



} Heroes of CSS

Web Development Boot Camp
Lesson 1.3



Admin Items

Homework Assignment Tips

01

Really work hard on this assignment! This assignment introduces you to fundamental concepts that we'll build upon during the rest of the course.

02

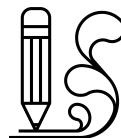
Review in-class material, especially activities.

03

Work with your peers! It's much better than screaming at your computer alone.

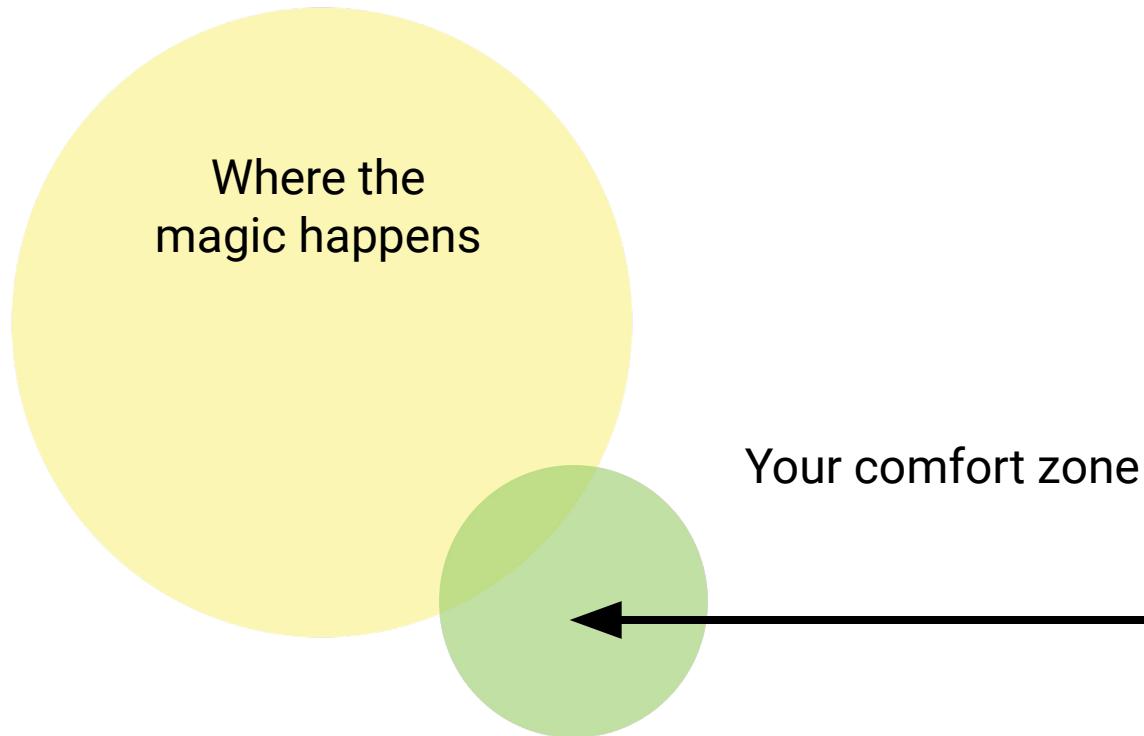
04

Ask questions on Slack! Your peers, TAs, and instructors are all here to help.



Most Important of All

Just submit *something* (even if it seems pretty crummy)!





Warning!

Brace Yourselves

Today is going to be a bit tough. But trust us—it will all look easy a few weeks from now!





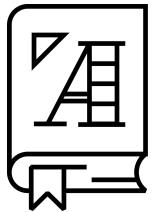
Don't expect to understand everything at once. Today is all about getting immersed.

CSS Recap

Critical Question:

What is CSS?

HTML and CSS Definitions



HTML: Hypertext Markup Language (Content)

CSS: Cascading Style Sheets (Appearance)

HTML/CSS are the “languages of the web.” Together they define both the content and the aesthetics of a webpage, handling everything from the layouts, colors, fonts, and content placement. (JavaScript is the language that deals with logic, animation, etc.)

HTML/CSS Analogy

HTML Alone	HTML and CSS
Like writing papers in Notepad.	Like writing papers in Microsoft Word.
Used to write unformatted text (i.e, content only).	Used both to write the content <i>and</i> format it (color, font, alignment, layout, etc.).
	

Basic HTML Page (No CSS)

Awesome Header

Smaller Awesome Header

Even Smaller Awesome Header

 Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.
 Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.



Menu Links

- Google
- Facebook
- Twitter

Enter CSS: Result

Awesome Header

Smaller Awesome Header

Even Smaller Awesome Header

Lore ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor
incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud
exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.



Menu Links

- [Google](#)
- [Facebook](#)
- [Twitter](#)

Critical Question: How Do We Style HTML?

Elements?

Classes?

IDs?

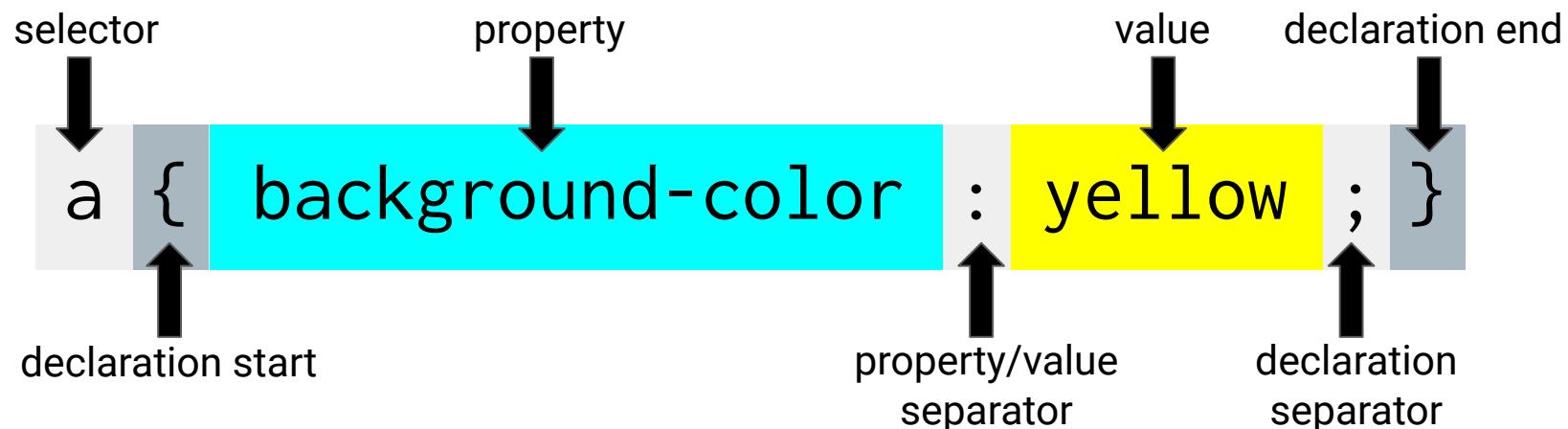


CSS Syntax

CSS works by hooking onto **selectors** added into HTML using **classes** and **identifiers**.

