Day 4

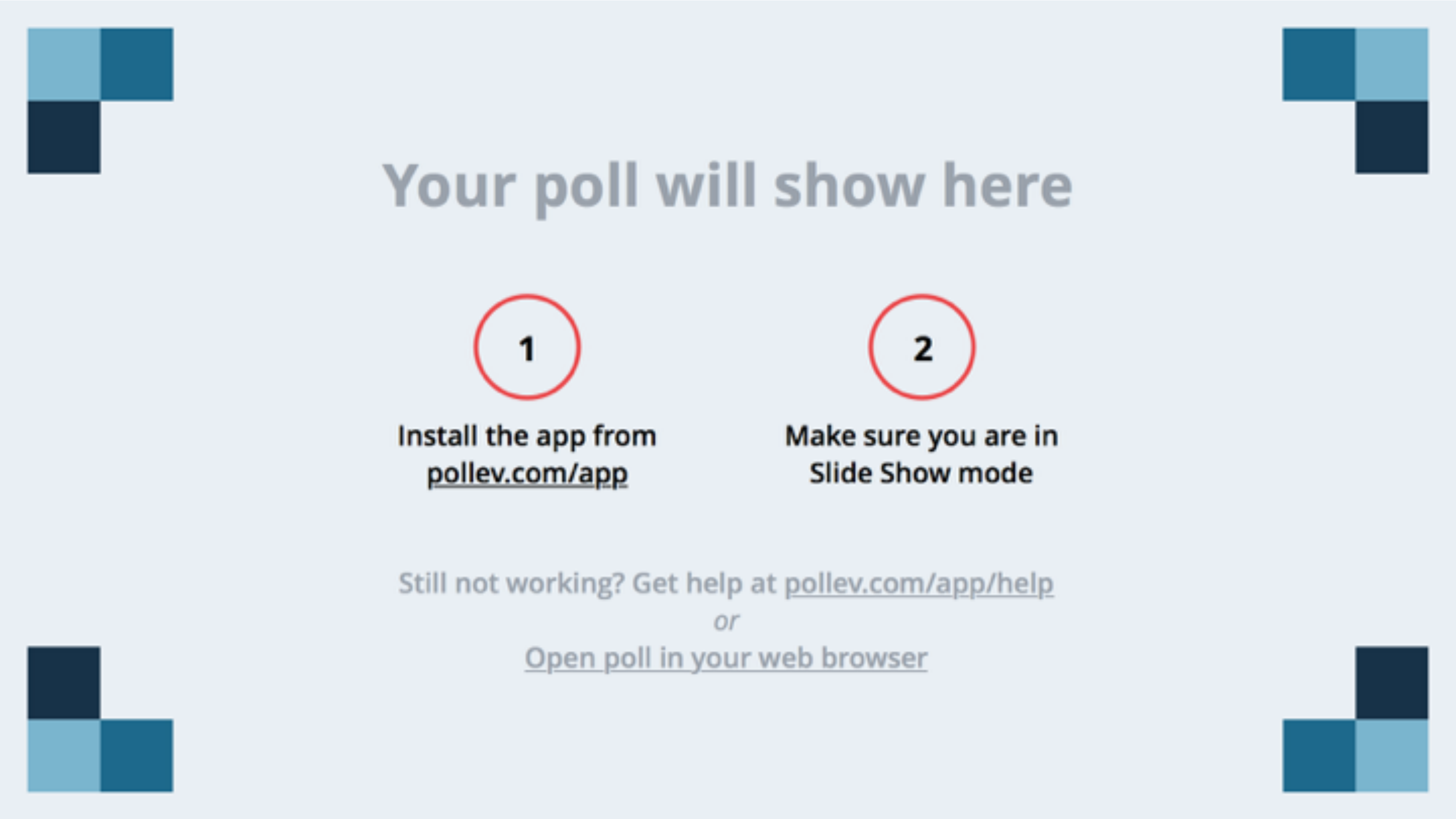
Going Live

6/28/2016

UCF CODING BOOT CAMP

Check-Up Session

How's it going?



