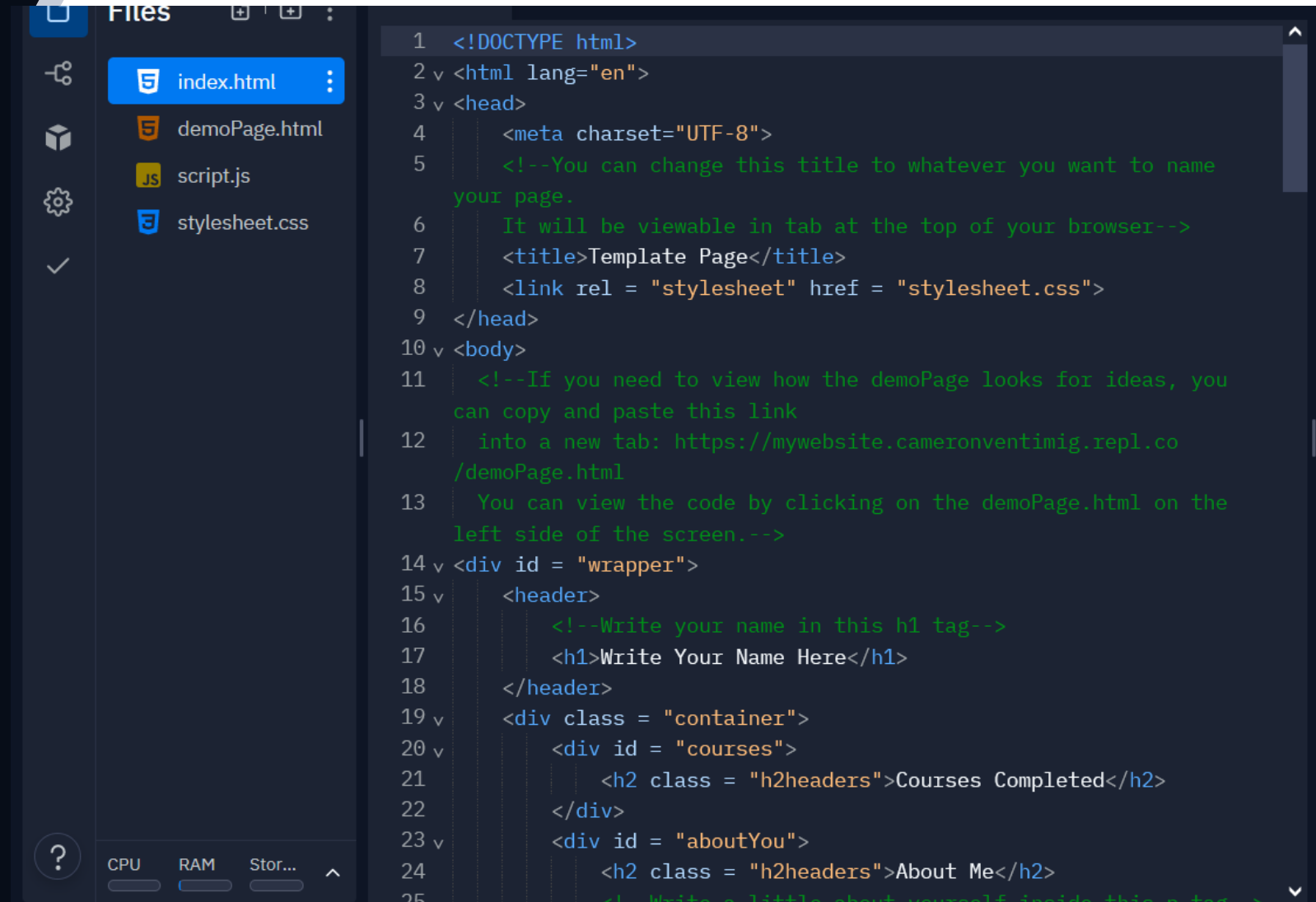
There are two main section inside of an HTML file. They are the head and body sections.

- The head section contains information **about** the webpage.
  - An example would be the title of the page and the location of a stylesheet used in for the file.
- The body section contains text and elements that are displayed **on** the web page.
  - Everything you see on the page is written inside of the body section of the file.



