



Your poll will show here

1

Install the app from
pollev.com/app

2

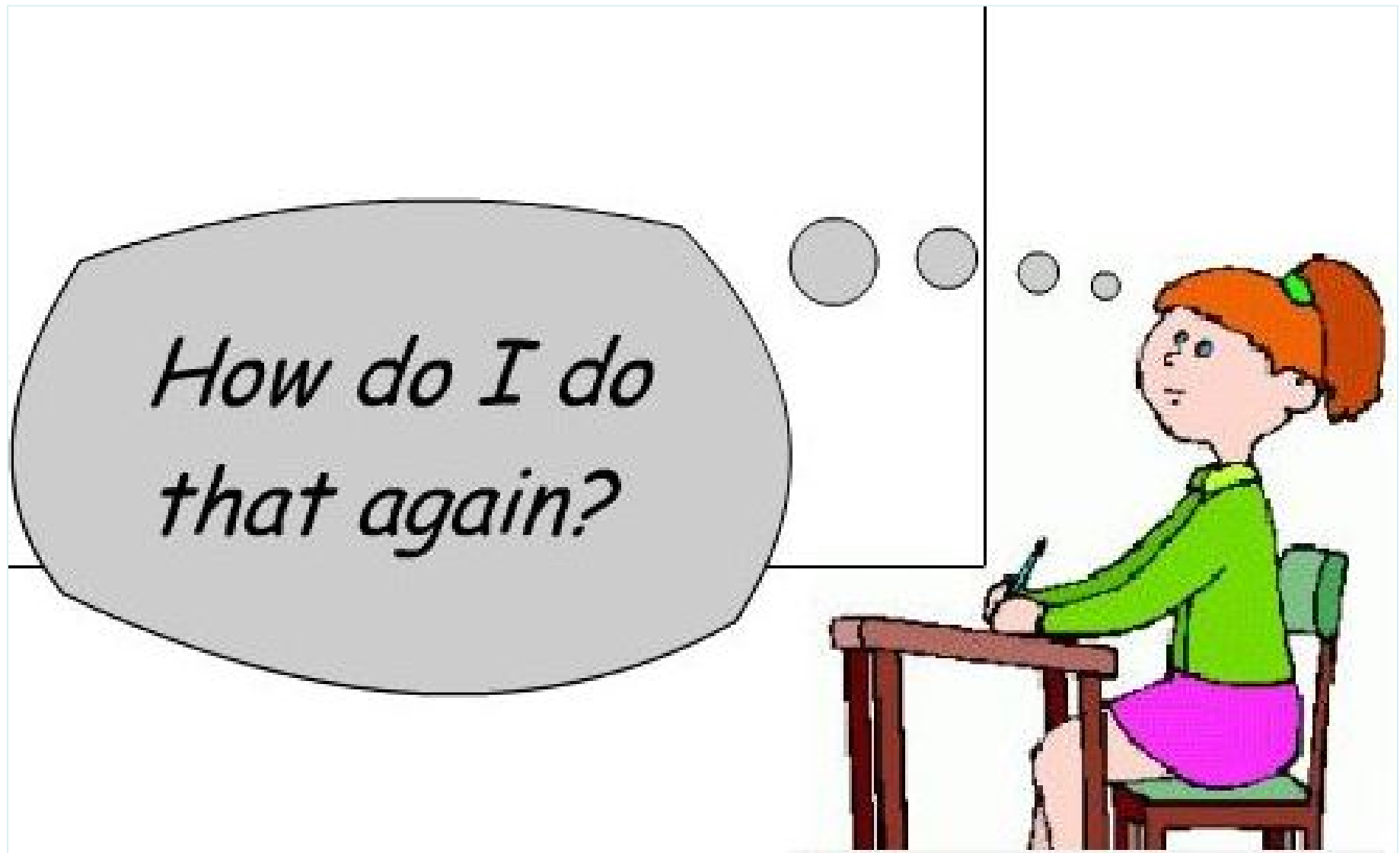
Make sure you are in
Slide Show mode

Still not working? Get help at pollev.com/app/help
or

[Open poll in your web browser](#)



It's Okay!



Where to Get Help

- **Practice, Practice, Practice:** Work Individually or in Groups
- **Review In Class Material (Exercises and Slides):**
<https://github.com/RutgersCodingBootcamp/0125-mw-class-content>
- **Re-Watch Class Videos:**
<https://github.com/RutgersCodingBootcamp/All-Classwork-Homework/blob/master/class-recordings.md>
- **In Class Office Hours:** 45 minutes before class, 30 minutes after
- **Virtual Office Hours:** Tuesdays 6:30 – 8:00 PM
- **Ahmed's Advanced Workshops:** By Announcement
- **Contact Student Success:** Message Stacey, anytime!

Homework Assignment

- Also, at this point everyone should have access to the homework repository in GitHub.

<https://github.com/RutgersCodingBootcamp/All-Classwork-Homework>

- Homework Assignment #1 is Due on Monday (2/1/16)

Day 2

Git'n Pro with HTML/CSS

Rutgers Coding Bootcamp | January 27, 2016

Today's Objectives

- Students will understand the importance of Git Version Control and how to use it
- Students will create GitHub Repositories, push code into them, and share with class
- Students will make more HTML documents
- Students will learn to properly use basic HTML tags
- Students will implement basic CSS styling to HTML documents.

What / Why Git?

The Group Project



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

JORDAN'S JAMZZZZ!!!!

The Group Project



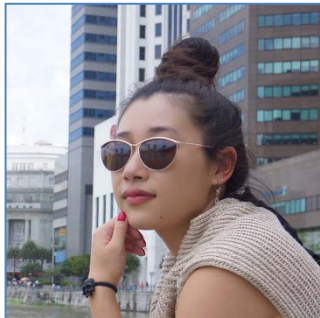
Programming Away...



The Group Project



Programming Away...



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

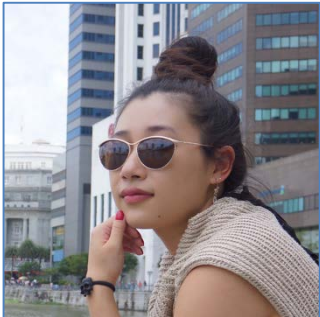
JASMINE'S JAMZZZZ!!!!

