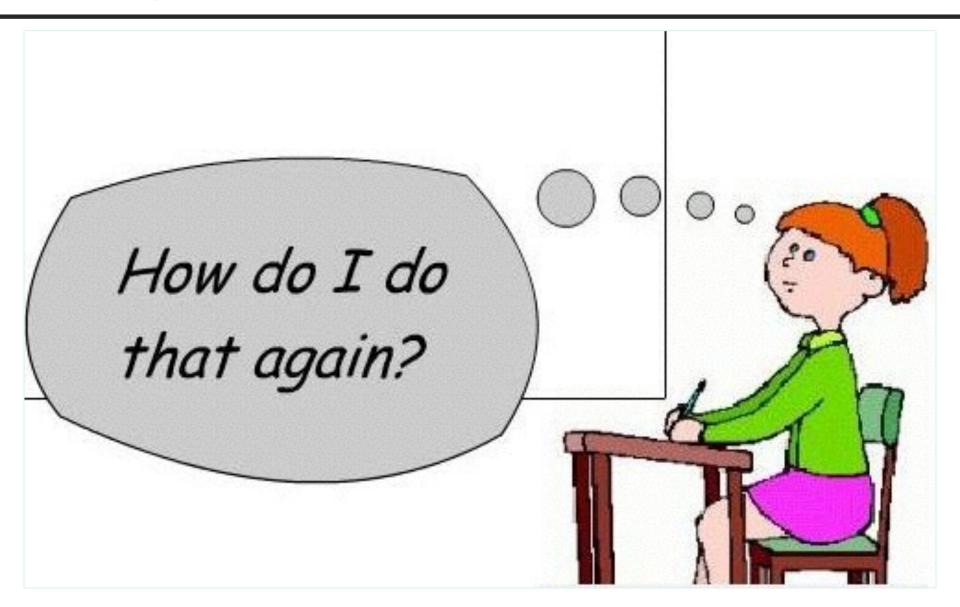
Day 2

# Git'n Pro with HTML/CSS

June 23, 2016



# It's Okay!



# Admin Items

## Where to Get Help

- Practice, Practice: Work Individually or in Groups
- Review In Class Material (Exercises and Slides):
   @Dwight Please #slackout the link
- Re-Watch Class Videos:
   @Nigel Please #slackout the link
- In Class Office Hours: 45 minutes before class, 30 minutes after
- Virtual Office Hours: T/W 6:30 8:00 PM
- One-on-One Sessions: By Announcement through SSM
- Contact Student Success: Anytime!

## Homework #1 - Assignment

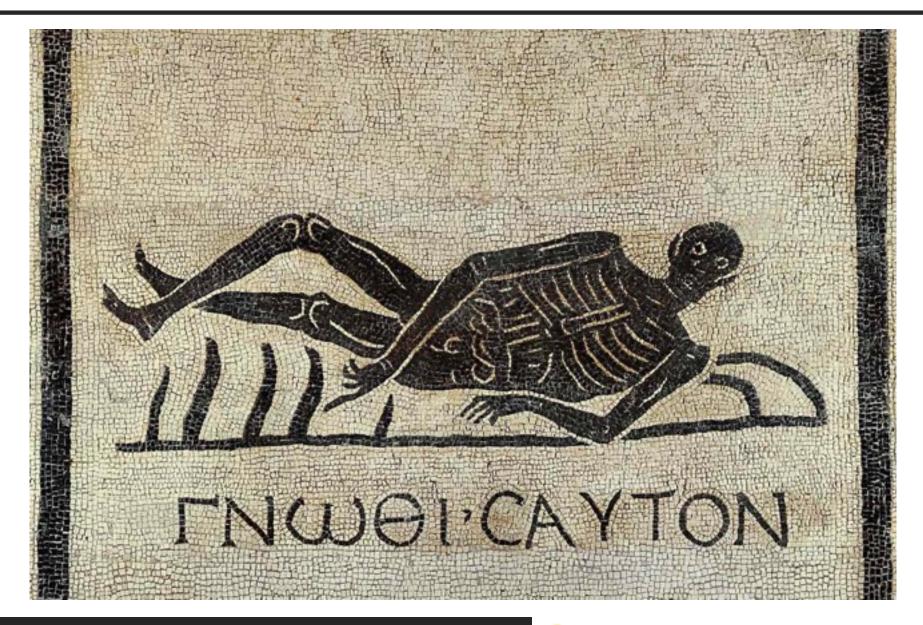
- Also, at this point everyone should have access to the homework repository in GitHub.
   <a href="https://github.com/UCF-Coding-Boot-Camp/06-16-VW-Class-Content">https://github.com/UCF-Coding-Boot-Camp/06-16-VW-Class-Content</a>
- Homework Assignment #1 is due next week
  - TTH Class: Next Thursday (6/30/2016)

# Today's Class!

# **Today's Objectives**

- Understand the importance of Git Version Control and how to use it
- Learn to create GitHub Repositories, push code into them, and share with class
- Create more HTML documents
- Learn to properly use basic HTML tags
- Learn basic CSS styling to HTML documents.