Your poll will show here

1

Install the app from pollev.com/app

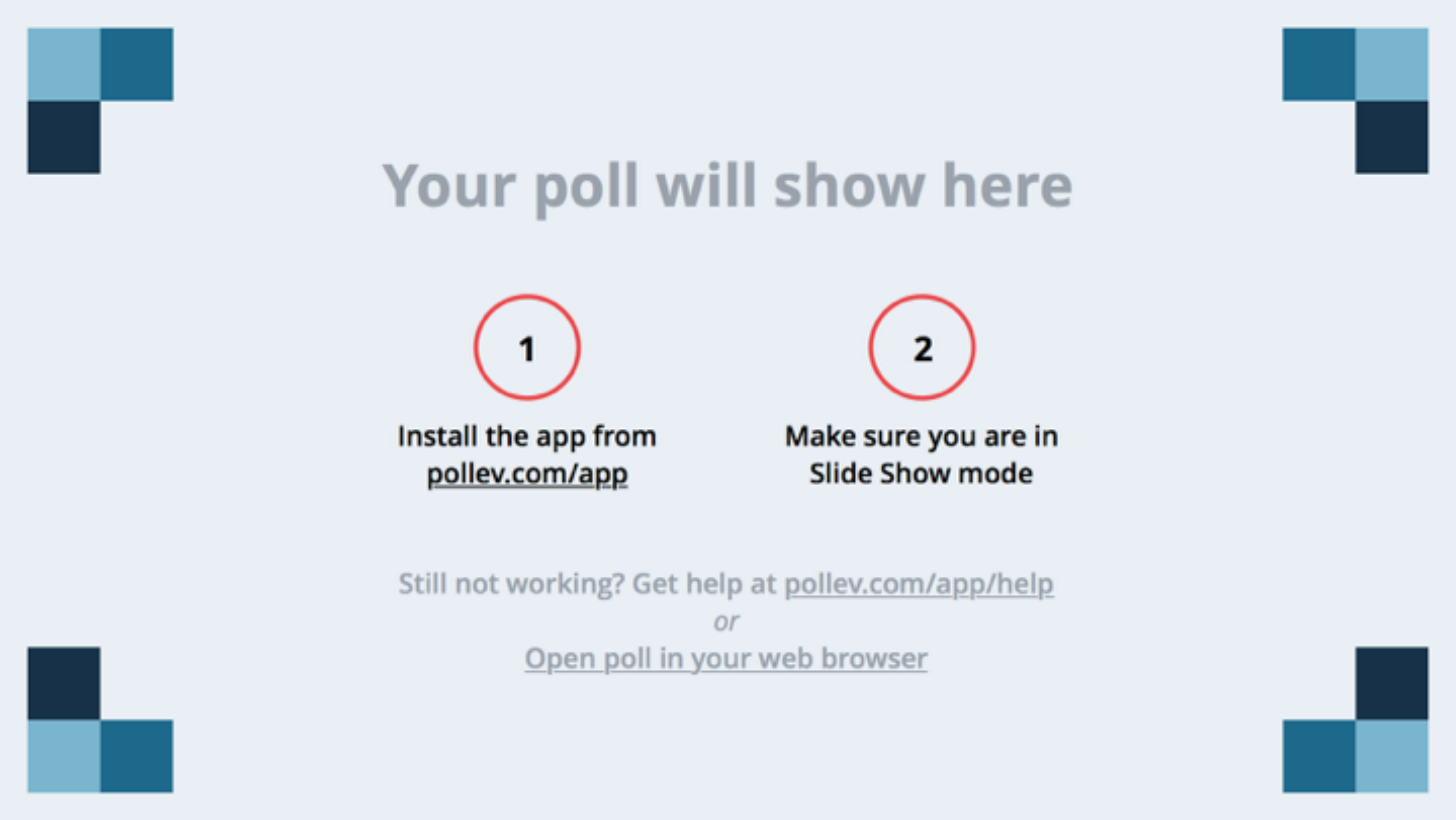
2

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



Your poll will show here

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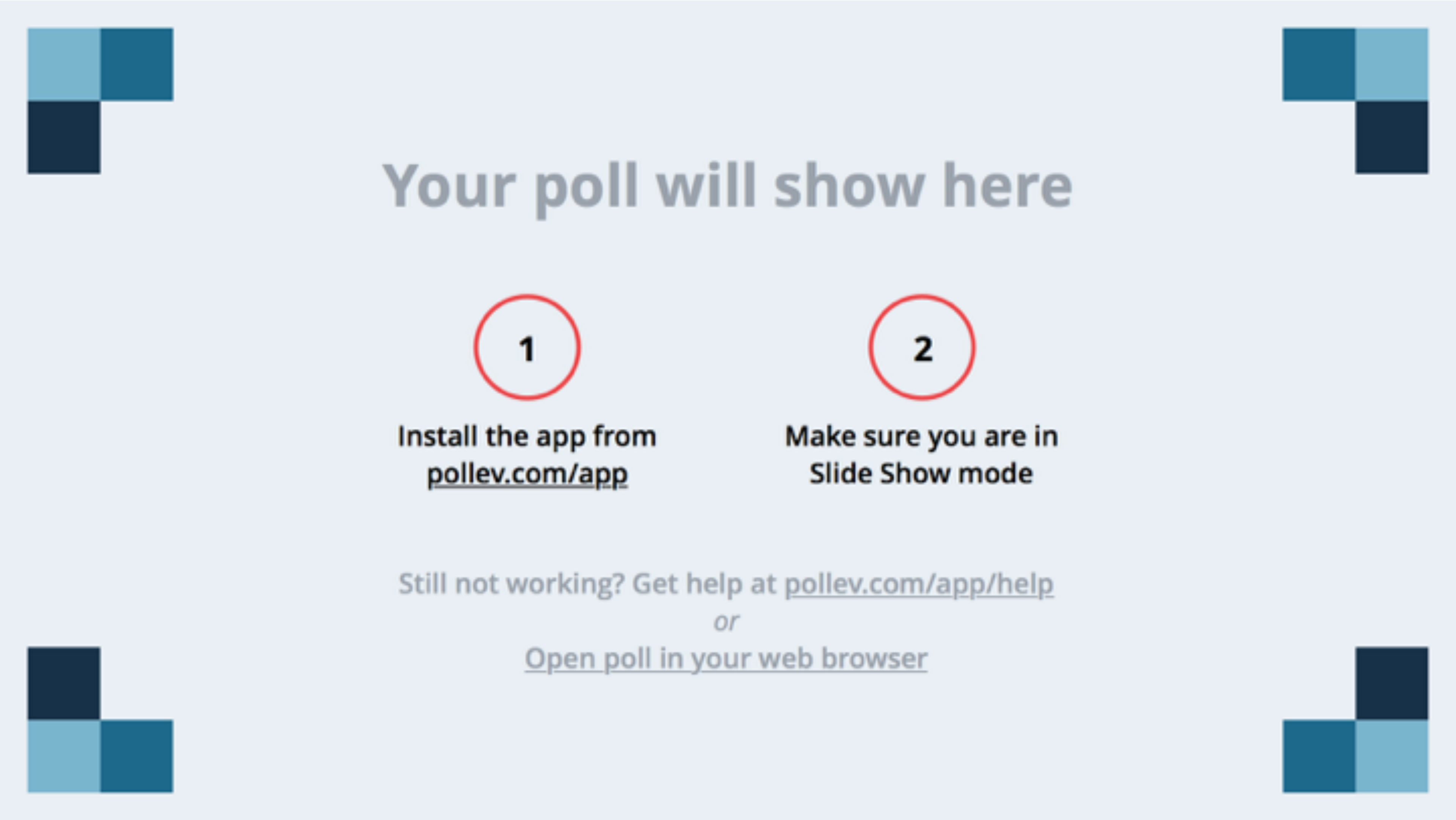
Open poll in your web browser



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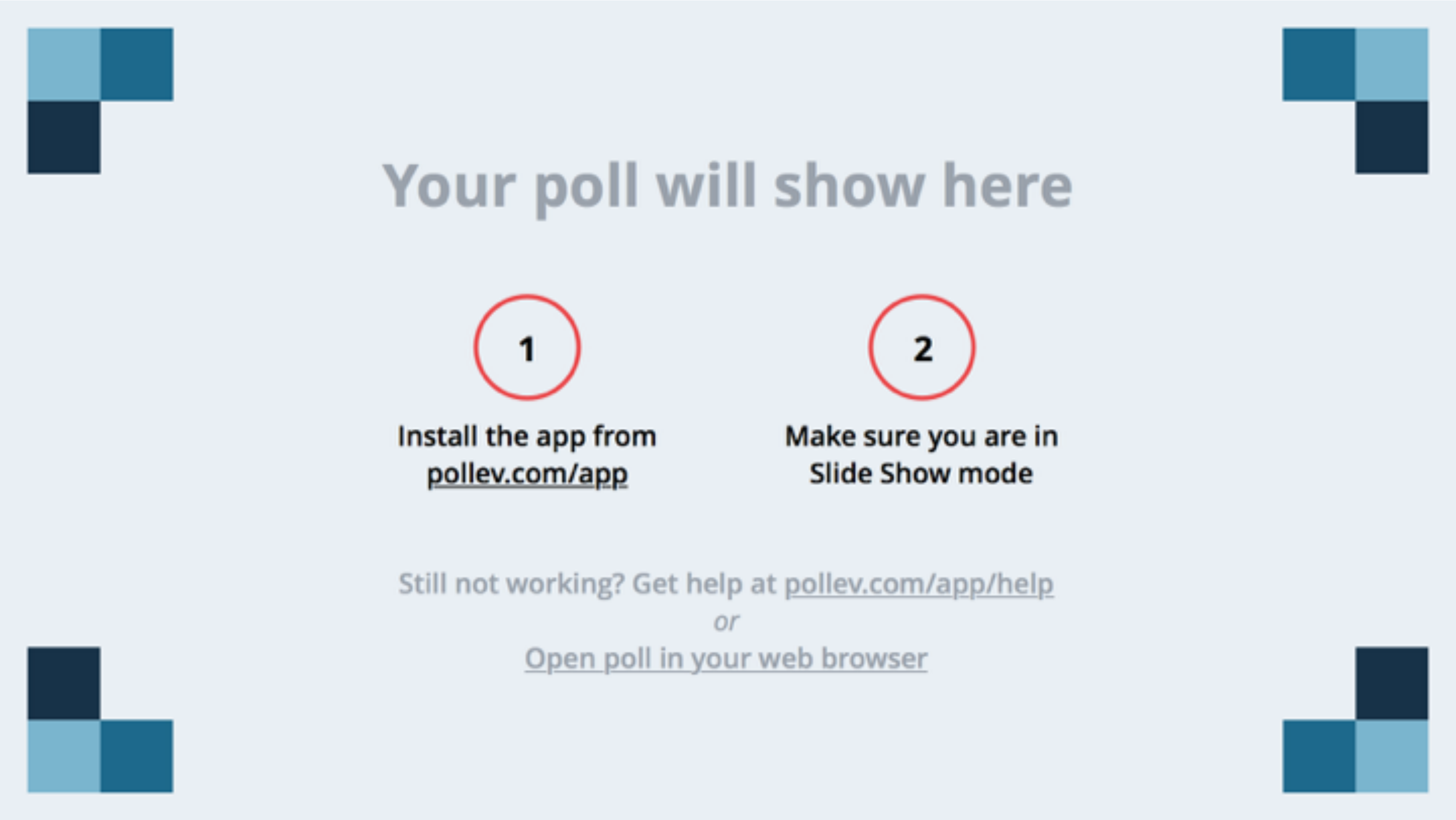

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2

Make sure you are in Slide Show mode

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or

Open poll in your web browser

Instructor Feedback

Seriously, mind-blown.