The Group Project



Programming Away...

Jordan's Version



Programming Away...

Jasmine's Version

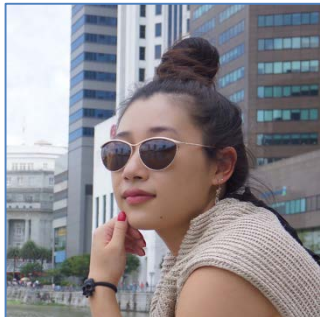


The Group Project – Tragedy #1



Programming Away...

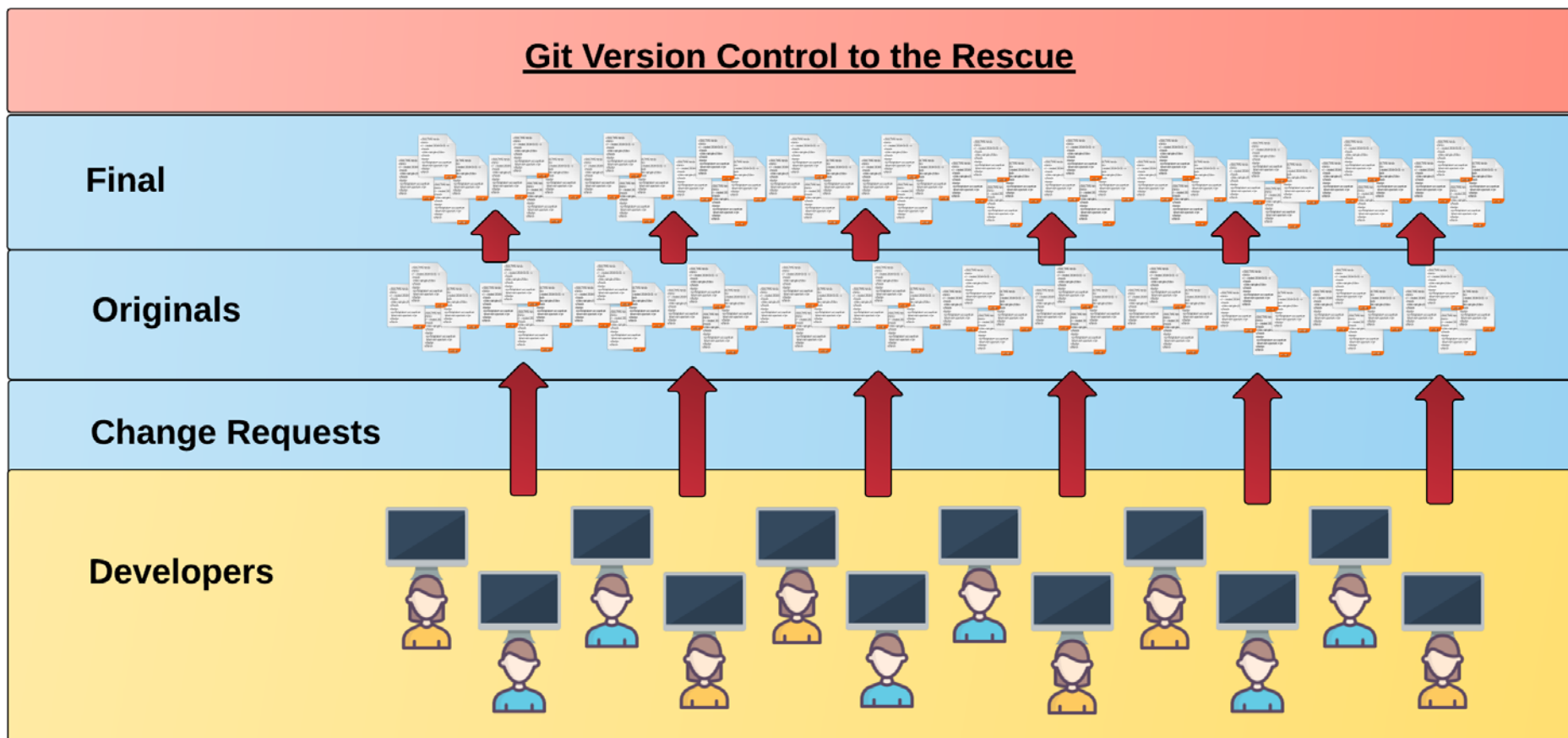
Now they have two completely different versions.



Programming Away...



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.

The Group Project



Programming Away...



Programming Away...



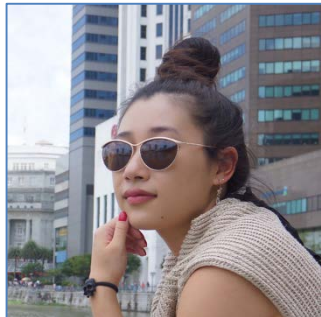
The Group Project



Programming Away...



**Hai guyz!!!
Kan I help??**



Programming Away...



The Group Project – Tragedy #2



Programming Away...

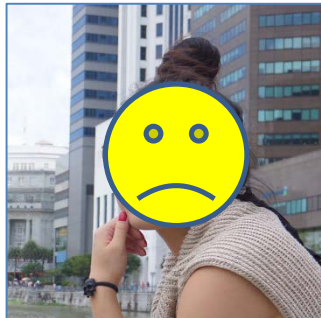
OKAY!
Delete. Delete.
Delete. Delete.
Delete. Delete



Programming Away...



Moral of the Story



Lesson:
You should use Version Control.

....And be wary of Walter.

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 – Tragedy 1 (Revisited)



Programming Away...

Now they have two completely different versions.



Programming Away...



The Group Project with Version Control



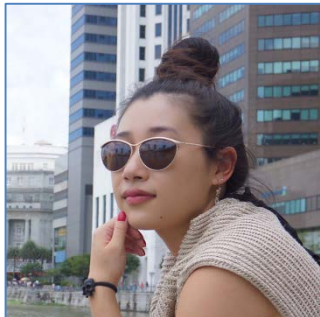
Main Branch (Jordan's)



Jordan continues programming

Jasmine **pushes (uploads)** her code changes into the main branch.