#### **ANYONE READ THIS?**



## **Know Thyself**

#### If you are a complete beginner to HTML/CSS and Coding...

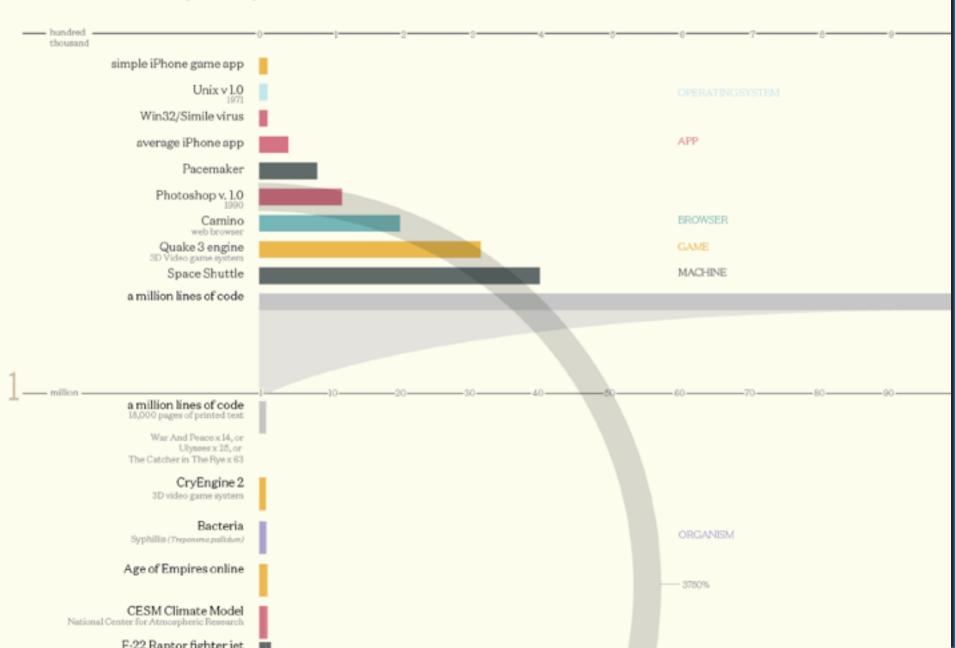
- Continue getting comfortable with HTML.
- Be able to completely write a basic HTML document (like in last class)
- Understand what CSS is, what its for, and how it works with HTML
- \*\*\*\*\*\*\*\*\*\* Be able to use Git and GitHub to upload code

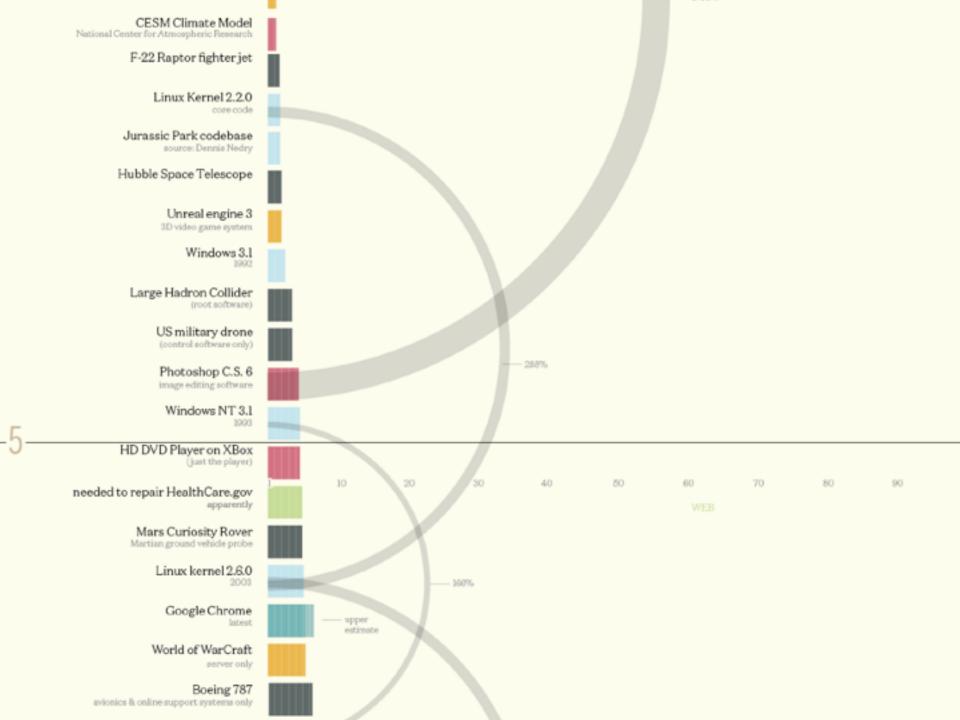
#### If you've had past exposure and felt comfortable with the last lesson...

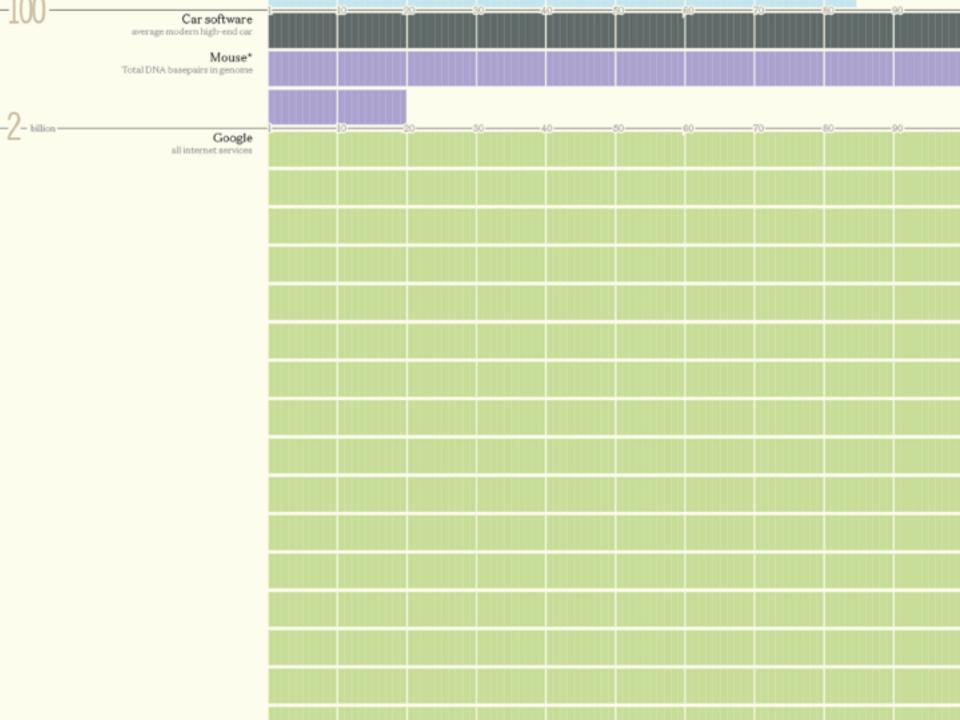
- Aim to build up your skills. Clear up questions or confusions about HTML
- Become knowledgeable about a wider range of HTML and CSS tags
- Be able to selectively apply CSS to specific HTML elements
- \*\*\*\*\*\*\*\*\* Be able to use Git and GitHub to upload code.