Classes use **.classname**, IDs use **#idname**, and elements use just their name.

Once hooked, we apply **styles** to those HTML elements using CSS.



Selectors

Element selector	Element name (p, a, div, span, etc.)	Applies to all <p> elements <pre>p { background-color: blue; }</pre>
Class selector	Period (.) + variable name (.myDiv, .phoneNumber, etc.)	Applies to all elements with class="classItem" <pre>.classItem { background-color: orange; }</pre>
ID selector	Hash (#) + variable name (#myDiv, #phoneNumber)	Applies to all elements with id="idItem" <pre>#idItem { background-color: green; }</pre>

CSS Selectors

```
p {  
    background-color: blue;  
}
```

```
.classItem {  
    background-color: orange;  
}
```

```
#idItem {  
    background-color: green;  
}
```



```
<p>  
    A paragraph with a blue background.  
</p>
```

```
<div class="classItem">  
    A div with an orange background.  
</div>
```

```
<div id="idItem">  
    A div with a green background.  
</div>
```

A paragraph with a blue background.

A div with an orange background.

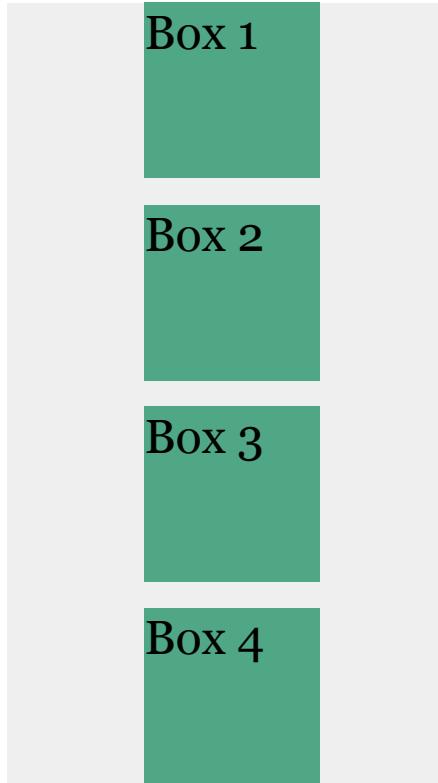
A div with a green background.

Questions?

CSS Positioning

Position: Static (Default)

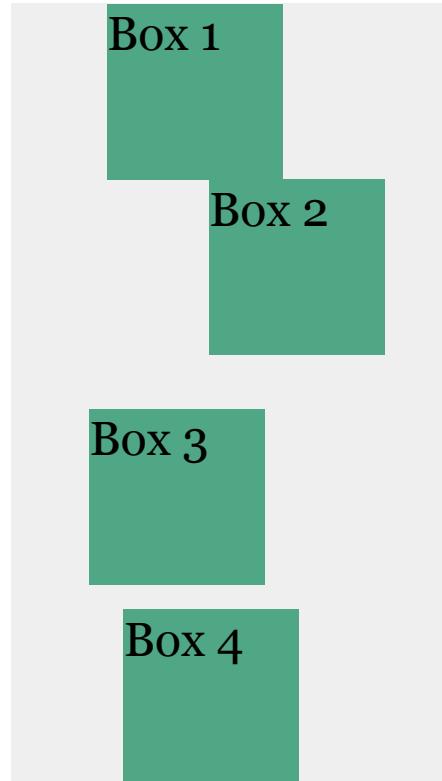
Four boxes placed statically (default):



Position: Relative

Switching the boxes to relative will nudge the boxes in relation to their “original” location.

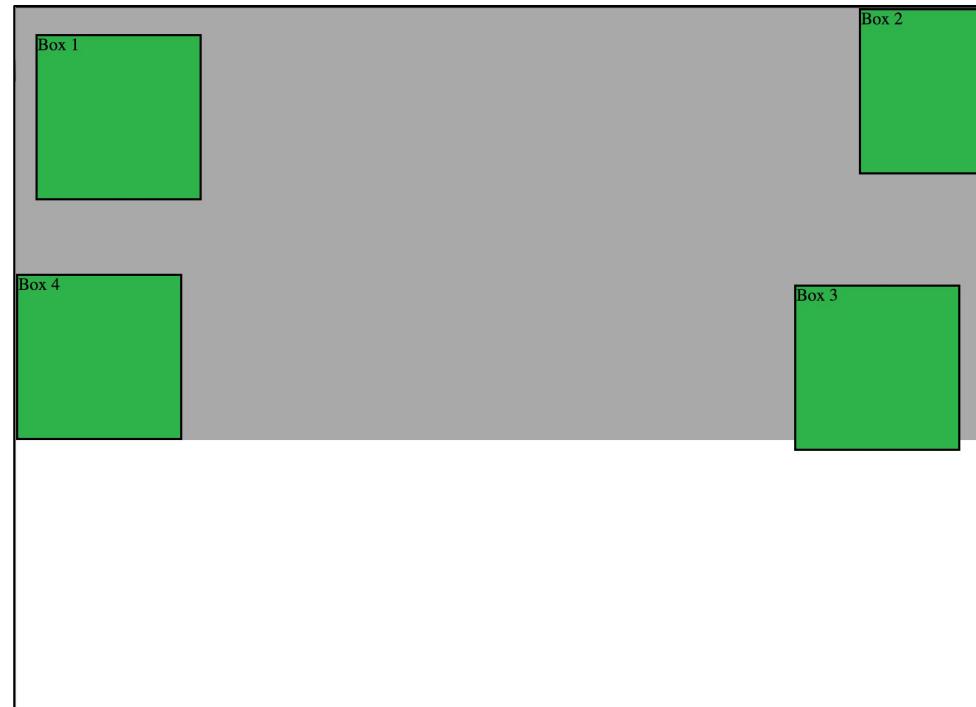
```
.box {  
  background: #2db34a;  
  height: 80px;  
  position: relative;  
  width: 80px;  
}  
.box-1 {  
  top: 20px;  
}  
.box-2 {  
  left: 40px;  
}  
.box-3 {  
  bottom: -10px;  
  right: 20px;  
}
```