# Open HTML File

- Elements have an opening tag `<>` and a closing tag `</>`
- Inside of `<title></title>` write what you want your card to be called. It will appear inside of the tab at the top of your browser.
- In order to add your name to the main heading, you will need to change the contents in between `<h1></h1>`



```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <!--You can change this title to whatever you want to name
    your page.
6   It will be viewable in tab at the top of your browser-->
7   <title>Template Page</title>
8   <link rel = "stylesheet" href = "stylesheet.css">
9 </head>
10 <body>
11   <!--If you need to view how the demoPage looks for ideas, you
    can copy and paste this link
12   into a new tab: https://mywebsite.cameronventimig.repl.co
    /demoPage.html
13   You can view the code by clicking on the demoPage.html on the
    left side of the screen.-->
14 <div id = "wrapper">
15   <header>
16     <!--Write your name in this h1 tag-->
17     <h1>Write Your Name Here</h1>
18   </header>
19   <div class = "container">
20     <div id = "courses">
21       <h2 class = "h2headers">Courses Completed</h2>
22     </div>
23     <div id = "aboutYou">
24       <h2 class = "h2headers">About Me</h2>
25     </div>
```

# Edit your file

- To change the information about yourself, you will need to change the contents between `<p></p>`
- To change the title of your project or work experience, you will need to change the contents between the `<dt></dt>` tags.
- To change the description of the project or work experience, you will need to change the contents between the `<dd></dd>` tags.

```
index.html x
14 v <div id = "wrapper">
15 v   <header>
16       <!--Write your name in this h1 tag-->
17       <h1>Write Your Name Here</h1>
18   </header>
19 v   <div class = "container">
20 v       <div id = "courses">
21           <h2 class = "h2headers">Courses Completed</h2>
22       </div>
23 v       <div id = "aboutYou">
24           <h2 class = "h2headers">About Me</h2>
25           <!--Write a little about yourself inside this p tag-->
26 v           <p>
27               You could write about anything you would want
28               other people to know about you in this section.
29               For example, you could write about things you like
30               to do.<br>
31           </p>
32       </div>
33   </div>
34 v   <div id = "coolThings">
35       <h2 class = "h2headers">Work/Project Experience</h2>
36       <dl>
37           <!--
38               Write about some project or work experience you have
39               here.
40               The dt tag is the title and the dd tag is the
41               description.
42           -->
```

# Modify contact section

- To add a link, you need to change the contents inside of the `<a></a>` tag.
- Href refers is the website you want to link to.
- To make the URL take the form of an image, you will add an `<img>` tag in between of the `<a></a>` tag.
- src refers to the link to the image you want to use.
- Alt is a description for people who are unable to view your page due to physical impairments

```
website-1 5 54 Run

index.html x
50 v <div id = "contact">
51   <h2 class = "h2headers">My Contact Information</h2>
52   <!--Here you can link the different ways someone you meet
can follow you.
53   The href section is where you will put the link to the
social media page.
54   The src section is where you put the link to the image you
want to use. You can use
55   the images we provided in our gitHub repositories here.
56   The alt section is a name you put for people that are
impaired and cannot view your page normally.
57   An example would be:
58   <a href = "https://www.linkedin.com/in/cameron-
ventimiglia" target="_blank"><img class = "image" src =
"https://cdn4.iconfinder.com/data/icons/social-media-2273/64
/social_media_network_online_linkedin-512.png" alt =
"LinkedIn"></a>
59   You can find some images we have stored at this link:
60   https://github.com/TechAmbassadors-GGC/TapIn/tree/main
/resources/Tap%20In/images
61   To use an image, simply click on the picture file you want,
and copy and paste the url
62   in the src part of the anchor tag.
63   -->
64   <a href = "" target="_blank"><img class = "image" src = ""
alt = ""></a>
65   </div>
```

```
66 <a href = "" target="_blank"><img class = "image" src = "" alt = ""></a>
```

# Get links for file

- `<a></a>`
- Anchor Element
- Specifies a hyperlink reference (href) to a file
  - Text between the `<a>` and `</a>` is displayed on the web page.  
`<a href="contact.html">Contact Us</a>`
- href Attribute
  - Indicates the file name or URL