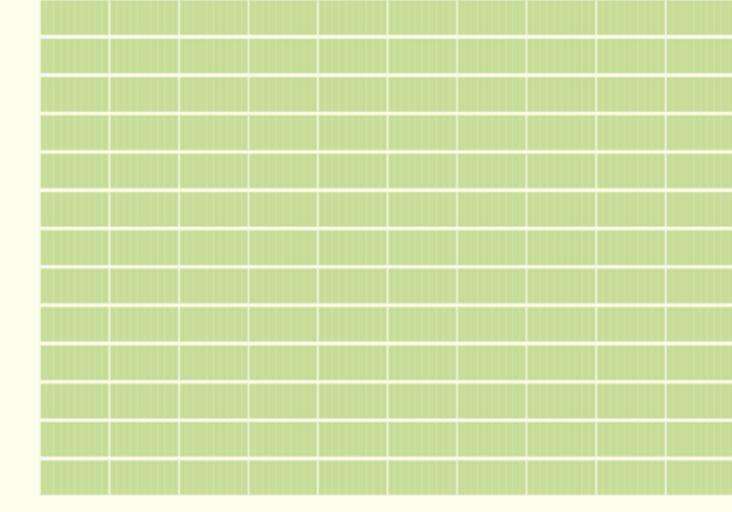
# What / Why Git?











"Human Genome = 3,300 billion "lines" of code

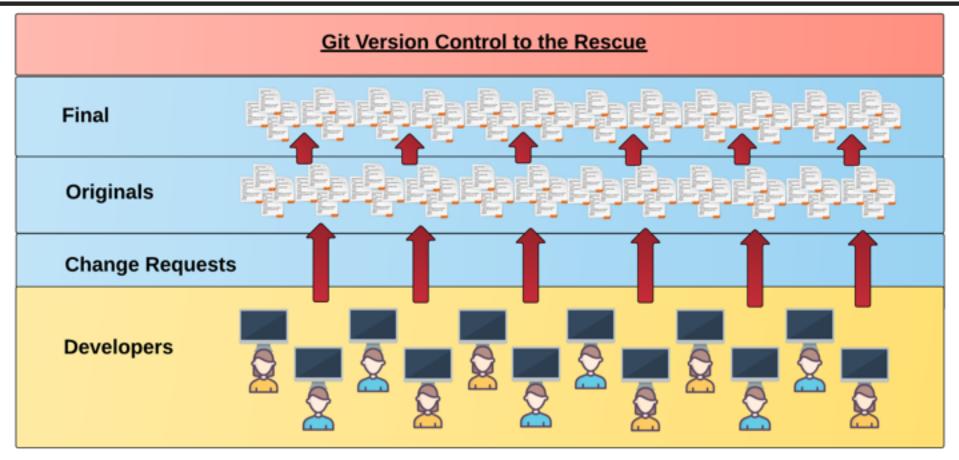
concept & design: David McCandless
informationisbeautiful.net
research: Pearl Doughly-White, Miriam Quick

this graphic is a part of knowledge is beautiful bit.ly/KIB\_Books



sources NASA, Quara, Ohloh, Wired & press reports note some guess work, rumours & estimates data bit.ly/HB\_linescode

## **Collaborative Coding**



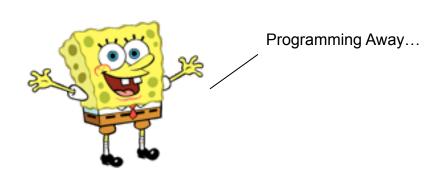
- Modern web development is *highly* collaborative.
- Teams are often extremely large and separated across country (or planet).
- Applications are often made up of hundreds or thousands of files.



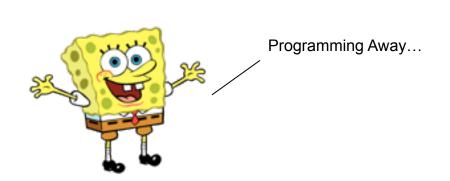


OMG. I HAZ THE GREATEST HTML IDEA!!!!!

SpongeSite.com





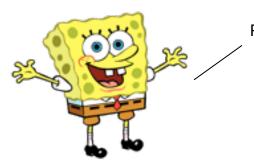






Spongebob's idea is dumb. We should call it...

KobezzzSite.com



Programming Away...