Instructor Feedback

Things I've noticed people doing *incredibly* well:

- Handling an enormous volume of information.
- **Everyone** is asking the right questions…
- Also, Noticing the right details…
- Helping others… ***and more important, asking for help!***
- And, most importantly, you are **figuring out things on your own.**

A Few Admin Things…

Instructor Feedback

- **Remember, Homework #1 is due on Wednesday / Thursday.**
- **Homework Link: https://github.com/UCF-Coding-Boot-Camp/06-16-VW-Class-Content/tree/master/homework-assignments/01-html-css**
- **Remember to submit Homework via GitHub (and Heroku):** @TA's — Please slack out link

And seriously!

Submit whatever you have! Don't get a 0.

(Even if you don't like what you've made.)

Office Hours + Additional Help

Also, remember….

- **In Class Office Hours:** 45 minutes before class, 30 minutes after
- **Review In Class Material (Exercises and Slides): https://github.com/UCF-Coding-Boot-Camp/06-16-VW-Class-Content/tree/master/homework-assignments/01-html-css**
- **Re-Watch Class Videos:**

  https://codingbootcamp.hosted.panopto.com/Panopto/Pages/Sessions/List.aspx?folderID=966e5959-9c5b-4574-9d6c-28f5426b053d

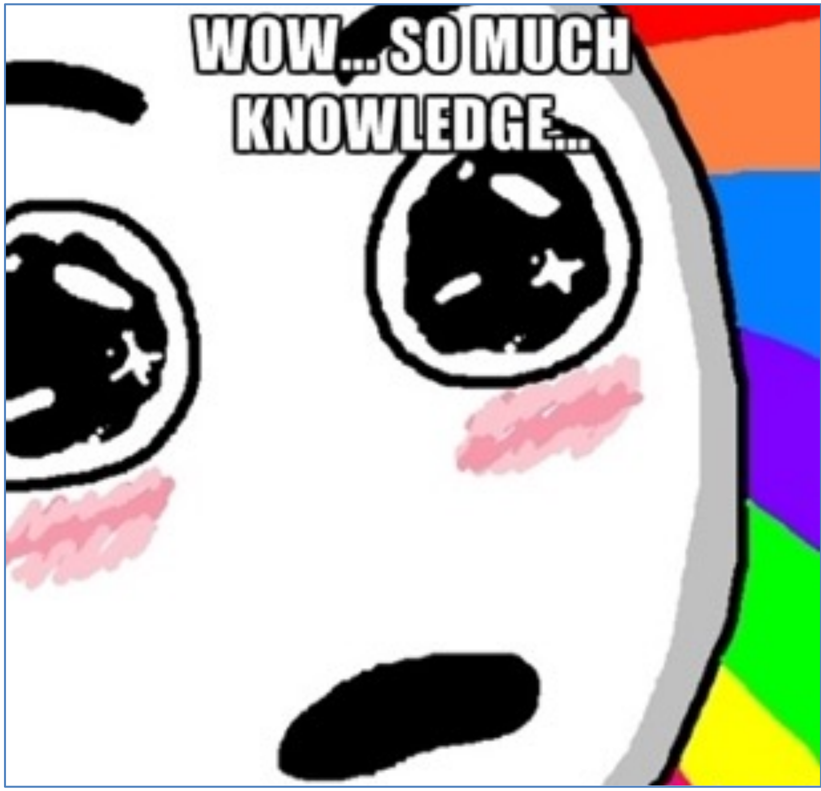
Recapping

Recap

In just one whirlwind week we've covered:

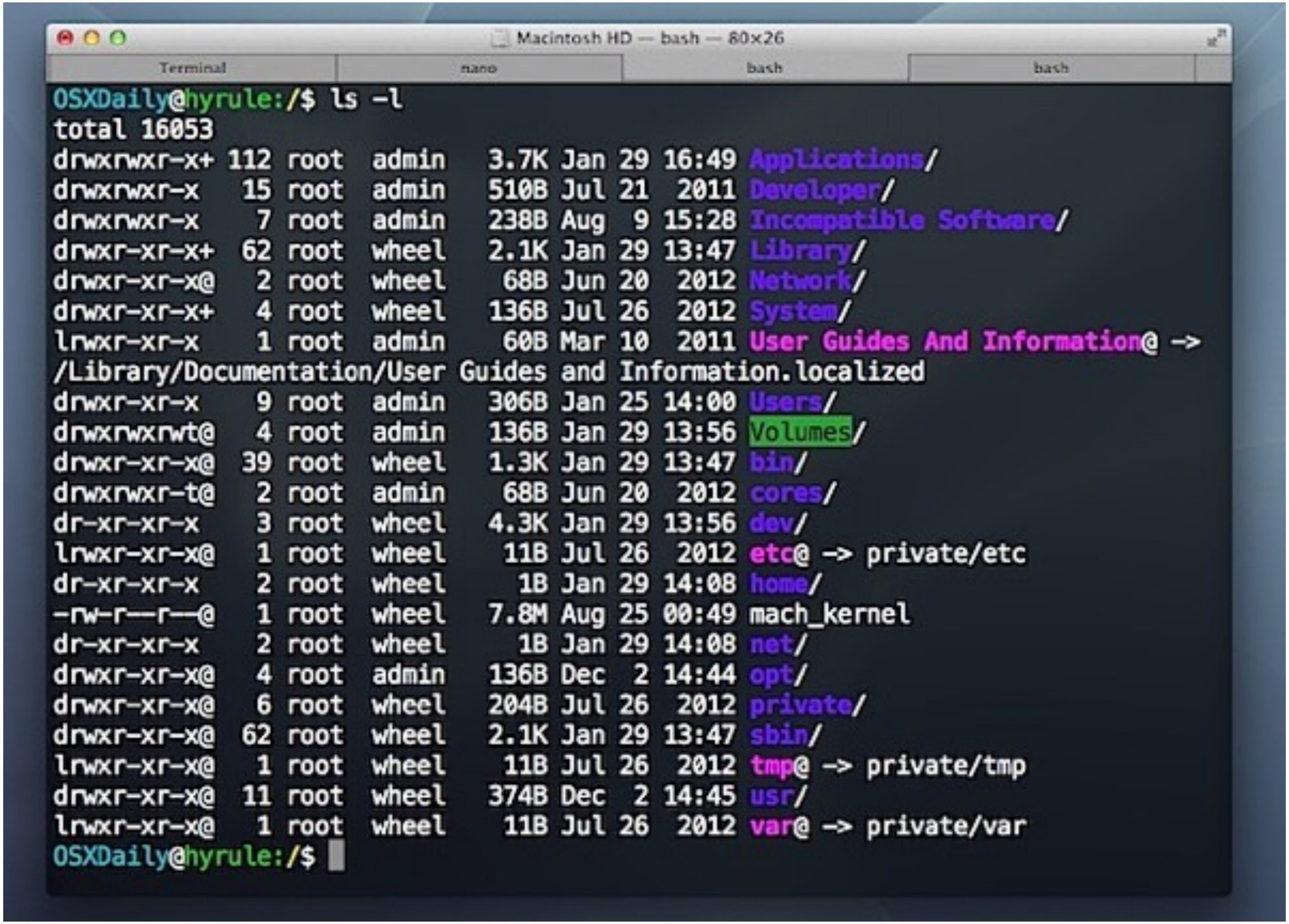
- Full-Stack Development Conceptually
- Terminal / Git Bash
- HTML Syntax
- Git Concepts and Commands
- CSS Purpose, Syntax, and Styles
- Floating
- Positioning
- Box Model
- Google Dev Tools