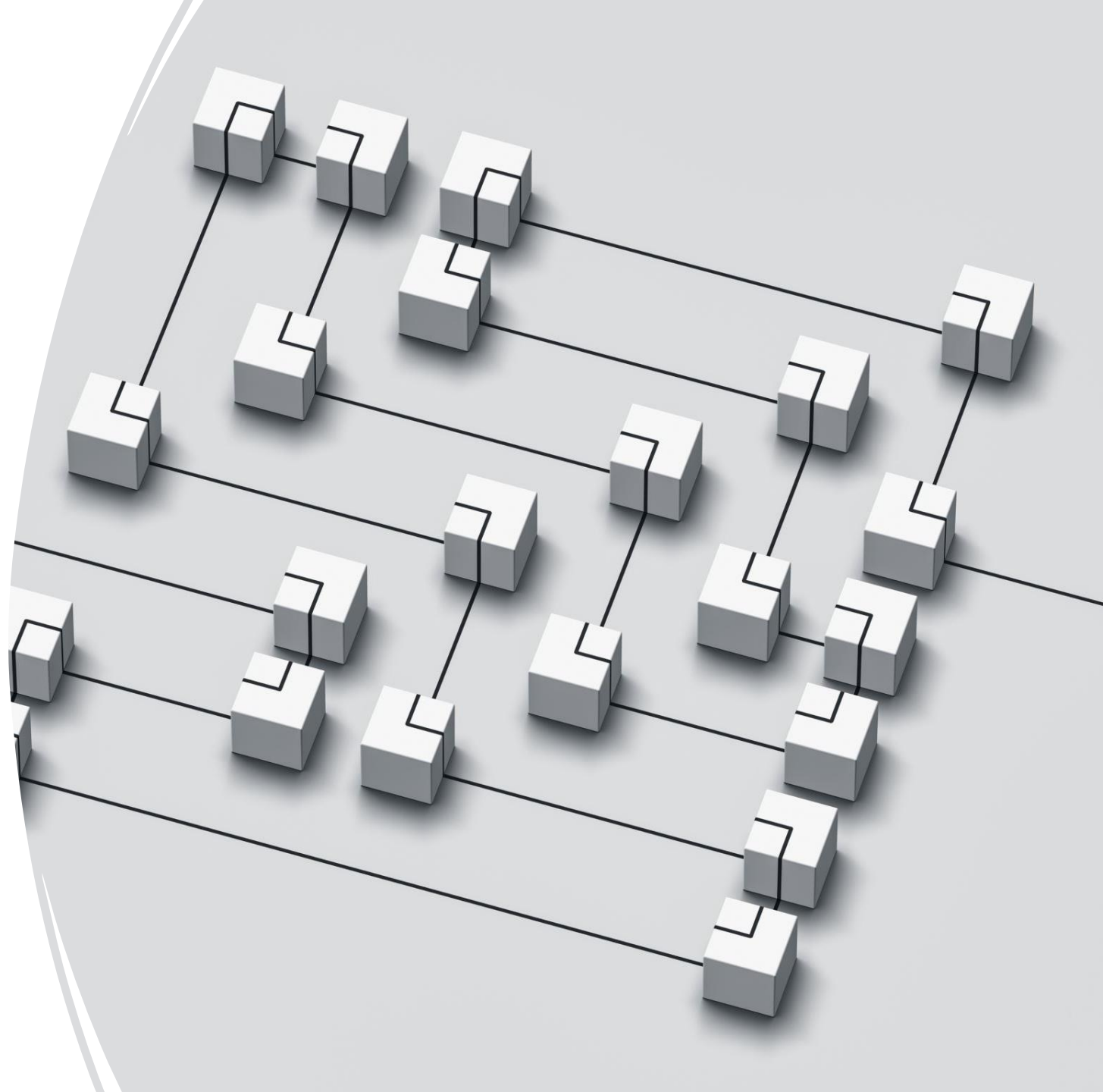




# What are Data Structures in Programming?

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- A data structure is internal storage a programmer can use to store, manipulate or access data inside of their program.
- Popular data structures in programming:
  - **Arrays**
  - ArrayLists
  - Queues
  - Stacks
  - Maps
  - Trees



# What is a JavaScript Array?

- An array is an object that can store multiple values **regardless of their data type**. It is often used when we want to store a list of elements and access them by a single variable.
- An example of how an array is created:
  - `var house = ["bedroom", "kitchen", "garage"];`
  - `house` is the array variable name
  - `"bedroom"`, `"kitchen"`, and `"garage"` are the elements of the house array.

Remove the placeholder elements and replace them with some courses you have completed.

