

Recommended text editor: Brackets - simple layout, made specifically for web development, allows you to see website while you work and closes tags for you.

### GitHub:

- GitHub will host your site for free (yay!)
- Make a GitHub account (make your username something professional and related to your name -- it'll be your website domain name later)
- Create a new repository called "yourusername.github.io"
  - This is your domain name!
- Start building in the repository!!
- To upload files -- go to your repository and drag and drop files
- In settings -> options, scroll down to GitHub Pages, this will tell you if your page is published
- If you are starting from scratch, you need to start with an 'index.html' file -- this is your home page and the site **will not work** without it

### Website Basics:

- Websites are mainly made up of three languages: html, css, and javascript
  - **HTML** is the backbone -- all of the info is here
  - **CSS** makes it look nice -- design aspects, use to change fonts, colors, page layout, shape, etc.
  - **Javascript** is for functionality -- allows your website to do more than just be a static page (makes it more than just a picture basically), adds reactivity and movement
- Other languages used include php, angular js, ruby, for backend python, C, C++
- Website made up of **backend** and **frontend**
  - backend -- responsible for storing data, the user doesn't interact with this but it helps the website run
  - frontend -- this is the part the user interacts with, it's what you see
  - host -- where the website is stored, several types of hosting
    - Shared hosting (several websites on one server)
    - Dedicated hosting (one server **dedicated** to housing your website)
    - VPS hosting (your website housed on multiple servers)
  - Bookshelf analogy -- the book binding (what you look at) is the frontend, the pages of the book itself is the backend, and the shelf is the host
- Hosting really only becomes important when you start adding more interaction to your site (membership, apps, functionality)
- We will be using GitHub Pages to host our websites (it's free!)
  - Your website's domain name will be: username.github.io but you can change it if you are willing to pay for a domain name (~\$12/year)

### HTML:

- HyperText Markup Language

- Written using tags encased in angled brackets
- To start a phrase - <>, to end </>
  - <tag>Content</tag>
- Attributes are added to tags to provide additional info
  - <tag attribute="value">Content</tag>
- Some important ones:
  - <HTML> </HTML> - encases all code
  - <body> </body> - body of the website
  - <h1></h1> - heading
  - <p> </p> - paragraph
  - <head> </head> - any links to outside resources, basic setup of the page
- At the start of every script you write:
 

```

<!DOCTYPE html>
<html>
<head>
  <title>My Website</title>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
</head>
</html>

```

#### CSS:

- Presentation layer for HTML
- Design of the page
- Syntax comprised of selectors, properties, values
 

```

selector{
    property: value;

    property: value;
}

```

#### Resources:

- Font Awesome -- cool and easy to use icons/logos to use
- <https://daneden.github.io/animate.css/> - Animate.css, let's you really easily add fun animation to text
- <https://vincentgarreau.com/particles.js/> - Particles.js, floating interactive particles for the background of your website
- <https://www.w3schools.com/howto/default.asp> - how to's on almost anything you can think of to add to your site (this is a great site for learning about web development, I highly recommend you check it out)
- <https://thecrashcourse.com/video?id=guvvH5OFizE> -- 4:05-6:00 (intro to HTML)
- <https://thecrashcourse.com/video?id=AEaKrq3SpW8> -- 7:51-9:47 (how domain names work)

- <https://www.bloc.io/build-your-first-website-with-html-and-css> -- tutorial on how to build a website using Skeleton Framework
- Google - anything you want to do on your website, someone has mostly likely already done, google it, check out stack overflow, you're probably going to find a solution online

#### Troubleshooting:

Test your website until you are SURE it is good! This means clicking every link, making sure any functionality does what it's supposed to, resize the window to make sure nothing gets majorly messed up, etc.

#### **I don't want objects to touch/be further away from each other**

Adjust their margins, you can do this within the object's div tag:

```
<div class="thing" style="margin-top:0px;margin-bottom:0px;margin-left:0px;margin-right:0px">
```

Add in margins for whichever part you need

#### **My image or PDF isn't showing up**

Check that the file is even there

Check the full file path is correct

Check the file type is in the correct case (.PDF vs .pdf), it needs to match exactly to what your file is

#### **I want to add comments to the code**

HTML - <!-- Your Comment Here -->

CSS - /\* Your Comment Here \*/

#### **I want all of the font to be the same but don't want to have to change the font for each text instance**

This is what CSS is for!! You can either embed CSS code in your HTML by putting the CSS within <style></style> tags within the <head></head> of the code. To change all text:

```
body {
  font-size: 48px;
  color: #fff; /* you can either put the hex code or just the color, Brackets will give
you a pop up with color options */
  font-family: -apple-system, BlinkMacSystemFont, 'Segoe UI', Ubuntu, Cantarell,
'Open Sans', 'Helvetica Neue', sans-serif;
}
```

This will make all the font the same throughout the website.

To just change the font of one type of text, specify what you would like to change:

```
h1 {
  font-size: 56px;
  color: #000;
}
```

Makes all the <h1> headers have black text with a size of 56 pixels

If you have more than one HTML file and want the font to apply to all the files, put these rules in a CSS file instead of in the head of your HTML file

**My website works and I uploaded everything to GitHub but none of the changes are showing up on my webpage??**

It takes time for the changes to show up after uploading to GitHub. If it's the first time you're setting up the page then it may take 24-48 hours to show up, otherwise it usually takes 1-2 minutes for changes to appear after uploading.

**I have this cool idea but I don't know how to do it!!**

W3schools

Google