- **How to learn on Your own!!**



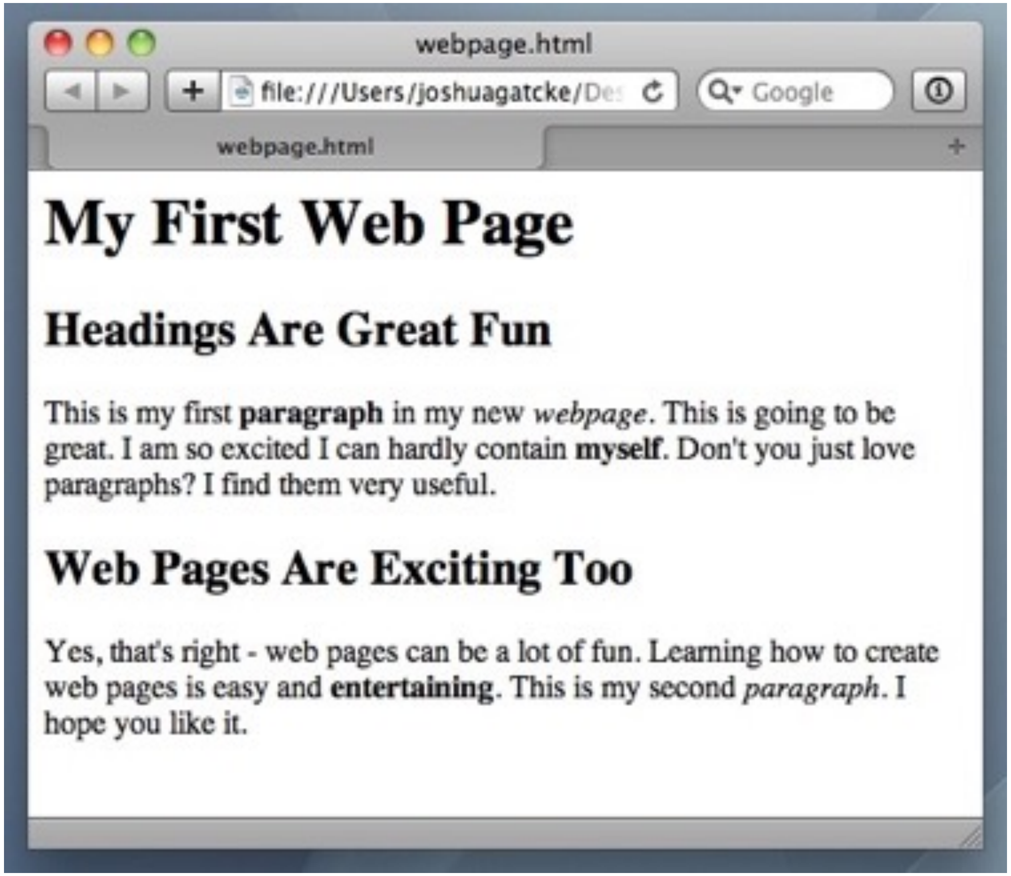
Full-Stack Development?

> Intro to Console



```
OSXDaily@hyrule:/$ ls -l
total 16053
drwxrwxr-x+ 112 root  admin   3.7K Jan 29 16:49 Applications/
drwxrwxr-x   15 root  admin   510B Jul 21  2011 Developer/
drwxrwxr-x    7 root  admin   238B Aug  9 15:28 Incompatible Software/
drwxr-xr-x+  62 root  wheel   2.1K Jan 29 13:47 Library/
drwxr-xr-x@   2 root  wheel    68B Jun 20  2012 Network/
drwxr-xr-x+   4 root  wheel   136B Jul 26  2012 System/
lrwxr-xr-x    1 root  admin    60B Mar 10  2011 User Guides And Information@ ->
/Library/Documentation/User Guides and Information.localized
drwxr-xr-x    9 root  admin   306B Jan 25 14:00 Users/
drwxrwxrwt@   4 root  admin   136B Jan 29 13:56 Volumes/
drwxr-xr-x@  39 root  wheel   1.3K Jan 29 13:47 bin/
drwxrwxr-t@   2 root  admin    68B Jun 20  2012 cores/
dr-xr-xr-x    3 root  wheel   4.3K Jan 29 13:56 dev/
lrwxr-xr-x@   1 root  wheel    11B Jul 26  2012 etc@ -> private/etc
dr-xr-xr-x    2 root  wheel     1B Jan 29 14:08 home/
-rw-r--r--@   1 root  wheel   7.8M Aug 25 00:49 mach_kernel
dr-xr-xr-x    2 root  wheel     1B Jan 29 14:08 net/
drwxr-xr-x@   4 root  admin   136B Dec  2 14:44 opt/
drwxr-xr-x@   6 root  wheel   204B Jul 26  2012 private/
drwxr-xr-x@  62 root  wheel   2.1K Jan 29 13:47 sbin/
lrwxr-xr-x@   1 root  wheel    11B Jul 26  2012 tmp@ -> private/tmp
drwxr-xr-x@  11 root  wheel   374B Dec  2 14:45 usr/
lrwxr-xr-x@   1 root  wheel    11B Jul 26  2012 var@ -> private/var
OSXDaily@hyrule:/$
```