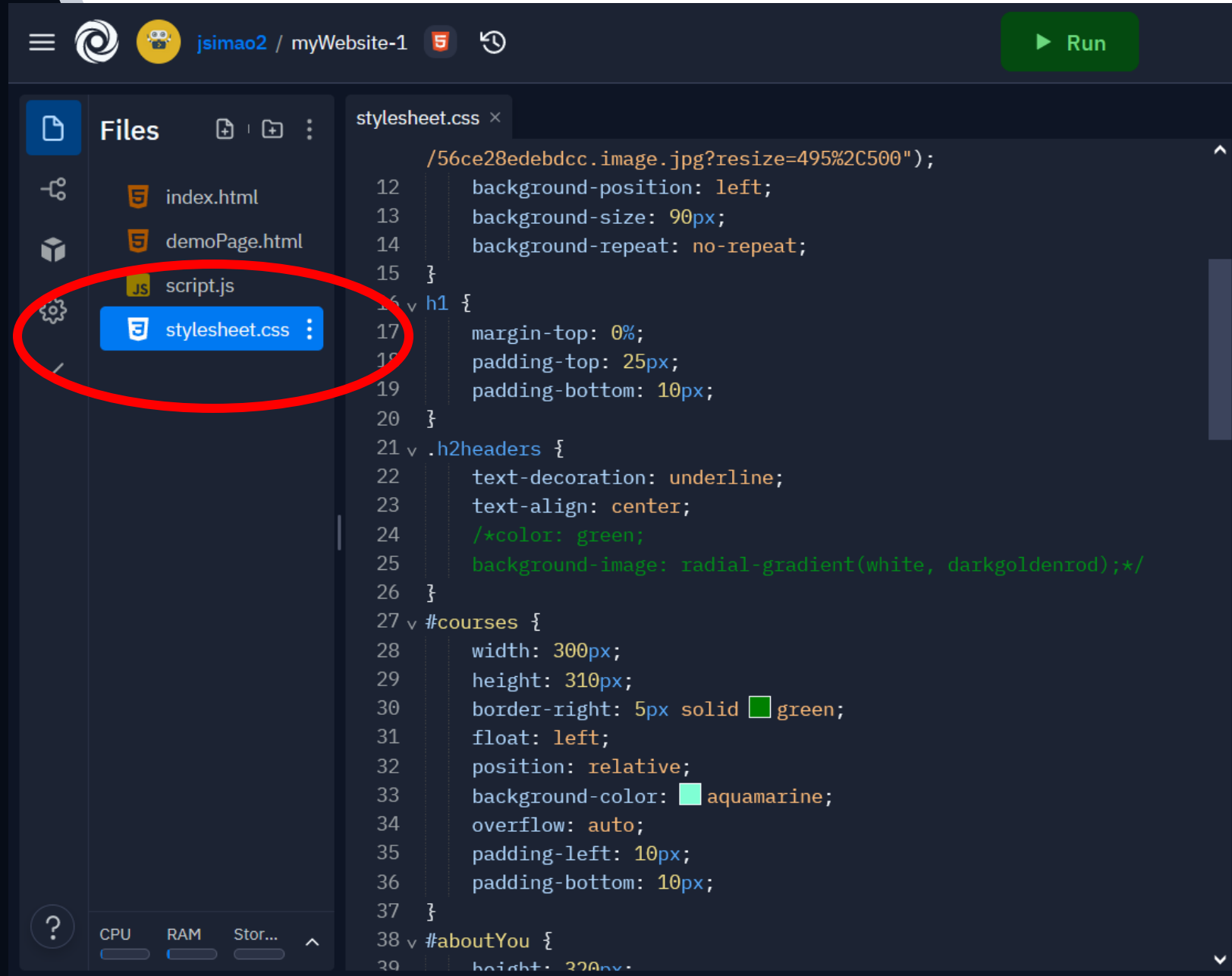
# Fill in the array

index.html ×

```
specific to your major.  
79 You will enter these courses inside of the courses array below.  
80 All you have to do is remove the Course Name 1 with the Course  
name you want to add.  
81 example: Course Name 1 would be changed to Digital Media.  
82 You can look at the demoPage.html file to see how to change  
it.-->  
83 v <script>  
84 v   let courses = [  
85     "Course Name 1",  
86     "Course Name 2",  
87     "Course Name 3"  
88   ];  
89 v   function myCourses() {  
90     let courseCompleted = document.getElementById("courses");  
91     let courseList = "";  
92 v   for (let i = 0; i < courses.length; i++) {  
93     courseList = courseList + `<li>${courses[i]}</li>`;   
94   }  
95   courseCompleted.innerHTML += `${courseList}`;  
96 }  
97 myCourses();  
98  
99 </script>  
100 </body>  
101 </html>
```

# Cascading Style Sheet (css)

- This is where most of the visual style of the webpage is kept.
- Using html you can change colors, add pictures, reposition elements in the page, etc.....





# Color Wheel!





[https://www.w3schools.com/colors/colors\\_picker.asp](https://www.w3schools.com/colors/colors_picker.asp)



# Changing the color of each section

- If you want to change the color of each section, you will need to open the css file called “stylesheet.css”.
- Inside of this file you will need to change the background-color of each section.
  - You can use a select amount of named colors or hexadecimal values
  - Hexadecimal values have a certain syntax that needs to be followed:
    - Starts with a #
    - Can only contain six digits
    - Can only contain numbers 0-9 and letters a-f
    - Good example: #123abc
    - Bad example: !123ht32
  - You can use a color picker to help generate these values for you.
  - [https://www.w3schools.com/colors/colors\\_picker.asp](https://www.w3schools.com/colors/colors_picker.asp) (search w3 schools color picker in google)

# Example of what to change in the CSS file

```
27  v #courses {  
28      width: 300px;  
29      height: 310px;  
30      border-right: 5px solid  green;  
31      float: left;  
32      position: relative;  
33      background-color:  aquamarine;  
34      overflow: auto;  
35      padding-left: 10px;  
36      padding-bottom: 10px;  
37  }
```

- You would want to change the background-color on line 33 to any color of your choosing.
  - If you need help, let us know.







Test your card!



# Post-Survey

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Scan QR code



# QUESTIONS?

Thank You!