Code conflicts are resolved before inclusion.



Jasmine's Branch

The Group Project – Tragedy 2 (Revisited)

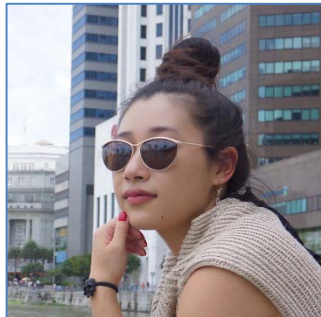


Programming Away...

OKAY!
Delete. Delete.
Delete. Delete.
Delete. Delete



Programming Away...



The Group Project with Version Control



Main Branch (Jordan's)



Walter **pushes** his (bad) code deletions

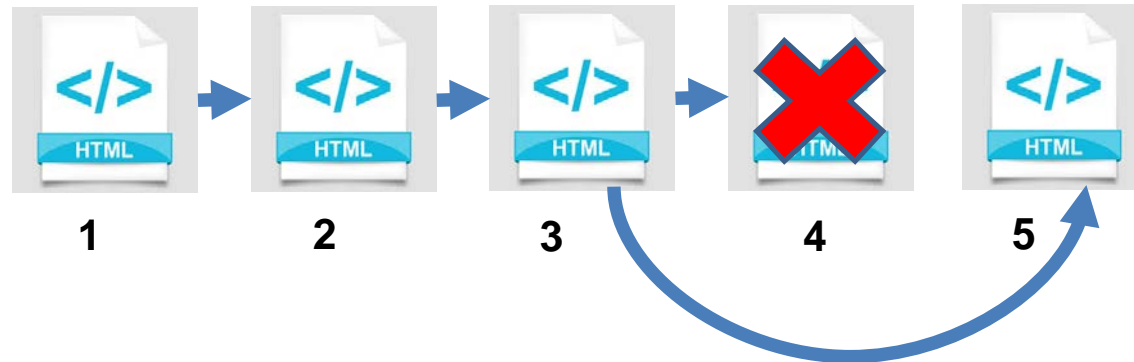


Walter's Branch

The Group Project with Version Control



Main Branch (Jordan's)



But this time, Jordan **rolls back** the code to an earlier version.



Walter's Branch

Moral of the Story



Lesson:
You should use Version Control.

....But still be wary of Walter.



Quick Activity!

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 :

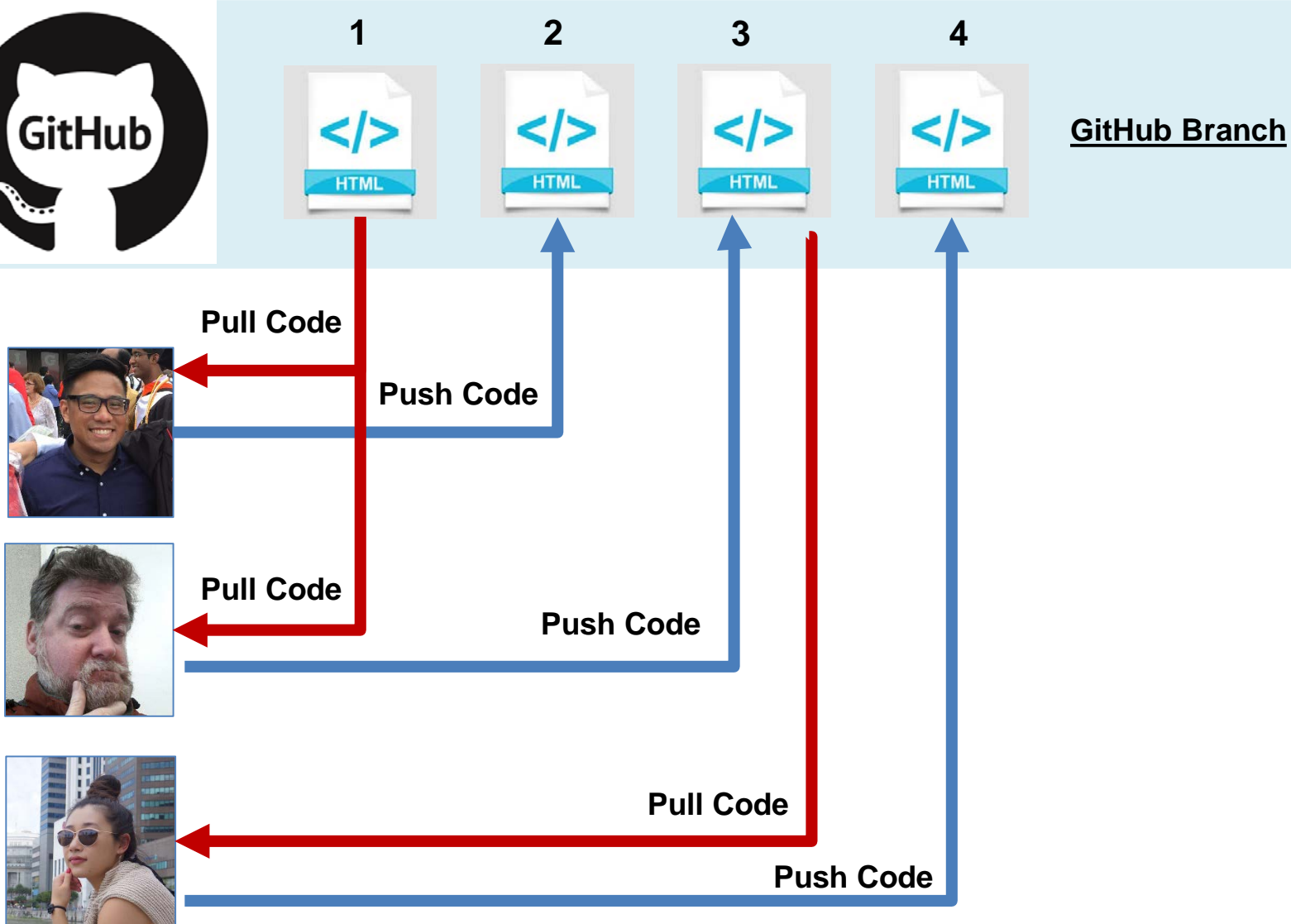
- Two of the key advantages to using a version control system

So... What's this GitHub?