**Spongebob's Version** 

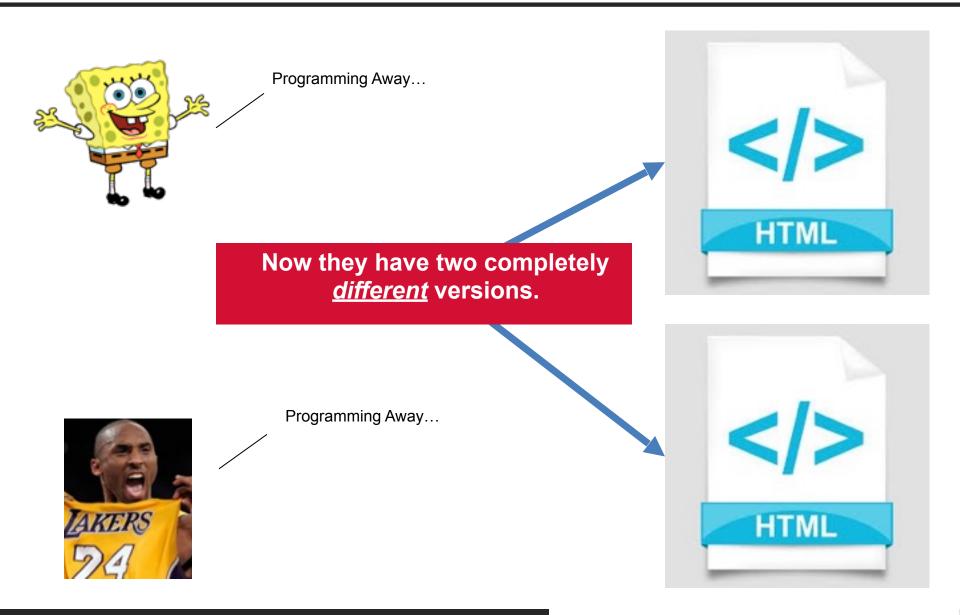


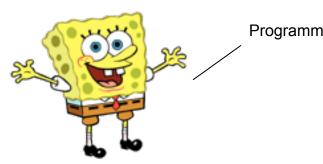


Programming Away...

**Kobe's Version** 







Programming Away...



Programming Away...











Programming Away...



# Hai guyz!!! How R Kan help??



Programming Away...



HTML

# The Group Project – Tragedy #2

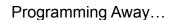






Programming Away...

OK.
Delete. Delete.
Delete. Delete.
Delete. Delete.













....And be wary of group members.



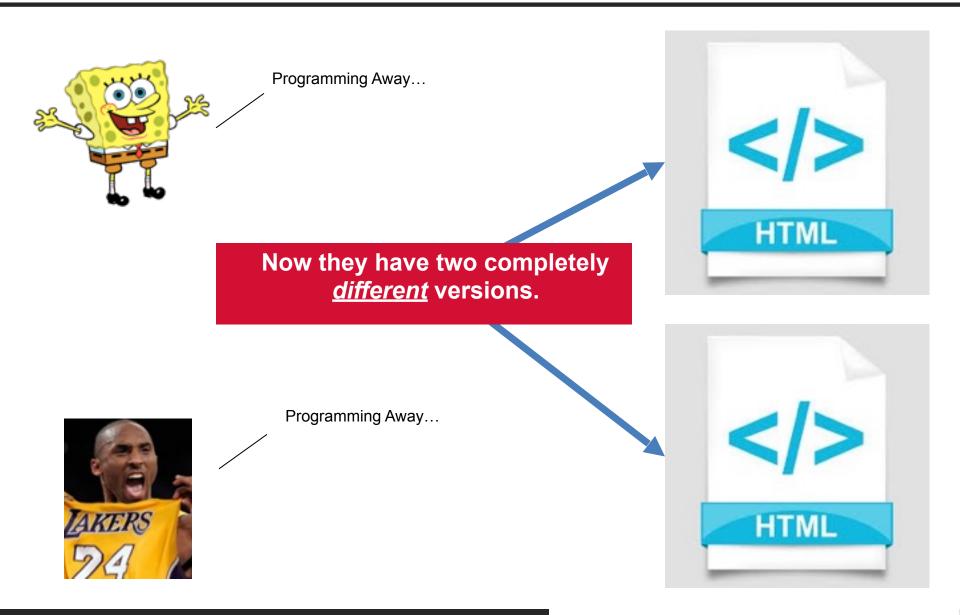
#### **Version Control**

# **Git Version Control:**

Offers a set of commands and an organizational structure for managing code when multiple developers work simultaneously.

# Major Benefits come from using Git:

- 1. Code Conflict Resolution
- 2. Version History



# The Group Project with Version Control



#### Main Branch (Spongebob's)

Spongebob continues programming



Kobe **pushes** (**uploads**) his code changes into the main branch.

**Code conflicts** are resolved before inclusion.





Kobe's Branch

## The Group Project – Tragedy 2 (Revisited)



Programming Away...



OK.
Delete. Delete.
Delete. Delete.
Delete. Delete.





Programming Away...



# The Group Project with version control



#### Main Branch (Spongebob's)



Kiss Dude **pushes** his (bad) code deletions



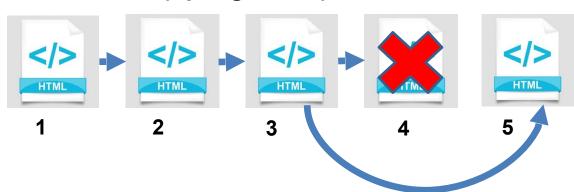


Kiss Dude's Branch

# The Group Project with version control



#### Main Branch (Spongebob's)



But this time, Spongebob <u>rolls back</u> the code to an earlier version.