<title> Intro to HTML </title>



My First Web Page

Headings Are Great Fun

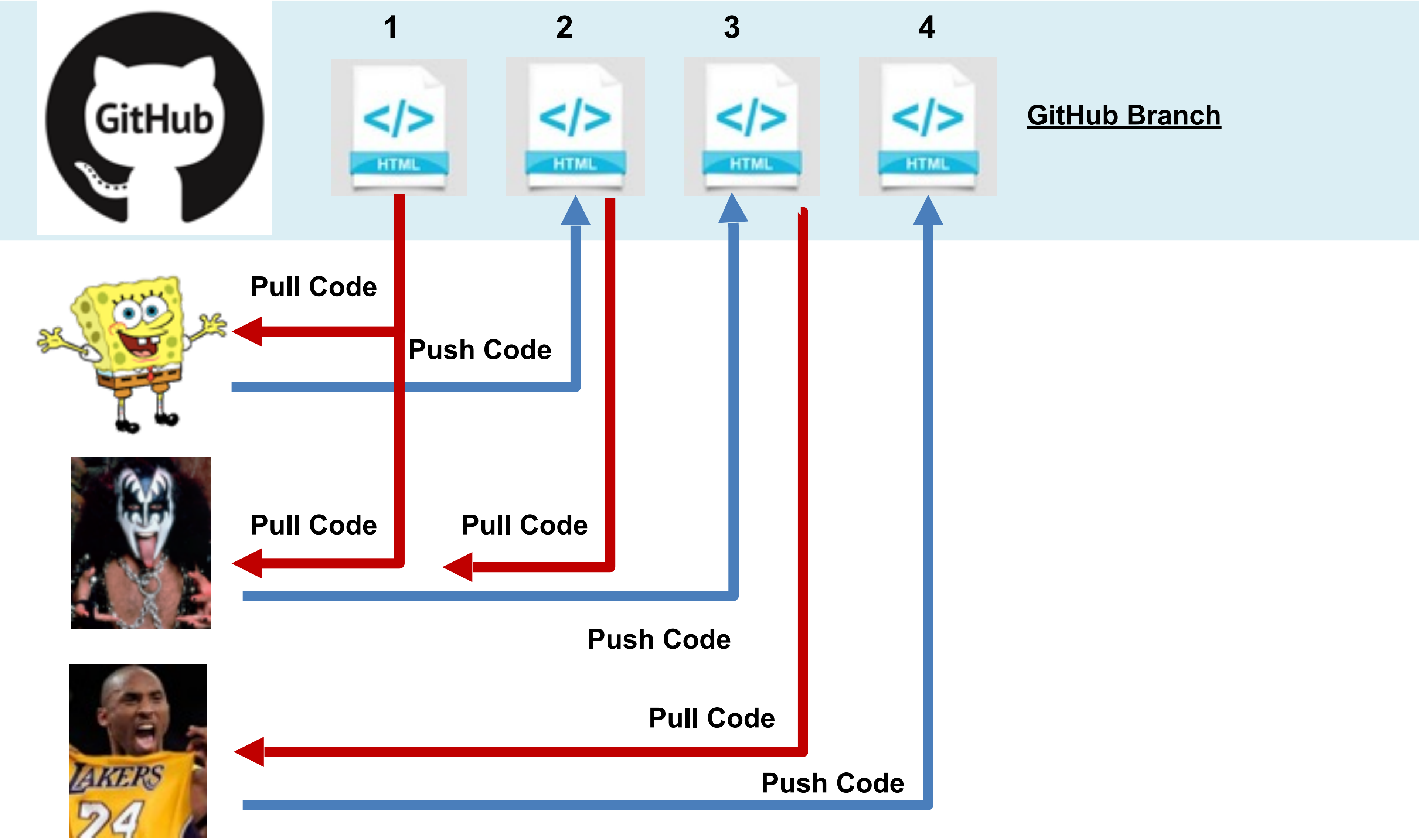
This is my first **paragraph** in my new *webpage*. This is going to be great. I am so excited I can hardly contain **myself**. Don't you just love paragraphs? I find them very useful.

Web Pages Are Exciting Too

Yes, that's right - web pages can be a lot of fun. Learning how to create web pages is easy and **entertaining**. This is my second *paragraph*. I hope you like it.

- **HTML** is one of the three base languages behind every single website.
- It defines all of the basic content and a *bit* of formatting.