- GitHub is a Web-Based hosting service 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

My First Repo

 This repository Search

Pull requests Issues Gist

 + 

afhaque / DemoRepository

Watch 0 Star 0 Fork 0

[Code](#) [Issues 0](#) [Pull requests 0](#) [Wiki](#) [Pulse](#) [Graphs](#) [Settings](#)

This is Ahmed's Demo repository for his class! — Edit


1 commit

1 branch

0 releases

1 contributor

Branch: master [New pull request](#) [New file](#) [Find file](#) [HTTPS](#) <https://github.com/afhaque> [Download ZIP](#)

 **afhaque** Initial commit Latest commit 2df88aa 4 minutes ago

[README.md](#) Initial commit 4 minutes ago

[README.md](#)

DemoRepository

This is Ahmed's Demo repository for his class!

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

> YOUR TURN!!

Assignment:

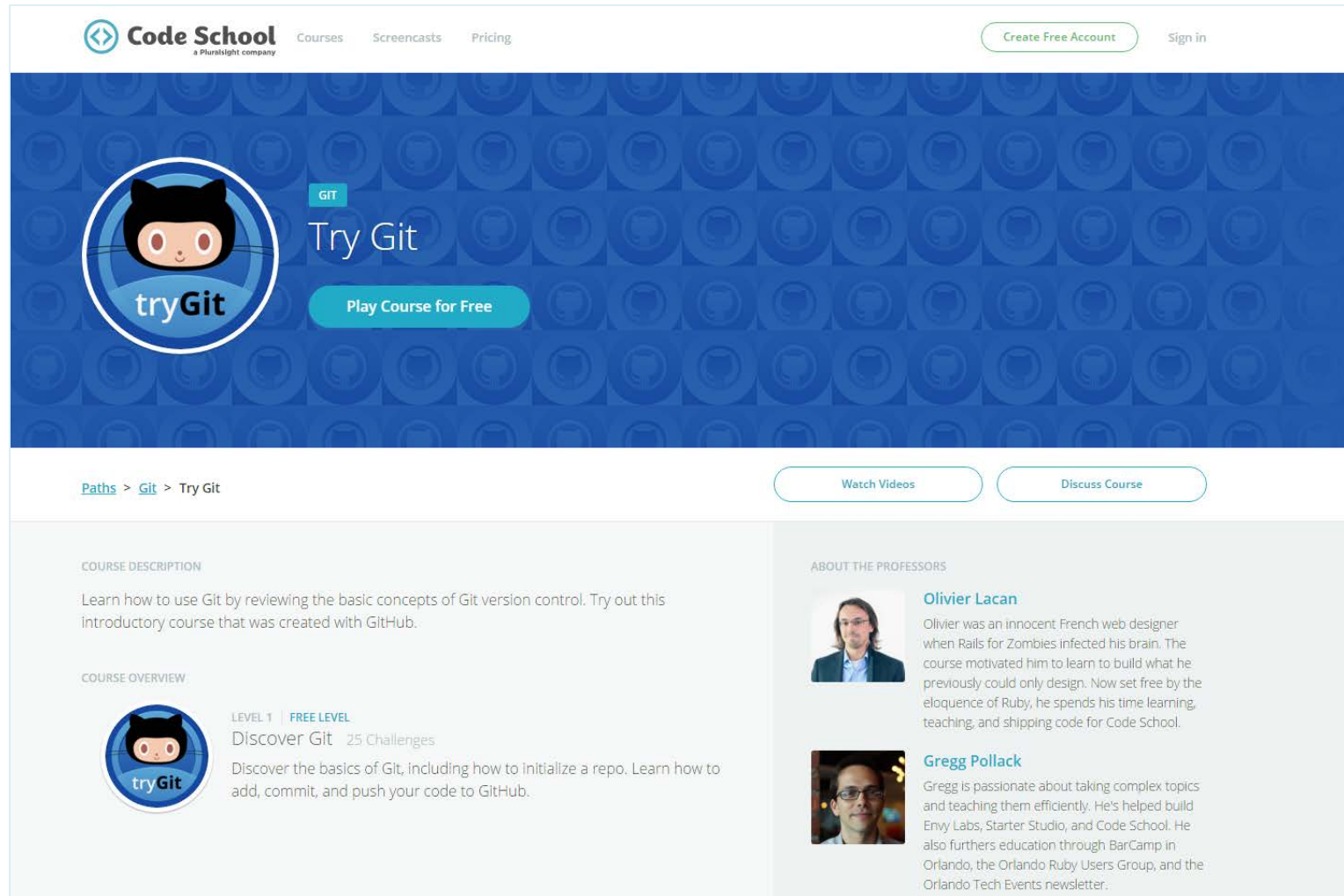
Using GitHub and the Command Line:

- 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 **fork** *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? Recommended (Free) Course