Position: Absolute

Positioned relative to nearest positioned ancestor

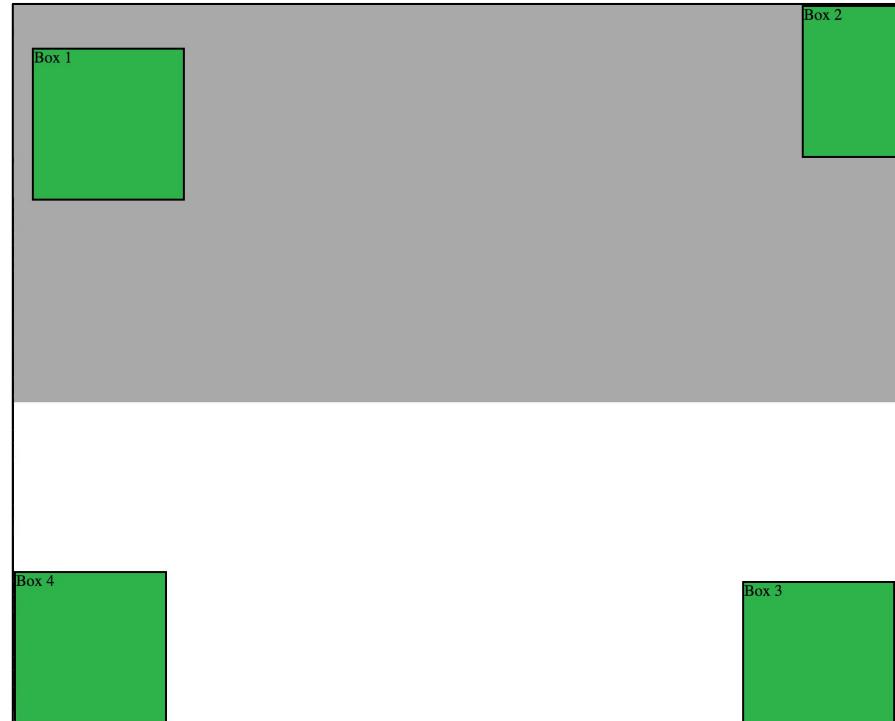
```
.box-set {  
  height: 400px;  
  background: darkgray;  
  position: relative;  
}  
.box {  
  position: absolute;  
  height: 150px;  
  width: 150px;  
  background: #2db34a;  
  border: 2px solid black;  
}  
.box-1 {  
  top: 6%;  
  left: 2%;  
}  
.box-2 {  
  top: 0;  
  right: -40px;  
}  
.box-3 {  
  bottom: -10px;  
  right: 20px;  
}  
.box-4 {  
  bottom: 0;  
}
```



Position: Fixed

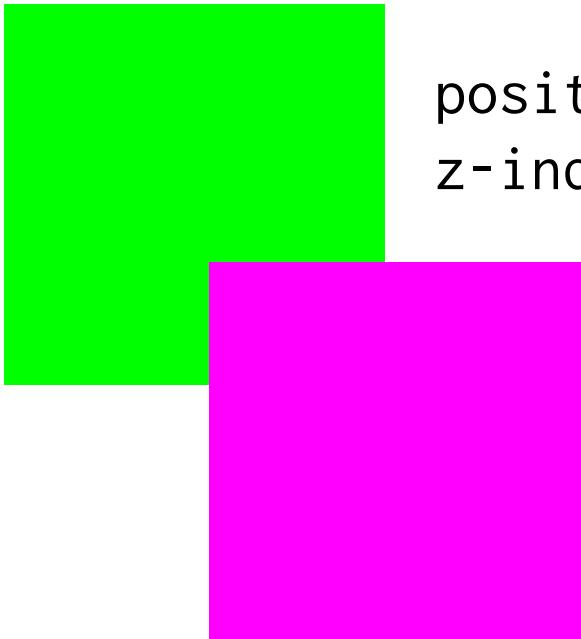
Position with exact coordinates in the browser window

```
.box-set {  
  height: 400px;  
  background: darkgray;  
}  
.box {  
  position: fixed;  
  height: 150px;  
  width: 150px;  
  background: #2db34a;  
  border: 2px solid black;  
}  
.box-1 {  
  top: 6%;  
  left: 2%;  
}  
.box-2 {  
  top: 0;  
  right: -40px;  
}  
.box-3 {  
  bottom: -10px;  
  right: 20px;  
}  
.box-4 {  
  bottom: 0;  
}
```



Layering with z-index

The z-index property allows you to layer elements on top of each other.



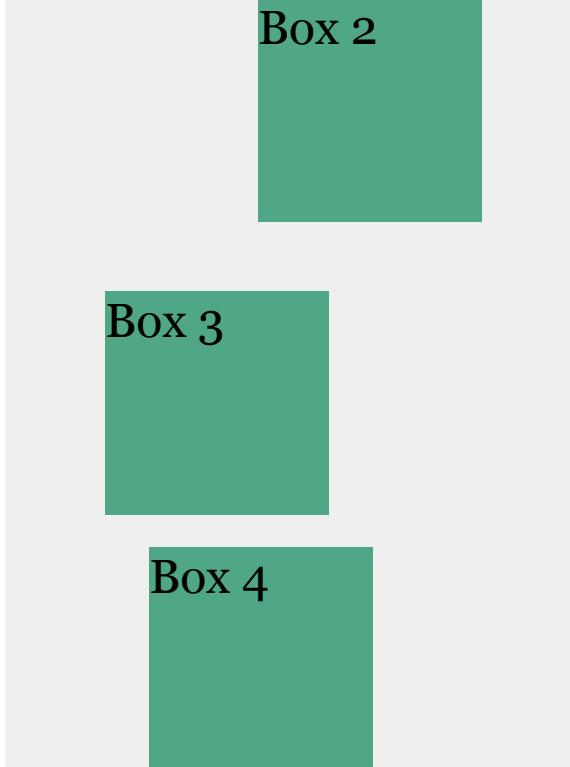
```
position: absolute;  
z-index: 1;
```

```
position: absolute;  
z-index: 2;
```

Hiding Things

Display: none allows you to hide elements from view.

This will become useful in later sections, when we'll hide and reveal specific HTML elements of our choosing.



Box 2

Box 3

Box 4



Instructor Demonstration
CSS Positioning



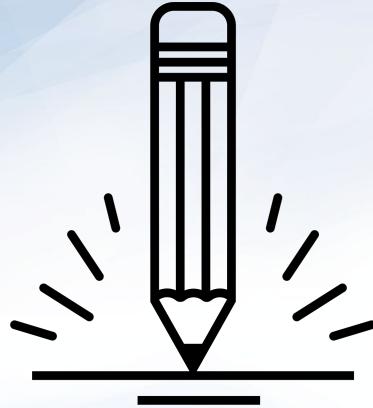
Time For a Quick Video

[Positioning in CSS](#)

Great Resource

Another great read for frontend developers:
learn.shayhowe.com





Activity: CSS Positioning

In this activity, you'll flex your newfound positioning skills by creating another conceptual layout. Eyeball the design to your best ability.