# Lesson: You should use Version Control!



#### Turn to your neighbor and have one of you explain to the other:

What the concept of version control is

#### Then the other should explain:

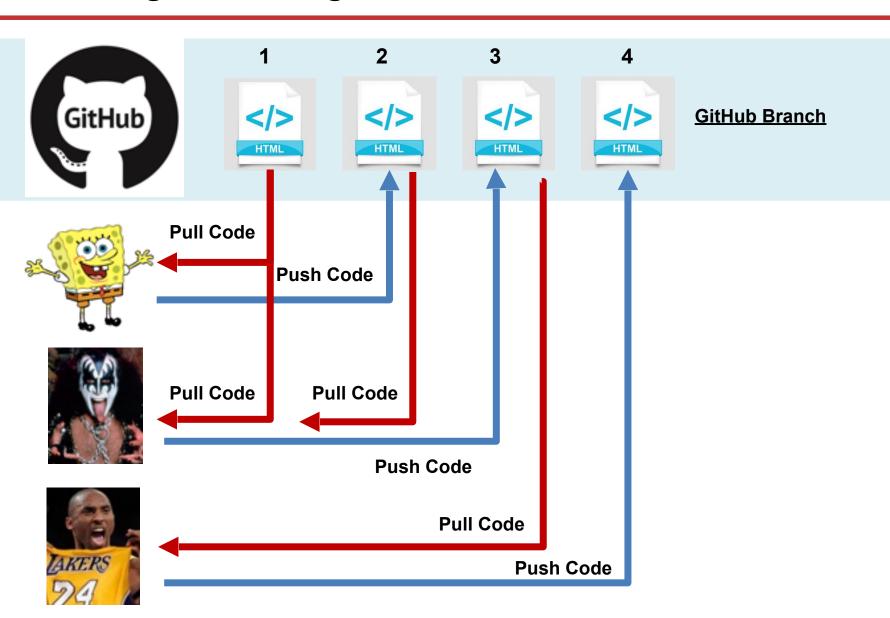
Two of the key advantages to using a version control system

## So... What's this GitHub thingamajig?

- GitHub is a Web-Based hosting service (PaaS) to store code online.
- It allows developers to pull (download) code or push (upload) code to the same repository (directory).
- It also allows developers to view histories of code changes and track issues.

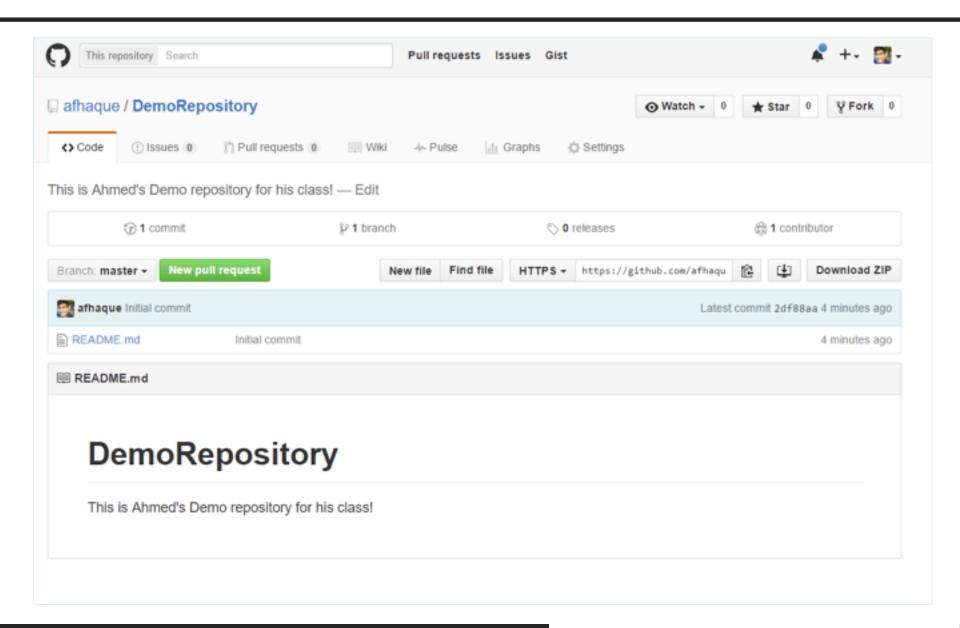


# **Pushing and Pulling to GitHub**



# Get Started with Git

#### **Instructor Git Demo!**



### **Basic Git Commands**

### At its most basic, these are the five git commands to get started

- 1. git clone
- 2. git add
- 3. git commit
- 4. git push
- 5. git pull

### **Basic Git Commands**

### At its most basic, these are the five git commands to get started

- 1. git clone copies an entire repo (to begin)
- 2. git add adds a file for inclusion in Git
- 3. git commit notes a change to the local repo
- 4. git push sends changes to hosting service
- 5. git pull downloads freshest version of repo

### **Assignment:**

Using GitHub and the Command Line:

- Create a new public GitHub repository and name it whatever you like. Be sure to check the box for "initialize this repository with a README"
- Next, clone the repo to your local directory.
- Then create an HTML file inside the local directory.
- Add, Commit, and Push the code to GitHub.

#### **Bonus:**

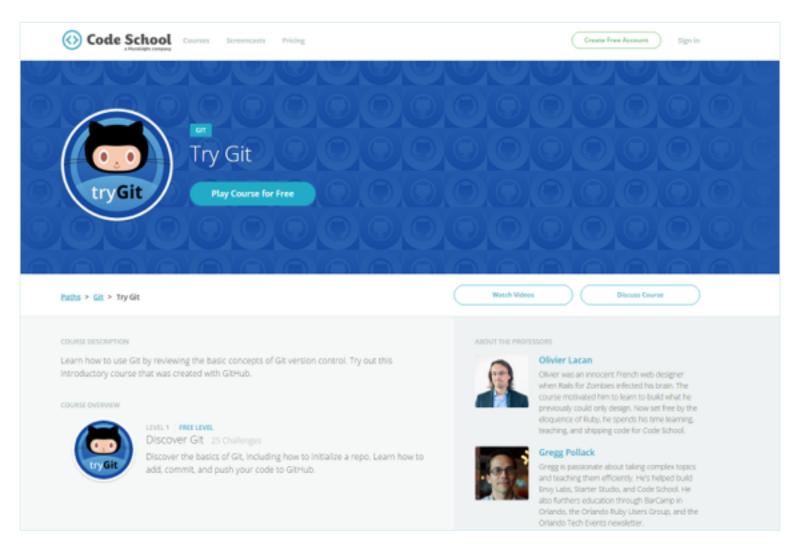
- Find a partner in class and <u>fork</u> their repository to your own GitHub account.
   Clone this forked repository to your local directory.
- Add, Commit, and Push the code back to your forked copy.
- Finally, submit a pull request to send your changes to your partner's repo.