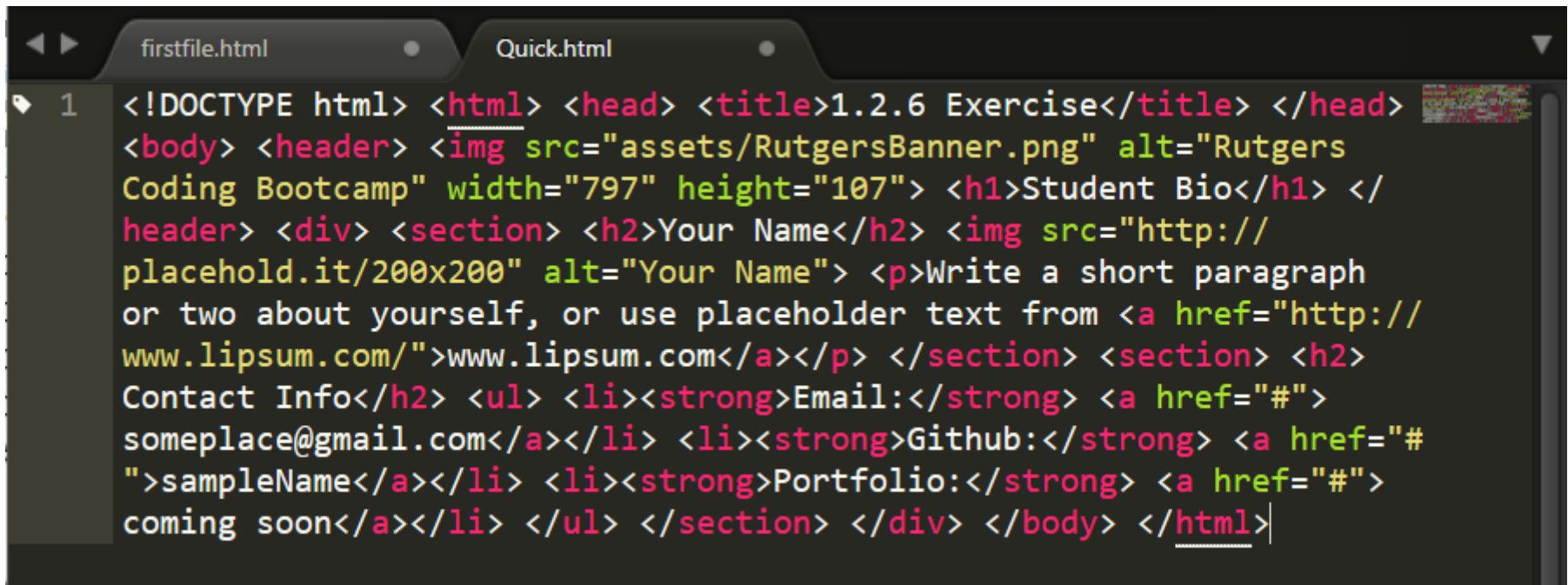
The screenshot shows the Code School website interface for the 'Try Git' course. At the top, the Code School logo is on the left, and navigation links for 'Courses', 'Screencasts', and 'Pricing' are in the center. On the right, there are buttons for 'Create Free Account' and 'Sign in'. The main banner features the GitHub logo with 'tryGit' text and a 'Try Git' title with a 'GIT' tag. A prominent blue button says 'Play Course for Free'. Below the banner, a breadcrumb trail reads 'Paths > Git > Try Git'. To the right of the trail are buttons for 'Watch Videos' and 'Discuss Course'. The 'COURSE DESCRIPTION' section states: 'Learn how to use Git by reviewing the basic concepts of Git version control. Try out this introductory course that was created with GitHub.' The 'COURSE OVERVIEW' section shows a 'tryGit' icon, 'LEVEL 1 | FREE LEVEL', and 'Discover Git 25 Challenges'. It describes the course as a discovery of Git basics, including how to initialize a repo, add, commit, and push code to GitHub. The 'ABOUT THE PROFESSORS' section introduces two instructors: Olivier Lacan, a French web designer who learned Ruby to build Rails for Zombies, and Gregg Pollack, who is passionate about teaching complex topics and has helped build Envy Labs, Starter Studio, and Code School. He also mentions his involvement in BarCamp in Orlando, the Orlando Ruby Users Group, and the Orlando Tech Events newsletter.

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

Break!