(Check Slack for additional instructions)

Suggested Time:
30 minutes



Float Activity

<div>

ading

position: fixed

1 ipsum dolor sit amet, consectetur adipiscing elit. Suspendisse a
erit ex, at blandit sapien. Lorem ipsum dolor sit amet, consectetur
adipiscing elit. Quisque finibus felis sem, non pulvinar odio fermentum vel.
Nunc varius tempus scelerisque. Curabitur congue magna vitae velit dictum,
eu finibus neque bibendum. In hac habitasse platea dictumst. Aliquam
fermentum lobortis felis, in feugiat diam congue ac.

<div>

position: relative

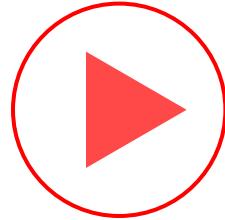
<div>

position: absolute

Nulla tempor ornare diam, vitae volutpat erat bibendum eget. Nunc sagittis
placerat velit sit amet interdum. Nam in iaculis purus, quis tristique velit.
Cras ut nisl vitae orci malesuada placerat non sed magna. Nulla ultrices,
dolor at aliquam volutpat, lorem magna pharetra arcu, eget feugiat nisi libero
at nunc. Phasellus finibus elit at sapien vehicula varius. Maecenas in dapibus
leo. Aliquam molestie vulputate metus. Morbi sed posuere quam, et sodales
felis. Proin augue nulla, pellentesque at venenatis vel, sagittis eget nibh.
Maecenas libero velit, luctus eu velit vitae, eleifend convallis felis.

Suggested Time: 30 Minutes





Time For a Quick Video

[CSS Positioning Layout](#)

Advice

Tips to Keep Moving Forward

01

Redo this at home.

We designed the class activities to firm up your HTML/CSS skills. Try them again at home.

02

REMEMBER!

The best way to learn web development is to practice, practice, practice!

Chrome Inspector

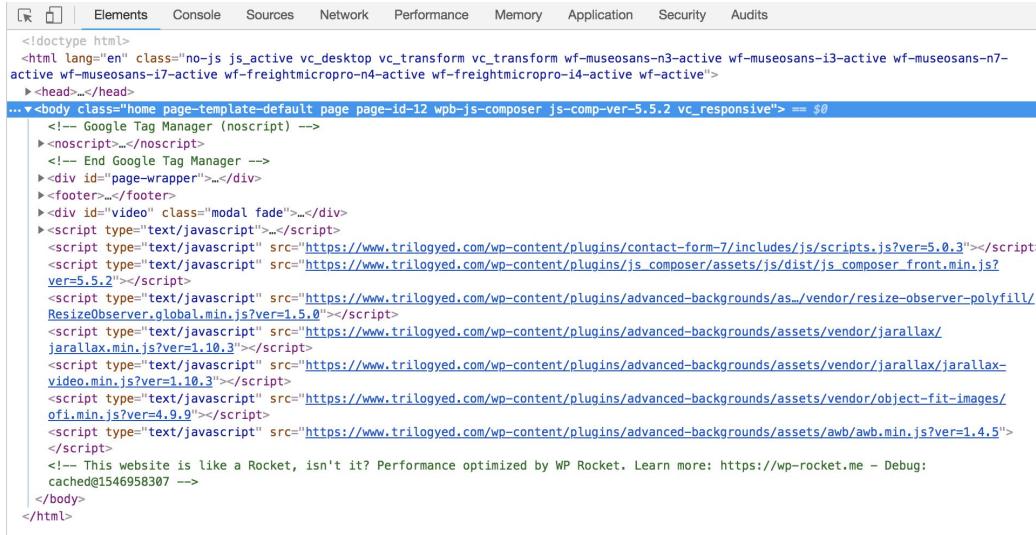
Chrome Inspector Is Your Friend



To access the Chrome inspector, right-click on a page and select **Inspect**.



It lets you inspect the HTML, CSS, and more.



A screenshot of the Chrome DevTools interface, specifically the Elements tab. The tab bar at the top includes Elements, Console, Sources, Network, Performance, Memory, Application, Security, and Audits. The main area displays the HTML source code of a webpage. A blue selection bar highlights a portion of the code within the body tag, specifically the section containing script tags. The code shows various JavaScript files being loaded from a domain named 'trilogedyed.com' via HTTPS. The highlighted code includes:

```
<!doctype html>
<html lang="en" class="no-js js_active vc_desktop vc_transform vc_transform wf-museosans-n3-active wf-museosans-i3-active wf-museosans-n7-active wf-museosans-i7-active wf-freightmicropn4-active wf-freightmicropn4-active wf-active">
  <head>...
    <!-- Google Tag Manager (noscript) -->
    <!-- End Google Tag Manager -->
  </head>
  <body class="home page-template-default page page-id-12 wpb_js_composer js-comp-ver-5.5.2 vc_responsive"> == $0
    ...
    <!-- Google Tag Manager (noscript) -->
    <!-- End Google Tag Manager -->
    <div id="page-wrapper">...
      <footer>...
        <div id="video" class="modal fade">...
          <script type="text/javascript">...
            <script type="text/javascript" src="https://www.trilogedyed.com/wp-content/plugins/contact-form-7/includes/js/scripts.js?ver=5.0.3"></script>
            <script type="text/javascript" src="https://www.trilogedyed.com/wp-content/plugins/js_composer/assets/js/dist/js_composer_front.min.js?ver=5.5.2"></script>
            <script type="text/javascript" src="https://www.trilogedyed.com/wp-content/plugins/advanced-backgrounds/assets/vendor/resize-observer-polyfill/ResizeObserver.global.min.js?ver=1.5.0"></script>
            <script type="text/javascript" src="https://www.trilogedyed.com/wp-content/plugins/advanced-backgrounds/assets/vendor/jarallax/jarallax.min.js?ver=1.10.3"></script>
            <script type="text/javascript" src="https://www.trilogedyed.com/wp-content/plugins/advanced-backgrounds/assets/vendor/jarallax/jarallax-video.min.js?ver=1.10.3"></script>
            <script type="text/javascript" src="https://www.trilogedyed.com/wp-content/plugins/advanced-backgrounds/assets/vendor/object-fit-images/ofi.min.js?ver=4.9.9"></script>
            <script type="text/javascript" src="https://www.trilogedyed.com/wp-content/plugins/advanced-backgrounds/assets/vendor/awb/awb.min.js?ver=1.4.5"></script>
          <!-- This website is like a Rocket, isn't it? Performance optimized by WP Rocket. Learn more: https://wp-rocket.me - Debug: cached@1546958307 -->
        </body>
      </html>
```

Chrome Inspector Is Your Friend



You can even edit the HTML/CSS in a webpage and instantly view your changes in the browser!