# Still a Bit Lost? Never Worry!



- Follow this handy Guide!
- Practice a few times on your own before our next class.

# If You're Still Lost... Here's a (Free) Course



https://www.codeschool.com/courses/try-git

# HTML Round 2

# On Ugly HTML

- PLEAZE! Don't do this...
   Use proper indentation and sectioning.
- Readable code is easier to maintain, & less likely to bug out
- Invest time to get better about this now. It will pay dividends!



•With a partner

- With a partner
  - Ask them, What is an HTML tag?

- With a partner
  - Ask them, What is an HTML tag?
  - Switch, and Ask them, what is an HTML attribute?

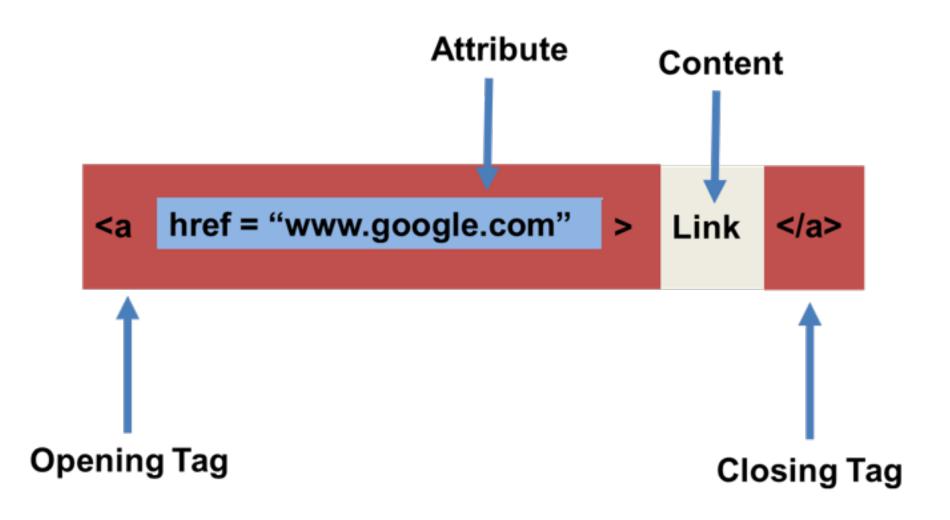
- With a partner
  - Ask them, What is an HTML tag?
  - Switch, and Ask them, what is an HTML attribute?
  - Switch, what is required for a valid HTML tag?

- With a partner
  - Ask them, What is an HTML tag?
  - Switch, and Ask them, what is an HTML attribute?
  - Switch, what is required for a valid HTML tag?
  - Both, What is the HTML5 doctype?

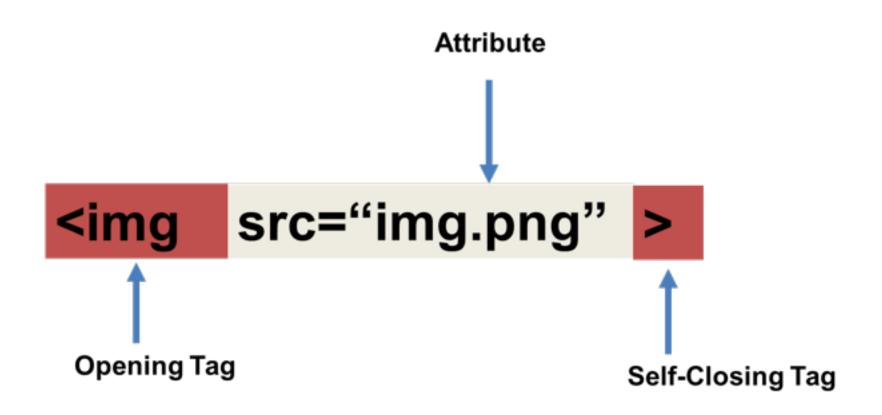
- With a partner
  - Ask them, What is an HTML tag?
  - Switch, and Ask them, what is an HTML attribute?
  - Switch, what is required for a valid HTML tag?
  - Both, What is the HTML5 doctype?
    - ○(Open book...⊖)



# **HTML Syntax (with Attribute)**



# **Tricky Tags (Self-Closing)**



# **Important Common Tags**

### **Headers:**

- <h1> </h1> Header 1 (Largest Header)
- <h2> </h2> Header 2 (Next Largest Header)
- <h3> </h3> Header 3
- ... <h6></h6>

### **Containers:**

- <html> </html> Wraps the entire page
- <head> </head> Wraps the header of the page
- <body> </body> Wraps the main content
- <div> </div> Logical Container \*\*\*
- Wraps individual Paragraphs

### Others:

- <strong> (bold), <em> (emphasis)
- <img> (images ♠), <a href> (links ♣), (list items ♠), <title> (title), <br/>(line break) (iii), <!-- --> (comments)



• All HTML Tags are listed here: <a href="http://www.w3schools.com/tags/">http://www.w3schools.com/tags/</a>

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- Other tags:
  - <video> for Videos

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  - <embed> for Embedded files

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- Other tags:
  - <video> for Videos
  - <audio> for Audio files
  - <embed> for Embedded files
  - <code> for including computer code