HTML Round 2

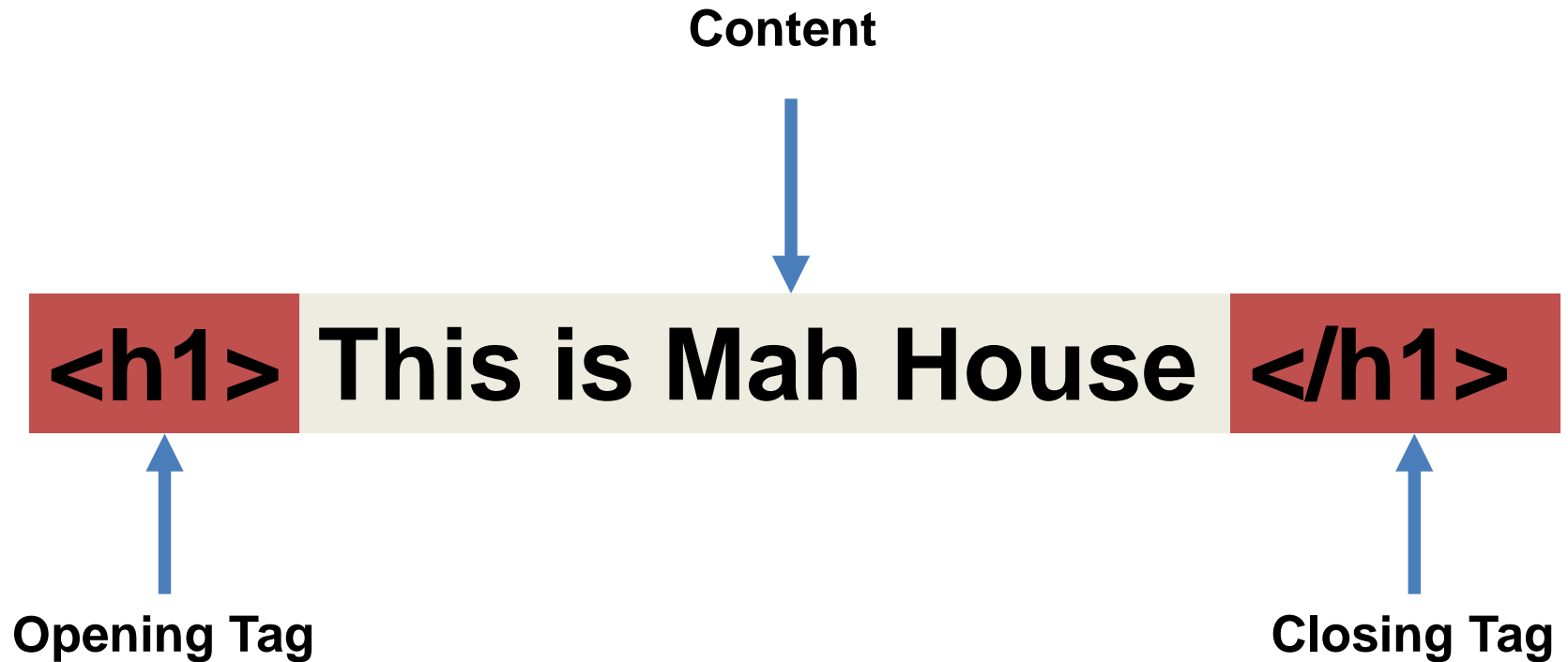
On Ugly HTML

A screenshot of a code editor with two tabs: 'firstfile.html' and 'Quick.html'. The 'Quick.html' tab is active, showing HTML code with poor formatting. The code is a single line with no line breaks or indentation, making it difficult to read. The code starts with a DOCTYPE declaration, followed by a single opening <html> tag, then a <head> section with a <title>, and finally a <body> section containing a <header> with an , an <h1>, another <header>, a <div> containing a <section> with an <h2>, an , a <p>, and a <a>, followed by another <section> with an <h2>, a with three items, and finally closing tags for </div>, </body>, and </html>.

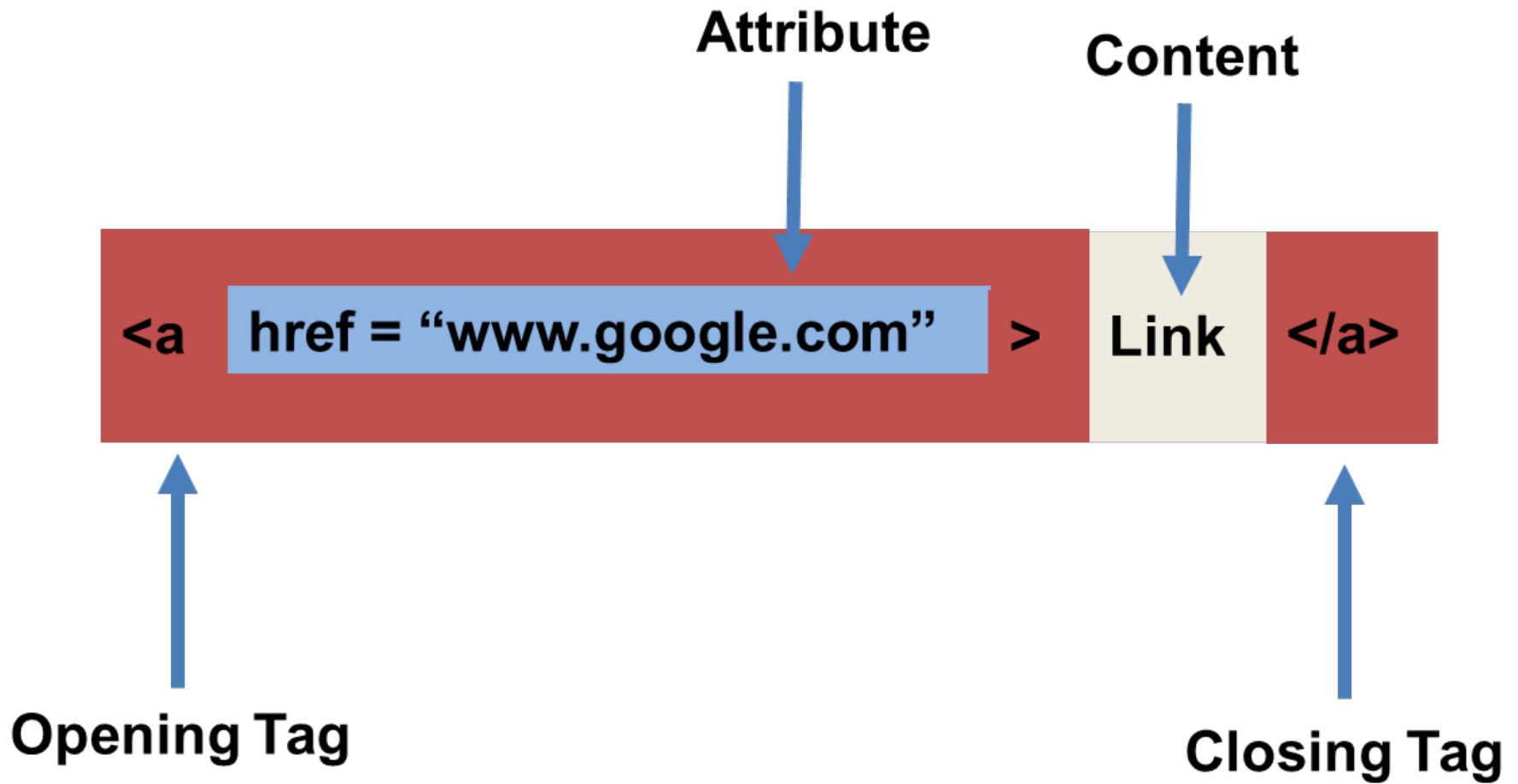
```
1 <!DOCTYPE html> <html> <head> <title>1.2.6 Exercise</title> </head>
  <body> <header>  <h1>Student Bio</h1> </
header> <div> <section> <h2>Your Name</h2>  <p>Write a short paragraph
or two about yourself, or use placeholder text from <a href="http://
www.lipsum.com/">www.lipsum.com</a></p> </section> <section> <h2>
Contact Info</h2> <ul> <li><strong>Email:</strong> <a href="#">
someplace@gmail.com</a></li> <li><strong>Github:</strong> <a href="#"
">sampleName</a></li> <li><strong>Portfolio:</strong> <a href="#">
coming soon</a></li> </ul> </section> </div> </body> </html>
```

- Don't do this... Use proper indentation and sectioning.
- Readable code is easier to maintain.