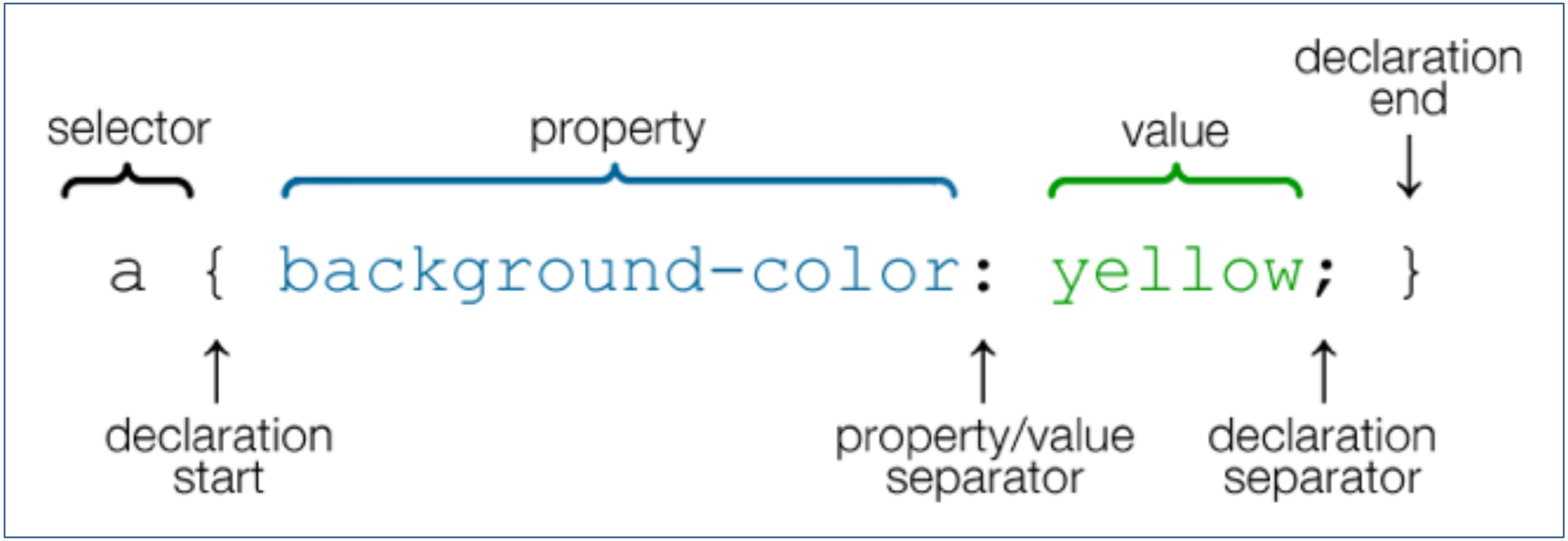
Pushing and Pulling to GitHub



CSS Syntax

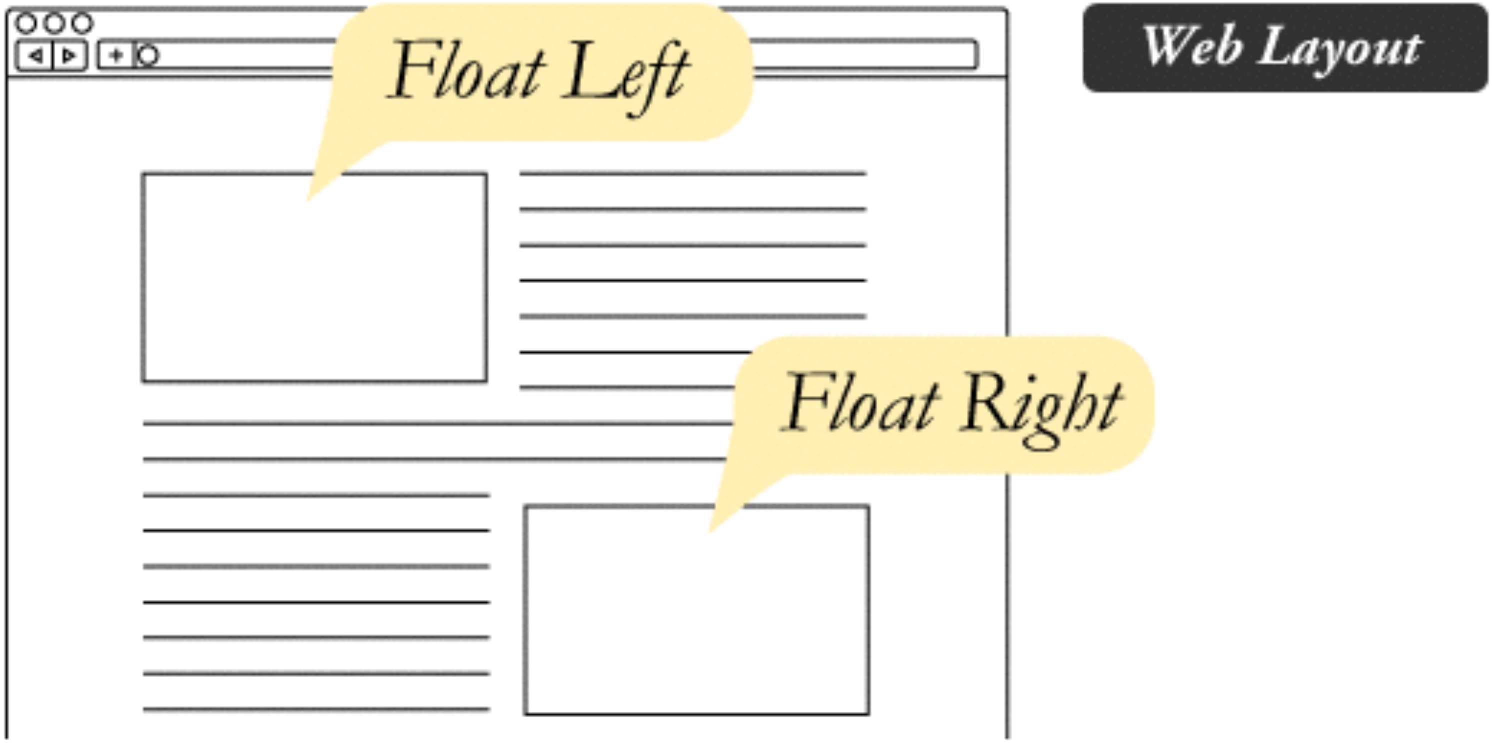
- CSS works by hooking onto **selectors** added into HTML using “**classes** and **identifiers**”.

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



```
a { background-color: yellow; }
```

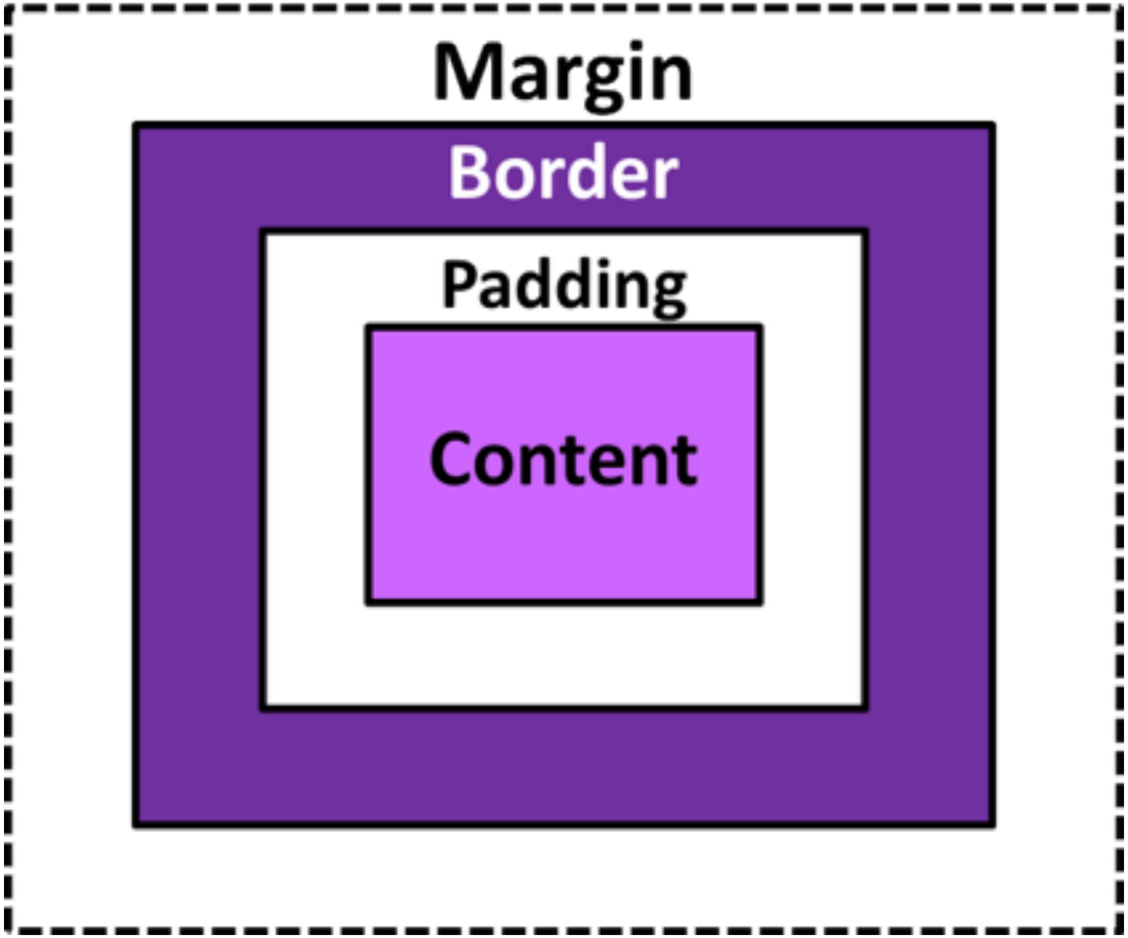
The Concept of “Flow”



- In HTML/CSS, (by default) every element displayed is governed by a concept called “**flow**”.