This works on any website, whether it's yours or not.

```
<!doctype html>
<html lang="en" class="no-js js_active vc_desktop vc_transform vc_transform wf-museosans-n3-active wf-museosans-i3-active wf-museosans-n7-active wf-museosans-i7-active wf-freightmicropn4-active wf-freightmicropn4i4-active wf-active">
  <head></head>
  <body class="home page-template-default page page-id-12 wpb-js-composer js-comp-ver-5.2.0 vc_responsive">
    <!-- Google Tag Manager (noscript) -->
    <noscript></noscript>
    <!-- End Google Tag Manager -->
    <div id="page-wrapper">...</div>
    <footer>...</footer>
    <div id="video" class="modal fade">...</div>
    <script type="text/javascript">...</script>
    <script type="text/javascript" src="https://www.trilogyed.com/wp-content/plugins/contact-form-7/includes/js/scripts.js?ver=5.0.3"></script>
    ...<script type="text/javascript" src="https://www.trilogyed.com/wp-content/plugins/js_composer/assets/js/dist/js_composer_front.min.js?ver=5.5.2"></script> = $0
    <script type="text/javascript" src="https://www.trilogyed.com/wp-content/plugins/advanced-backgrounds/assets/vendor/resize-observer-polyfill.min.js?ver=1.5.0"></script>
    <script type="text/javascript" src="https://www.trilogyed.com/wp-content/plugins/advanced-backgrounds/assets/vendor/jarallax/jarallax.min.js?ver=1.10.3"></script>
    <script type="text/javascript" src="https://www.trilogyed.com/wp-content/plugins/advanced-backgrounds/assets/vendor/jarallax/jarallax-video.min.js?ver=1.10.3"></script>
    <script type="text/javascript" src="https://www.trilogyed.com/wp-content/plugins/advanced-backgrounds/assets/vendor/object-fit-images/ofi.min.js?ver=4.9.9"></script>
    <script type="text/javascript" src="https://www.trilogyed.com/wp-content/plugins/advanced-backgrounds/assets/awb/awb.min.js?ver=1.4.5"></script>
    <!-- This website is like a Rocket, isn't it? Performance optimized by WP Rocket. Learn more: https://wp-rocket.me - Debug: cached@1546958307 -->
  </body>
</html>
```

```
Styles Computed Event Listeners >
Filter :hov .cls +
element.style {
}
* {
    -webkit-font-smoothing: antialiased;
    -moz-osx-font-smoothing: grayscale;
}
* {
    -vendor-prefixes.scss:75
    -webkit-box-sizing: border-box;
    -moz-box-sizing: border-box;
    box-sizing: border-box;
}
script {
    user agent stylesheet
    display: none;
}
Inherited from body.home.page-template-default...
body {
    position: relative;
    min-height: 100%;
    font-family: freight-micro-pro;
    font-weight: 400;
    font-size: 15px;
    padding-top: 90px;
}
body {
    scaffolding.scss:28
    font-family: "Helvetica
    Neue", Helvetica, Arial, sans-serif;
    font-size: 14px;
    line-height: 1.42857;
    color: #333;
    background-color: #fff;
}
```



We'll come back to
this after the break.

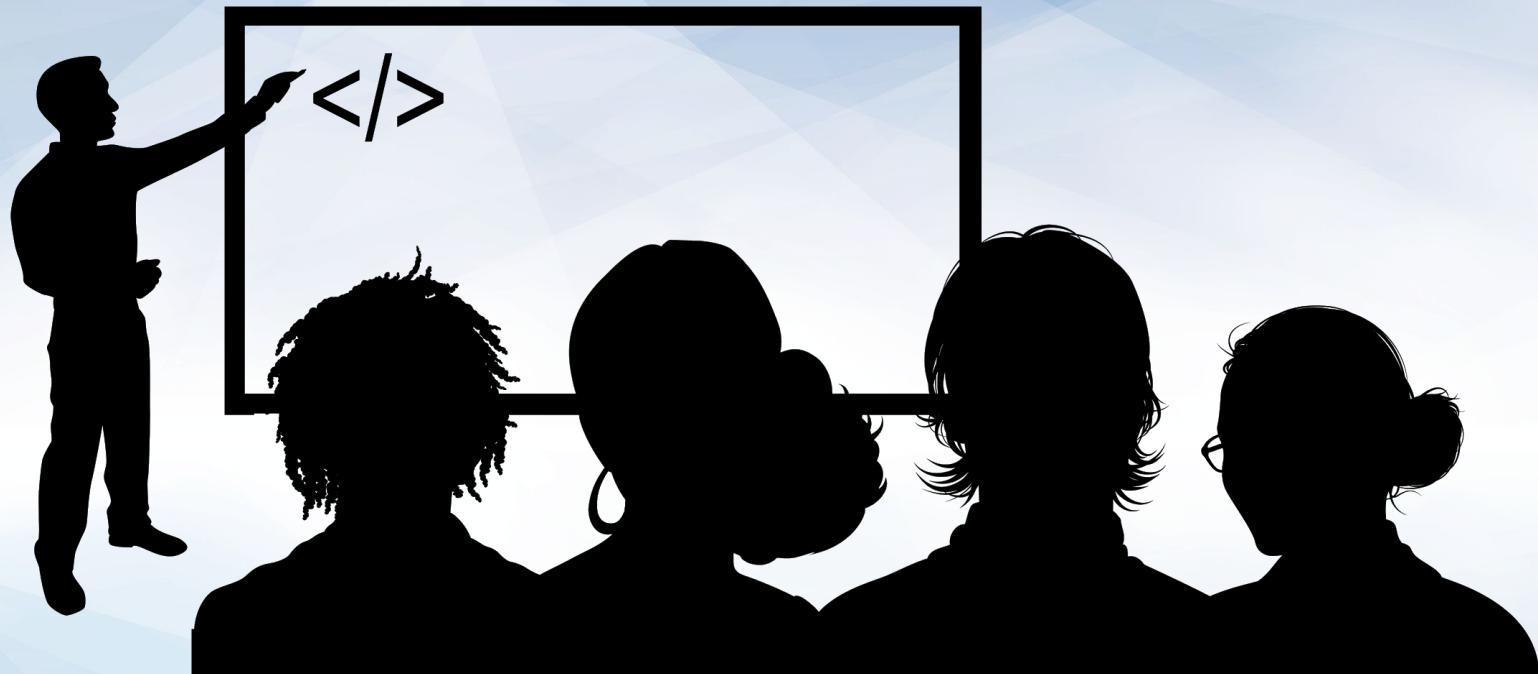
Take a Break!



Modifying Sites

You can edit any page's HTML and CSS with Chrome DevTools.
Plus, you'll see your results instantly.





Instructor Demonstration
Chrome DevTools

Activity: Modify a Website

For the next 15 minutes, take a website you commonly use (Amazon, Google, HuffPo, etc.) and heavily modify it using Chrome DevTools.