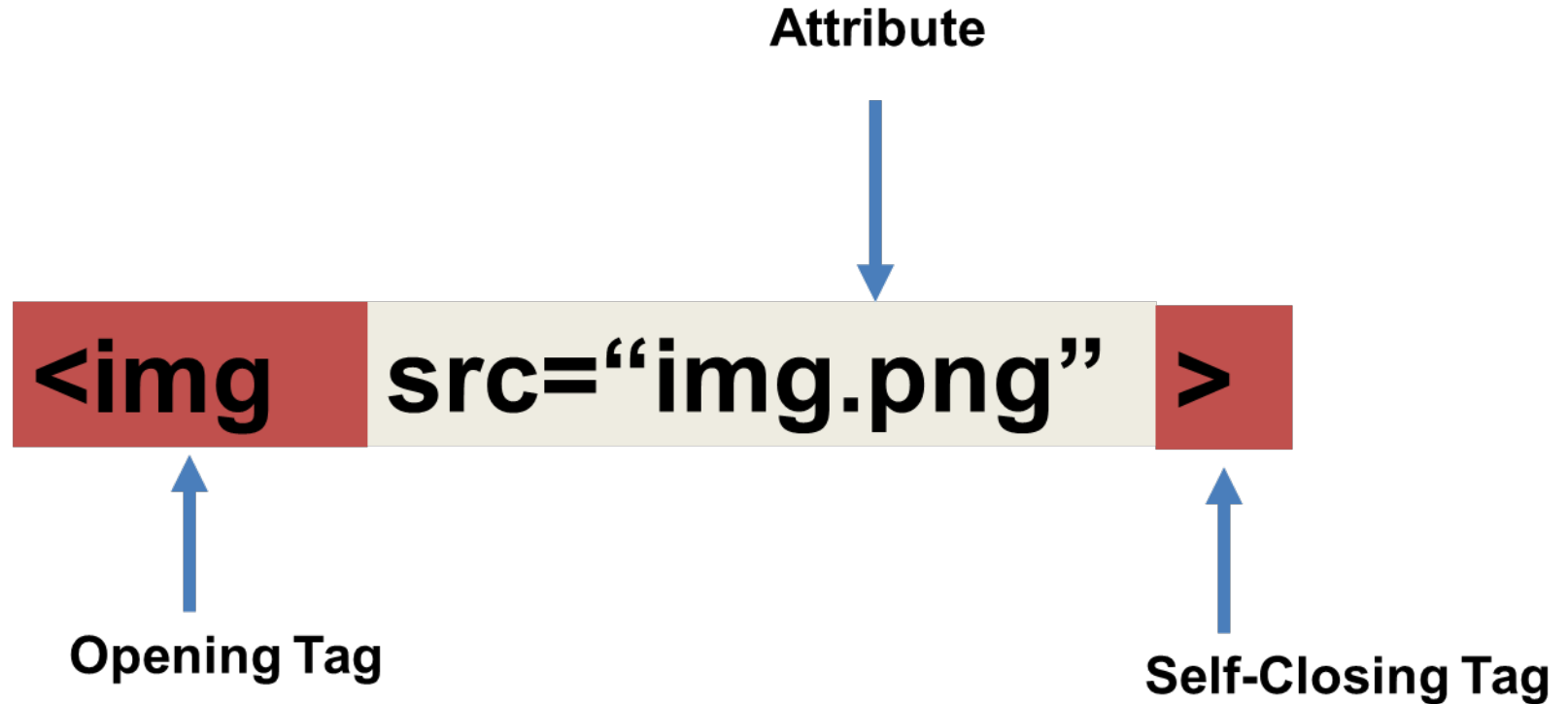
HTML Syntax (Basic)



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
- ...

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 ***
- `<p> </p>` - Wraps individual Paragraphs

Others:

- `` (bold), `` (emphasis)
- `` (images), `<a href>` (links), `` (list items) , `<title>` (title), `
` (line break), `<table>` (tables), `<!-- -->` (comments)

Less Common Tags

- All HTML Tags are listed here: <http://www.w3schools.com/tags/>
- Don't try to memorize them! 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
 - <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>

<p>Note that the form itself is not visible.</p>

<p>Also note that the default width of a text input field is 20 characters.</p>

</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.

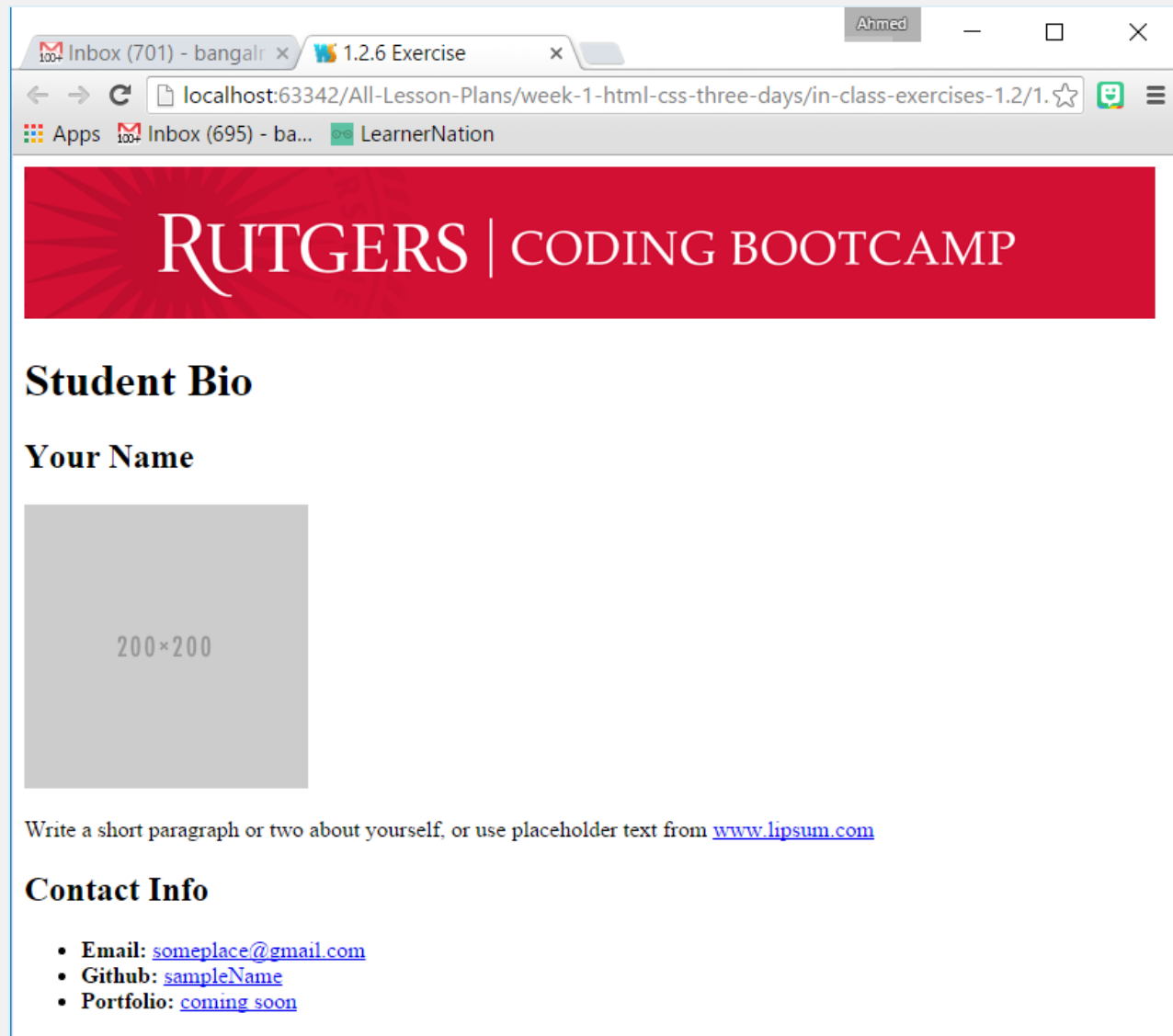
> YOUR TURN!!