- All HTML Tags are listed here: <a href="http://www.w3schools.com/tags/">http://www.w3schools.com/tags/</a>
- <u>Don't try to memorize them!</u> Simply refer back to documentation as needed.
- Other tags:
  - <video> for Videos
  - <audio> for Audio files
  - <embed> for Embedded files
  - <code> for including computer code
  - <header> for headers

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- <u>Don't try to memorize them!</u> Simply refer back to documentation as needed.
- Other tags:
  - <video> for Videos
  - <audio> for Audio files
  - <embed> for Embedded files
  - <code> for including computer code
  - <header> for headers
  - <nav> for navigation bars

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  - <video> for Videos
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  - <header> for headers
  - <nav> for navigation bars
  - <footer> for footers

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  - <header> for headers
  - <nav> for navigation bars
  - <footer> for footers

### **HTML** for Forms

# **Common UI (User Interface) Form Elements:**

- <form> Creates a form section in HTML
- <input> Input boxes
- <label> Labels for boxes
- **<button>** Button
- <textarea> Large textbox

### **HTML** for Forms

```
<!DOCTYPE html>
<html>
<body>
<form>
 First name: <br>
 <input type="text" name="firstname">
 <br>
 Last name: <br>
 <input type="text" name="lastname">
</form>
Note that the form itself is not visible.
Also note that the default width of a text input field is 20 characters.
</body>
</html>
```

First name:
Last name:
Note that the form itself is not visible.
Also note that the default width of a text input field is 20 characters.

Activity: 1-HTML\_Git | Suggested Time: 20 min

# **Assignment**

In this activity, you'll be creating a student bio using HTML. You will then add, commit, and push your completed HTML to GitHub for the world to see.

# **Student Bio**

#### Your Name

200×200

Write a short paragraph or two about yourself, or use placeholder text from www.lipsum.com

#### Contact Info

• Email: someplace@gmail.com

Github: <u>sampleName</u>
 Portfolio: <u>coming soon</u>

# CSS Stylin'

# HTML / CSS Definitions (\*yawn\* unimportant)

- **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 third handling logic, animation, etc.)



# HTML / CSS Analogy

# HTML Alone

- Like writing papers in "Notepad".
- Can only write unformatted text.

# CHARACTER

# HTML / CSS

- Like writing papers in Microsoft Word.
- Can format text, page settings, alignment, etc. based on "highlighting" and menu options.





# **Basic HTML Page**

```
<!DOCTYPE html>
    <html lang="en">
    <head>
        <meta charset="UTF-8">
 4
        <title>My First Website!</title>
 5
    </head>
    <body>
 8
        <h1>Awesome Header</h1>
        <h2>Smaller Awesome Header</h2>
10
11
        <h3>Even Smaller Header</h3>
12
13
        Lorem ipsum dolor sit amet, consectetur adipisicing elit. Quidem consequatur
        unde aut dolores odio hic, accusamus recusandae ipsam illum enim voluptatibus
        obcaecati totam tempora eum quod sapiente. Corporis, quidem, culpa?
        <img src="https://pbs.twimg.com/media/BsgYfMQCQAAWVKH.jpg" alt="Awesome" width="</pre>
14
        25%">
15
        <h3>Menu Links</h3>
16
17
        <<u>ul</u>>
            <a href="http://www.google.com"></a>Google
18
            <a href="http://www.facebook.com"></a>Facebook
19
20
            <a href="http://www.twitter.com"></a>Twitter
21
        22
23
    </body>
24
    </html>
```

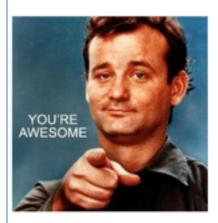
# **Basic HTML Page - Result**

# Awesome Header

#### Smaller Awesome Header

#### Even Smaller Header

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Quidem consequatur unde aut dolores odio hic, accusamus recusandae ipsam illum enim voluptatibus obcaecati totam tempora eum quod sapiente. Corporis, quidem, culpa?



#### Menu Links

- Google
- Facebook
- Twitter

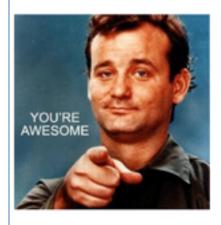
# **Basic HTML Page - Result**

# Awesome Header

#### Smaller Awesome Header

#### Even Smaller Header

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Quidem consequatur unde aut dolores odio hic, accusamus recusandae ipsam illum enim voluptatibus obcaecati totam tempora eum quod sapiente. Corporis, quidem, culpa?



#### Menu Links

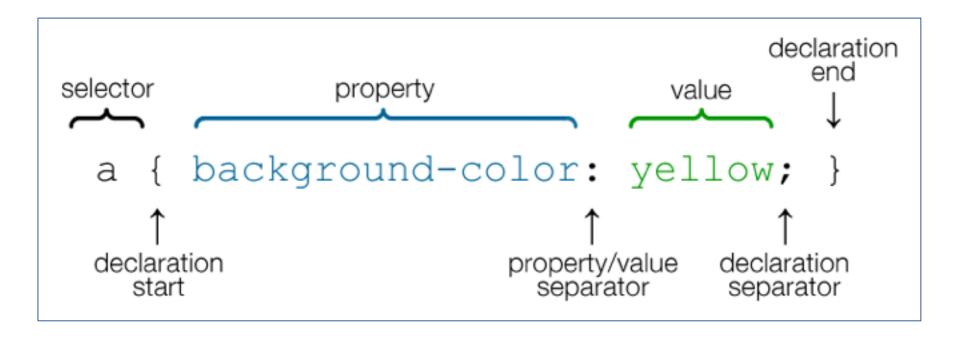
- Google
- Facebook
- Twitter





# **CSS Syntax**

- CSS works by hooking onto selectors added into HTML using "classes and identifiers".
- Once hooked, we apply styles to those HTML elements using css.