Be sure to modify the following:

- Content (change words)
- Colors
- Spacing

Send a screenshot to the class's Slack channel when you're done.

Suggested Time: 15 minutes



Activity: Modify Your Own Website

For the next 10 minutes, edit any site that you've been working on—in class or for homework—with Chrome DevTools.

Be sure to at least modify:

- Content (change words)
- Colors
- Spacing

Suggested Time: 10 minutes



Loading Multiple CSS Files (Important!)



Deploying multiple CSS files simultaneously is a powerful technique.

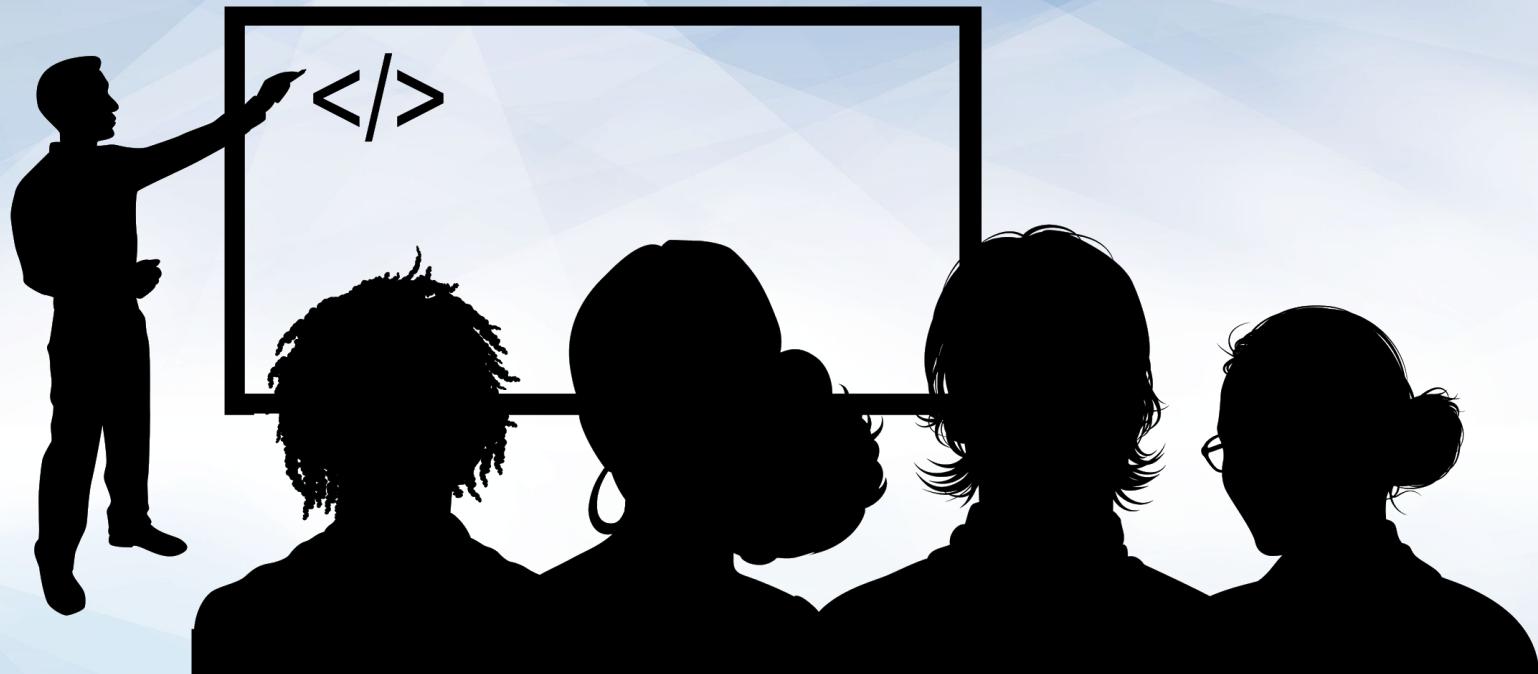


This technique allows developers to create complex designs made up of abounding design elements.



Remember, the loading order matters!