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.

Additional instructions, sent via Slack.

> YOUR TURN!!



Break?

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.)



Basic HTML Page

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <title>My First Website</title>
5  </head>
6  <body>
7      <h1>Awesome Header</h1>
8      <h2>Smaller Awesome Header</h2>
9      <h3>Even Smaller Header</h3>
10
11     <p>Lorem ipsum dolor sit amet, consectetur adipisicing elit.
12     Quis, molestiae modi accusantium animi magnam veniam, impedit
13     asperiores sint consequuntur debitis fugit quibusdam dolor,
14     iusto sed porro ab minus voluptatibus amet.</p>
15     
17
18     <h3>Menu Links</h3>
19     <ul>
20         <li><a href="http://www.google.com">Google</a></li>
21         <li><a href="http://www.facebook.com">Facebook</a></li>
22         <li><a href="http://www.twitter.com">Twitter</a></li>
23     </ul>
24 </body>
25 </html>
```

Basic HTML Page

Awesome Header

Smaller Awesome Header

Even Smaller Header

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Quis, molestiae modi accusantium animi magnam veniam, impedit asperiores sint consequuntur debitis fugit quibusdam dolor, iusto sed porro ab minus voluptatibus amet.

RUTGERS

Menu Links

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

Basic HTML Page

Awesome Header

Smaller Awesome Header

Even Smaller Header

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Quis, molestiae modi accusantium animi magnam veniam, impedit asperiores sint consequuntur debitis fugit quibusdam dolor, iusto sed porro ab minus voluptatibus amet.

RUTGERS

Menu Links

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

Hella Boring...

Enter CSS

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

Awesome Header

Smaller Awesome Header

Even Smaller Header

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Quis, molestiae modi accusantium animi magnam veniam, impedit asperiores sint consequuntur debitis fugit quibusdam dolor, iusto sed porro ab minus voluptatibus amet.

RUTGERS

Menu Links

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

HTML vs HTML/CSS

HTML Alone

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



HTML / CSS

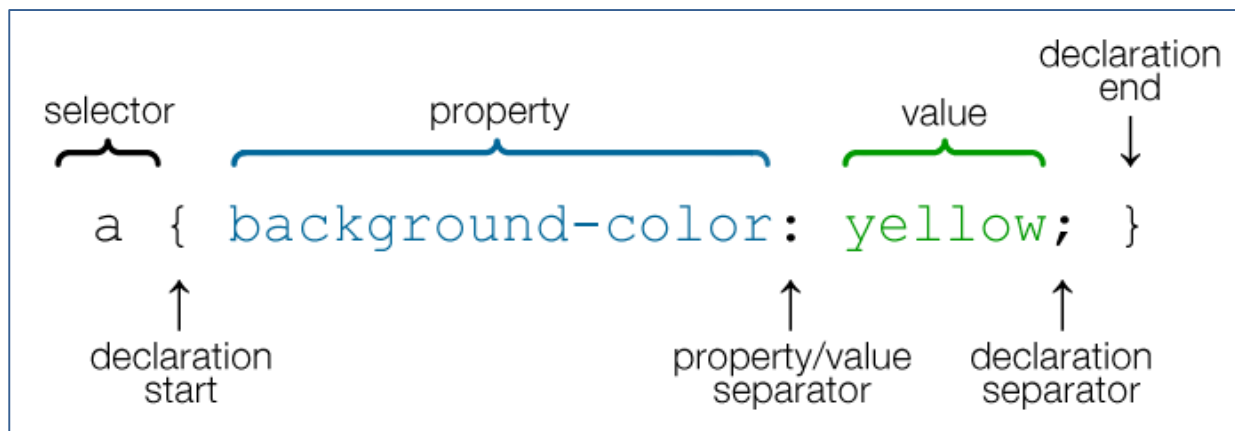
- Like writing papers in Microsoft Word.
- Can format text, page settings, alignment, etc. based on “highlighting” and menu options.



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

Enter CSS

- CSS works by hooking onto **selectors** added into HTML using “**classes** and **identifiers**”.
- Once hooked, we apply **styles** to those HTML elements using css .
- In order to use classes we simply add a “class=className” or “id=IDName” into the HTML tag.



CSS Example

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

Example (HTML):

```
<p class="bigBlue">Header</p>
```

Example (CSS):

```
.bigBlue  
{  
  font-size: 100px;  
  color: blue;  
}
```

Key CSS Attributes

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

Background:

- **background-color:** sets background color
- **background-image:** sets background image

CSS Show!

> YOUR TURN!!

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 TURN!!

RUTGERS | CODING BOOTCAMP

Student Bio

Your Name



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

Contact Info

- **Email:** someplace@gmail.com
- **Github:** [sampleName](#)
- **Portfolio:** [coming soon](#)

Recap + Questions