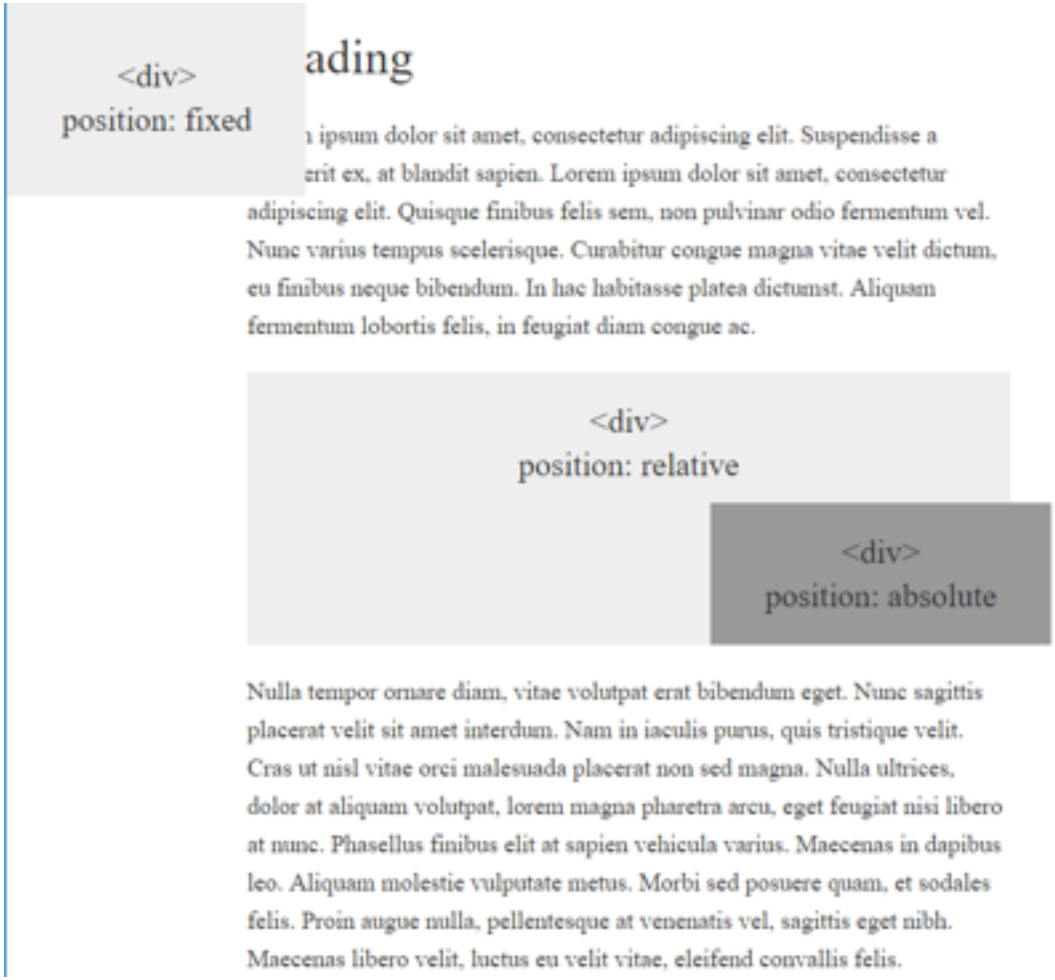
- This means that HTML elements force their adjacent elements to **flow around** them.

The Box Model



- The Box Model wraps every CSS element in **padding, border, and margin** – allowing micro changes of spacing.

CSS Positioning



<div>
position: fixed

ading

ı 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.

- Through CSS positioning (**static, relative, fixed, absolute)** we can orient our html elements in relation to space.

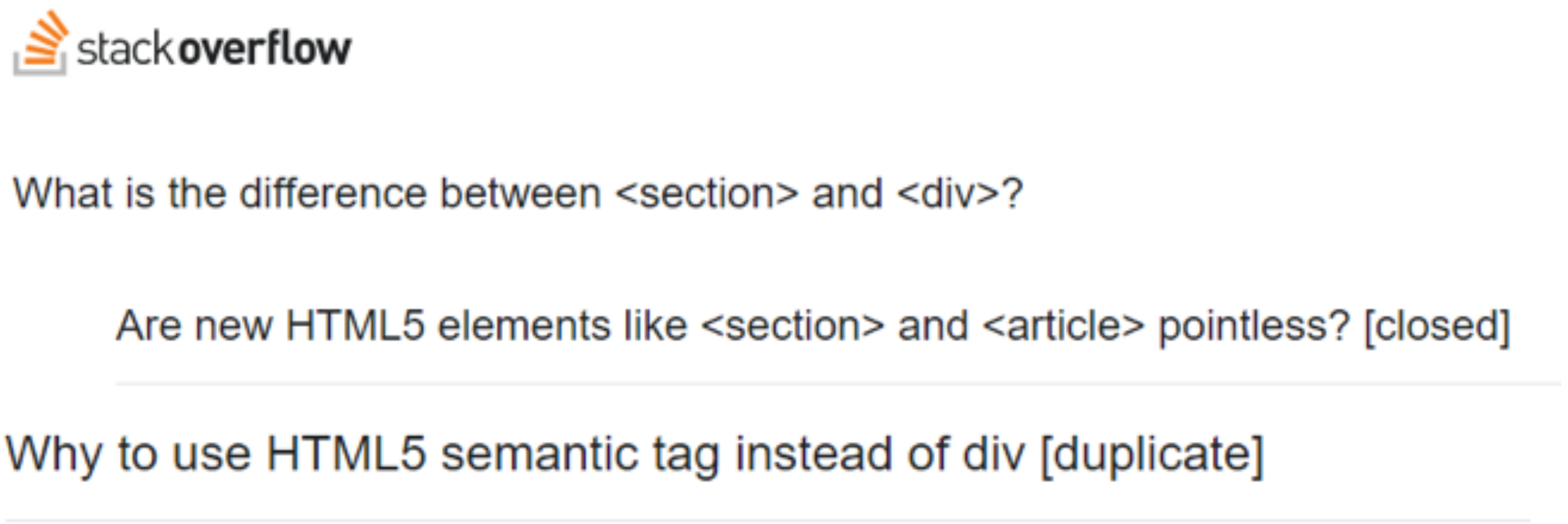
How to Learn…

w3schools.com
design shack
CSS newbie
cssreset
stackoverflow
CSS-TRICKS
sitepoint FORUMS
SMASHING MAGAZINE
MDN
MOZILLA DEVELOPER NETWORK

General Questions / Issues?

Double Take

Divs, Sections, Navs, Etc.…



stackoverflow

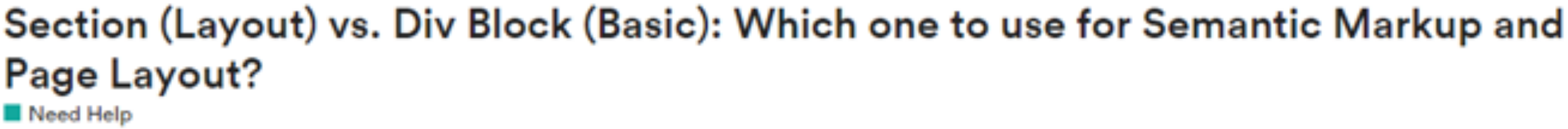
What is the difference between <section> and <div>?

Are new HTML5 elements like <section> and <article> pointless? [closed]

Why to use HTML5 semantic tag instead of div [duplicate]

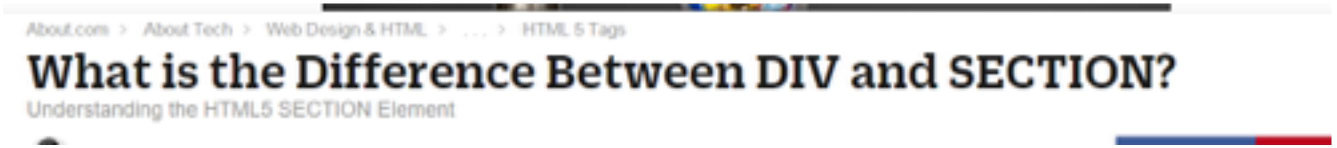
10 months ago by Noel Hale

USE DIV OR SECTION ELEMENT



Section (Layout) vs. Div Block (Basic): Which one to use for Semantic Markup and Page Layout?