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4      <title>Multiple CSS Files!!</title>
5      <link rel="stylesheet" href="assets/style1.css">
6      <link rel="stylesheet" href="assets/style2.css">
7      <link rel="stylesheet" href="assets/style3.css">
8  </head>
9  <body>
10 <header>
```



Instructor Demonstration
Multiple CSS Files

By a show of hands,
which browser do you use?

Battle of the Browsers



Under the hood, web browsers often render webpages differently than their competition.



These disparities could mean that the HTML/CSS displays differently in each web client.



Because of these potential differences, web developers need to make their websites cross-browser compatible.



Reset.css (or Normalize.css)



Reset.css will “reset” all browser-specific CSS. This means your site will appear the same in all browsers.



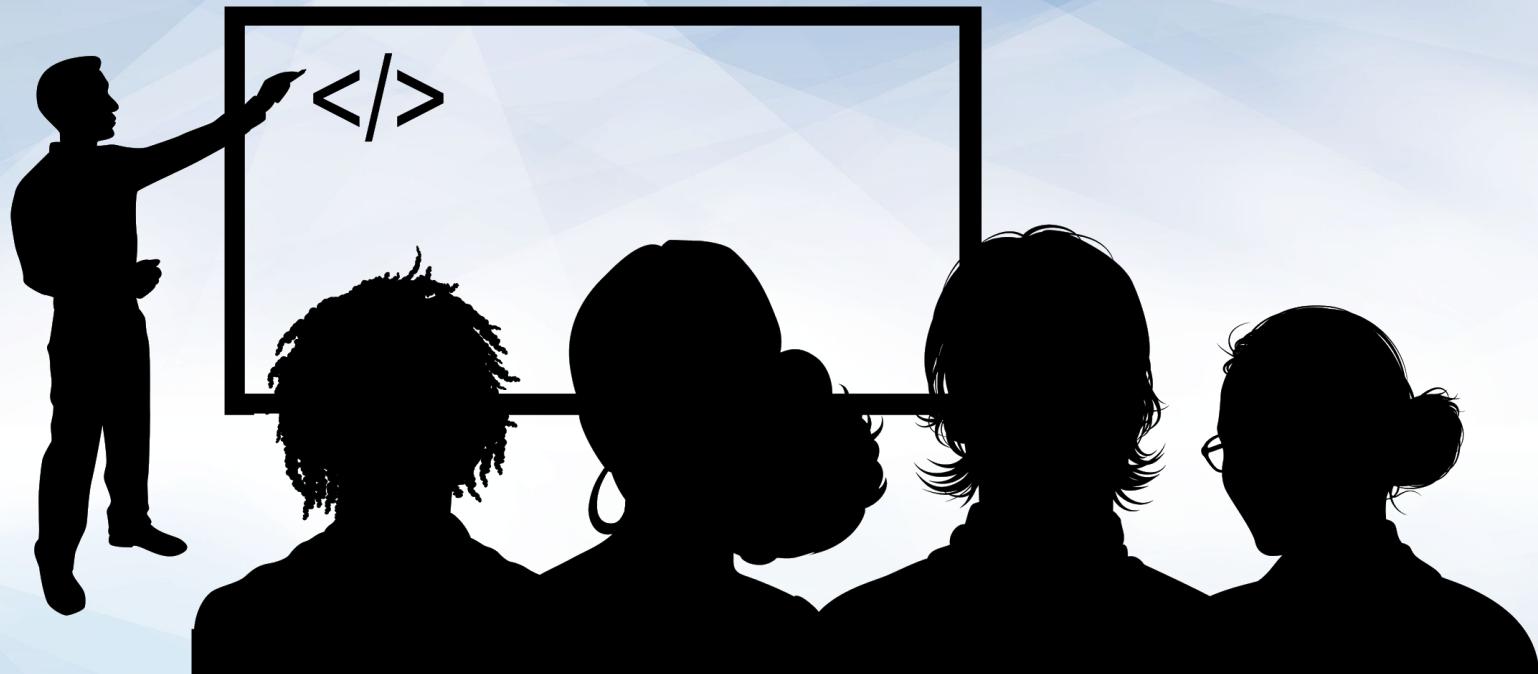
However, you will have to restyle everything yourself.

Header 1
Header 2
Header 3
Lorem ipsum dolor sit amet, consectetur adipisicing elit. Molestiae at consectetur iste dignissimos maiores placeat deleniti eum dolore, velit ab similique eligendi commodi perspiciatis excepturi labore facere. Ad, excepturi, distinctio?
Lorem ipsum dolor sit amet, consectetur adipisicing elit. Soluta, reiciendis molestias inventore blanditiis ratione amet, dolore id doloribus minus iure esse, accusantium qui ex, nesciunt? Officiis, animi saepē libero quae!



List Item 1
List Item 2
List Item 3
List Item 4
[Google.com](#)
[Facebook.com](#)
[Ebay](#)

Jill	Smith	50
Eve	Jackson	94



Instructor Demonstration
CSS Resets

Why CSS Resets Matter

01

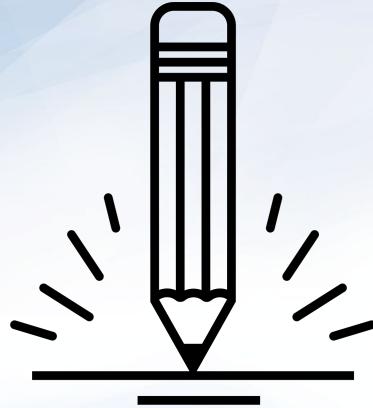
They are important for creating browser-compatible websites.

02

They are an example of using someone else's CSS in your website.

03

They are a common topic for front-end developer interview questions.



Activity:

CSS Resets

Suggested Time:
10 minutes



Activity: CSS Resets

Follow the instructions provided via Slack to incorporate a reset.css file into a basic HTML file.