# Classes, tags and ID's. OH MY!

```
<style>
 /*
 This is a tag, and is used to style the HTML elements we just learned.
 It will apply to EVERY tag of that type.
 */
 h1 {
   color: orange;
 /*
      This is a class, and is used to style the HTML elements we just learned.
      It will apply to EVERY tag with that class="bigBlue" (caSeSenSitivE)
      */
  .bigBlue {
   color: blue;
 /*
    This should ONLY BE USED ONCE ON A PAGE.
   It is NOT an encouraged way of targeting elements
    (Too specific for 99% of cases)
 #thisIsAnID {
    color: #00B7FF;
</style>
```

# **Enter CSS**

```
26 <style>
                                             49 ₹
                                                       img {
27 ▽
        h1 {
                                             50
                                                           display: block:
28
             font-size: 60px;
                                             51
                                                           margin-left: auto;
29
             text-align: center;
                                             52
                                                           margin-right: auto;
30
             margin-bottom: 15px;
                                             53
                                                       }
             text-decoration: underline;
31
                                             54
32
             background-color: black;
                                             55 ▼
                                                       p {
33
             color: white;
                                             56
                                                           text-align: center;
34
        <u>}</u>
                                                           font-size: 20px;
                                             57
35
                                             58
                                                           font-weight: bold;
        h2 {
36 ▽
                                             59
                                                       }
37
             font-size: 40px;
                                             60
38
             text-align: center;
                                             61 ▼
                                                       ul {
39
             margin-top: 15px;
40
             margin-bottom: 15px;
                                             62
                                                           text-align: center;
                                                           font-size: 35px;
41
         }
                                             63
42
                                                           list-style-position: inside;
                                             64
43 ₹
        h3 {
                                                           border-style: solid;
                                             65
44
             font-size: 20px;
                                                           border-width: 5px;
                                             66
             text-align: center;
45
                                             67
             margin-top: 15px;
46
                                             68
                                                  </style>
47
```

# Awesome Header

## Smaller Awesome Header

Even Smaller Header

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Quidem consequatur unde aut dolores odio hic, accusamus recusandae ipsam illum enim voluptatibus obcaecati totam tempora eum quod sapiente. Corporis, quidem, culpa?



Menu Links

- Google
- Facebook
  - Twitter

# **CSS Example**



# **CSS Example**

 In the below example the "Header" would be turned blue and MUCH larger, because of the CSS.



**Font / Color:** 



# **Font / Color:**

• color: Sets color of text

# **Font / Color:**

• color: Sets color of text

font-size: Sets size of the font

# **Font / Color:**

• color: Sets color of text

font-size: Sets size of the font

• font-style: Sets italics

# **Font / Color:**

color: Sets color of text

font-size: Sets size of the font

• font-style: Sets italics

font-weight: Sets bold

# **Font / Color:**

color: Sets color of text

font-size: Sets size of the font

• font-style: Sets italics

font-weight: Sets bold

# **Font / Color:**

color: Sets color of text

font-size: Sets size of the font

font-style: Sets italics

font-weight: Sets bold

#### **Font / Color:**

color: Sets color of text

font-size: Sets size of the font

font-style: Sets italics

font-weight: Sets bold

# **Alignment / Spacing:**

 margin-top(bottom/left/right): Adds space between element and its own border.

#### **Font / Color:**

color: Sets color of text

font-size: Sets size of the font

font-style: Sets italics

font-weight: Sets bold

# **Alignment / Spacing:**

 margin-top(bottom/left/right): Adds space between element and its own border.

#### **Font / Color:**

color: Sets color of text

font-size: Sets size of the font

• font-style: Sets italics

font-weight: Sets bold

- margin-top(bottom/left/right): Adds space between element and its own border.
- margin-top (bottom/left/right): Adds space between element and surrounding elements.

#### **Font / Color:**

color: Sets color of text

font-size: Sets size of the font

• font-style: Sets italics

font-weight: Sets bold

- margin-top(bottom/left/right): Adds space between element and its own border.
- margin-top (bottom/left/right): Adds space between element and surrounding elements.

#### **Font / Color:**

color: Sets color of text

font-size: Sets size of the font

font-style: Sets italics

font-weight: Sets bold

- margin-top(bottom/left/right): Adds space between element and its own border.
- margin-top (bottom/left/right): Adds space between element and surrounding elements.
- float: Forces elements to the sides, centers, or tops

#### **Font / Color:**

color: Sets color of text

font-size: Sets size of the font

font-style: Sets italics

font-weight: Sets bold

- margin-top(bottom/left/right): Adds space between element and its own border.
- margin-top (bottom/left/right): Adds space between element and surrounding elements.
- float: Forces elements to the sides, centers, or tops

#### **Font / Color:**

color: Sets color of text

font-size: Sets size of the font

font-style: Sets italics

font-weight: Sets bold

# **Alignment / Spacing:**

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# **Background:**

background-color: sets background color



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# **Powerful Duo**

Believe it or not... HTML / CSS is all you need to develop a full-blown rich looking website.

# **INSTRUCTOR DEMO**

# Instructor: Demo

(quickexample\_internalcss.html | 2-BasicCSS)

# **Assignment**

In this activity, you'll be upgrading your previous HTML bio using CSS styles. Once you are done with your changes, you'll commit and push these changes up to GitHub.

Additional instructions, sent via Slack.

# Your Name Write a short paragraph or two about yourself, or use placeholder text from www.lipsum.com Portfolio: coming soon Contact Info Email: someplace@gmail.com Github: sampleName Portfolio: coming soon

# Recap + Questions