Note the impact the reset file makes after its inclusion.

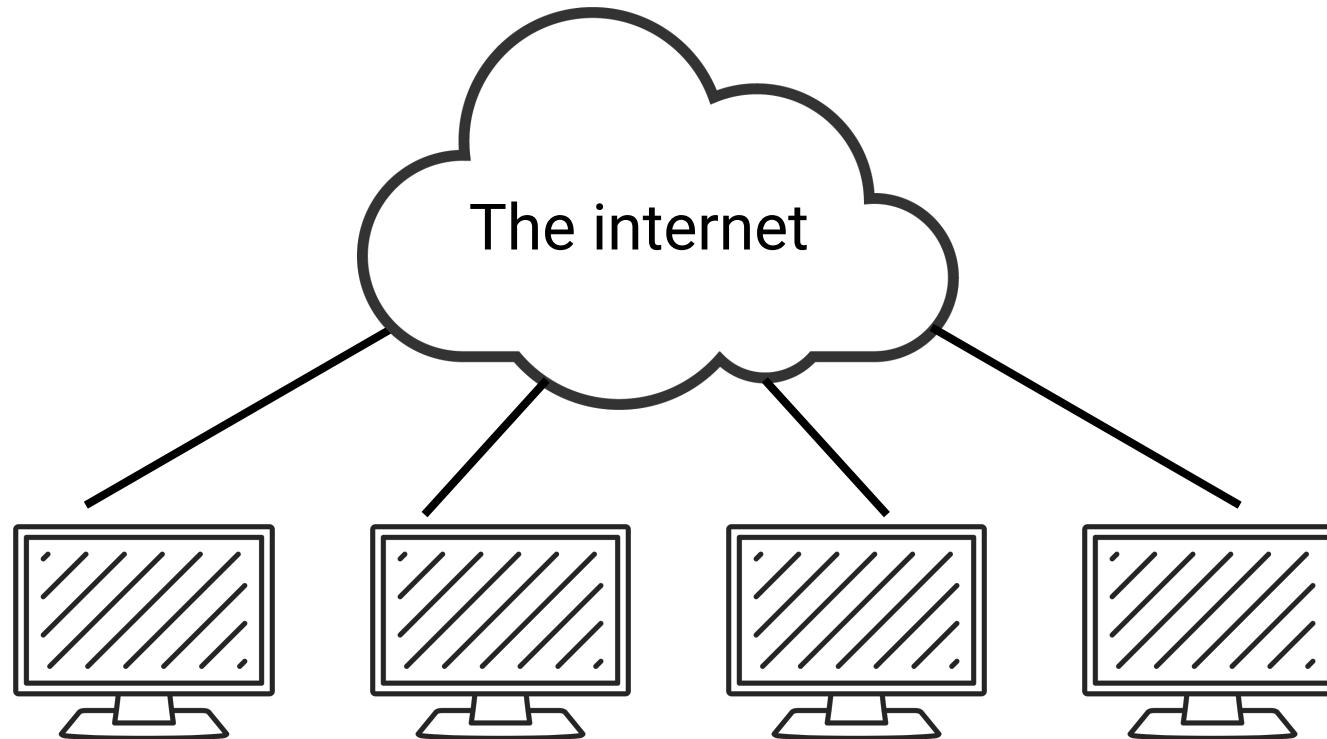
Suggested Time: 10 minutes



To the Web with GitHub!

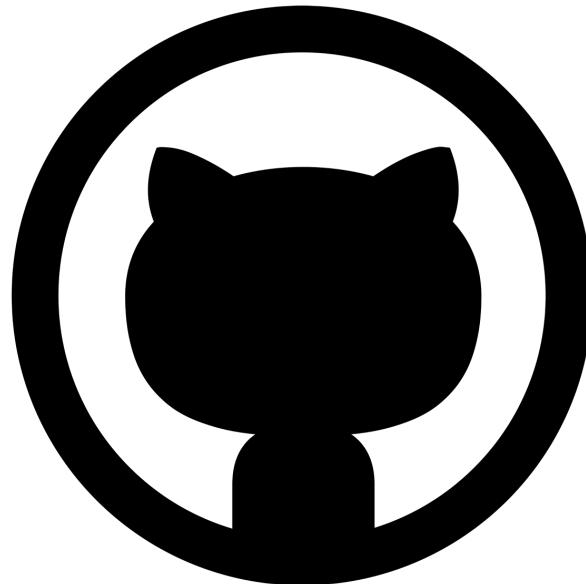
The Internet

Here is a deep and complex diagram illustrating how the internet works.



The World Will See Our Greatness!

GitHub provides hosting for static websites, which means we can deploy our websites and applications onto their servers for the world to see.



Let's All Log In to GitHub



Instructor Demonstration GitHub Pages Deployment—Personal

Deploying a Static Personal Site to GitHub Pages

Follow these basic steps:

01

Create a new repo named `_username_.github.io`.

02

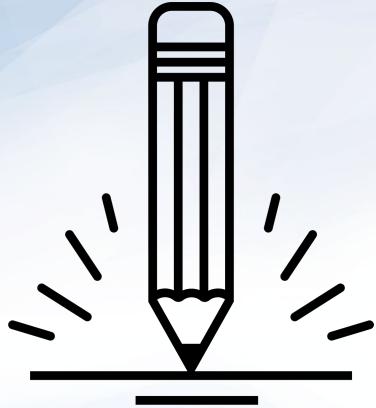
Navigate to a folder on your computer and clone the repo into it.

03

Build your files.

04

Add, commit, and push your changes to the repository.



Activity:

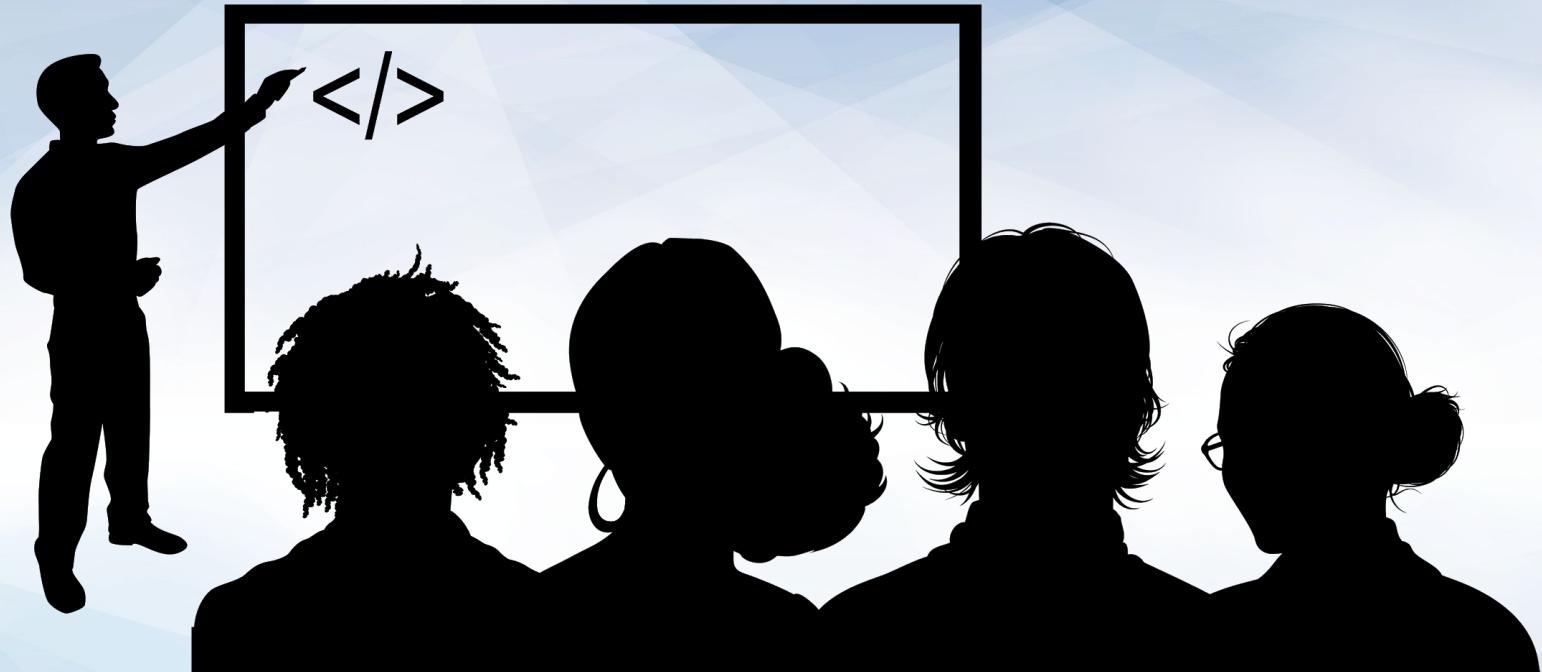
Deploying Bio to GitHub Pages

Time to take your newfangled website and deploy it to the cloud—in this case, GitHub Pages.

Additional instructions will be sent via Slack.

Suggested Time:
15 minutes





Instructor Demonstration GitHub Pages Deployment—Project

Deploying a Static Project Site to GitHub Pages

Follow these steps:

01

Create a new repository in your GitHub account. You can name this repository whatever you like.

02

In the repository, create a new file and name it index.html.

03

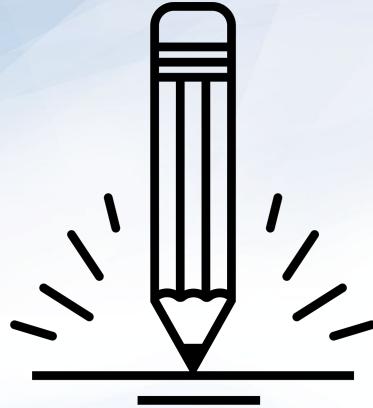
Add some basic HTML to this file, save it, and then navigate to your repository's Settings tab.

04

Scroll down to the GitHub Pages section. In the Source section, select the master branch as your source.

05

Navigate to <username>.github.io/<repositoryname>; you will find that your new webpage has gone live!



Activity: Creating a Project Site

Build a newfangled website, and then deploy it to GitHub Pages as a project instead of a personal site.

Additional instructions will be sent via Slack.

Suggested Time:
15 minutes



Recap & Reassurances

You Got This!



Questions?