■ Need Help

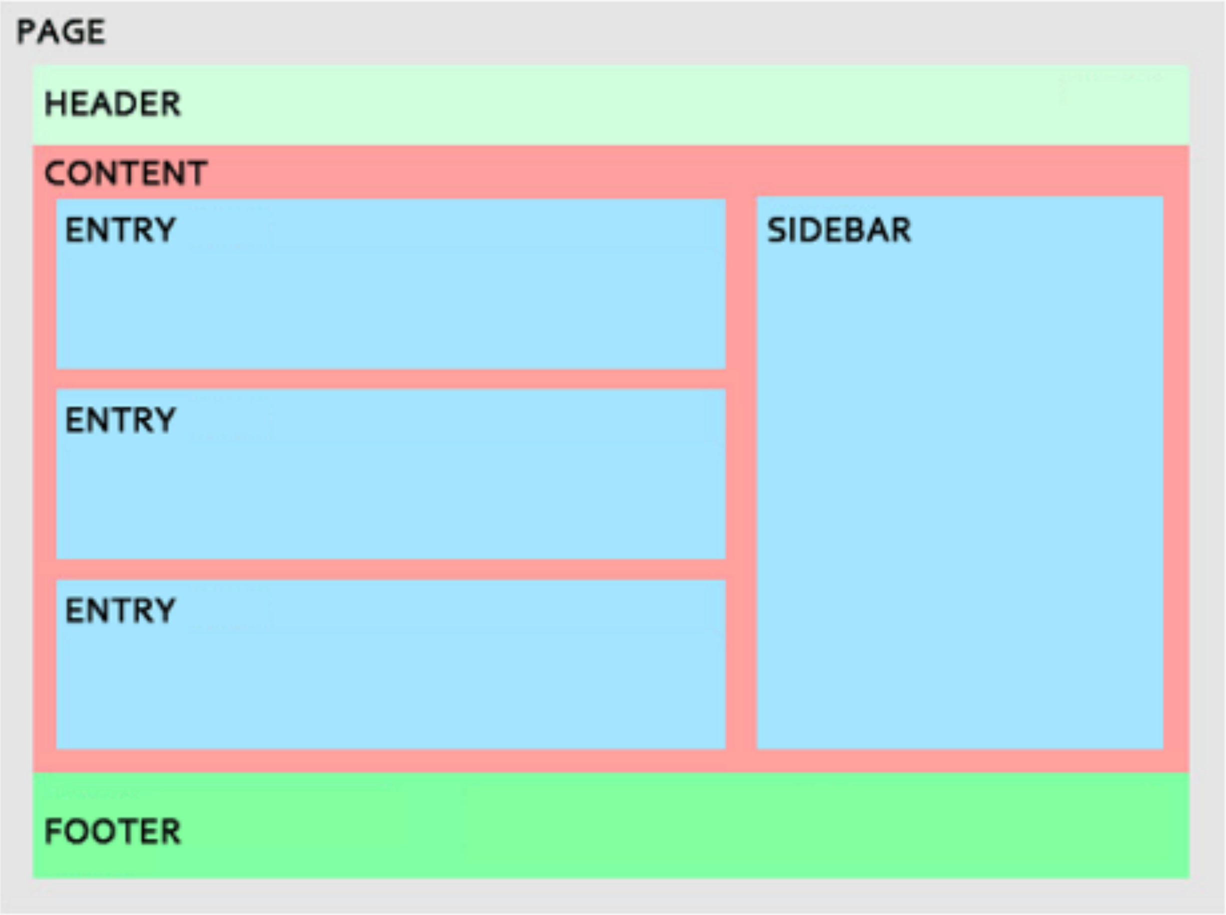


About.com > About Tech > Web Design & HTML > . . . > HTML 5 Tags

What is the Difference Between DIV and SECTION?

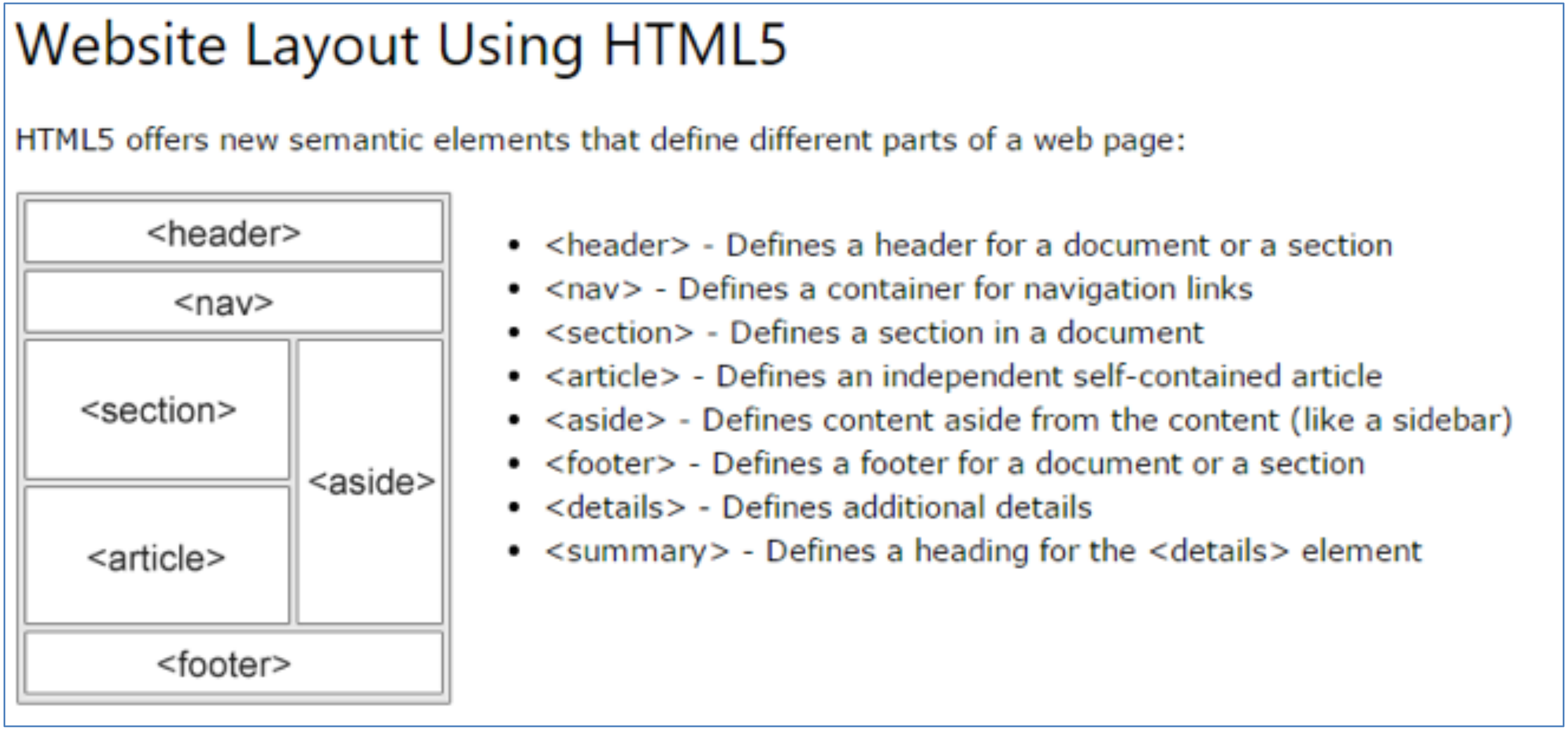
Understanding the HTML5 SECTION Element

Divs, Sections, Navs, Etc….



- Fundamentally, all web layouts are composed of containers, traditionally called “**divs**”.

Divs, Sections, Navs, Etc….



Website Layout Using HTML5

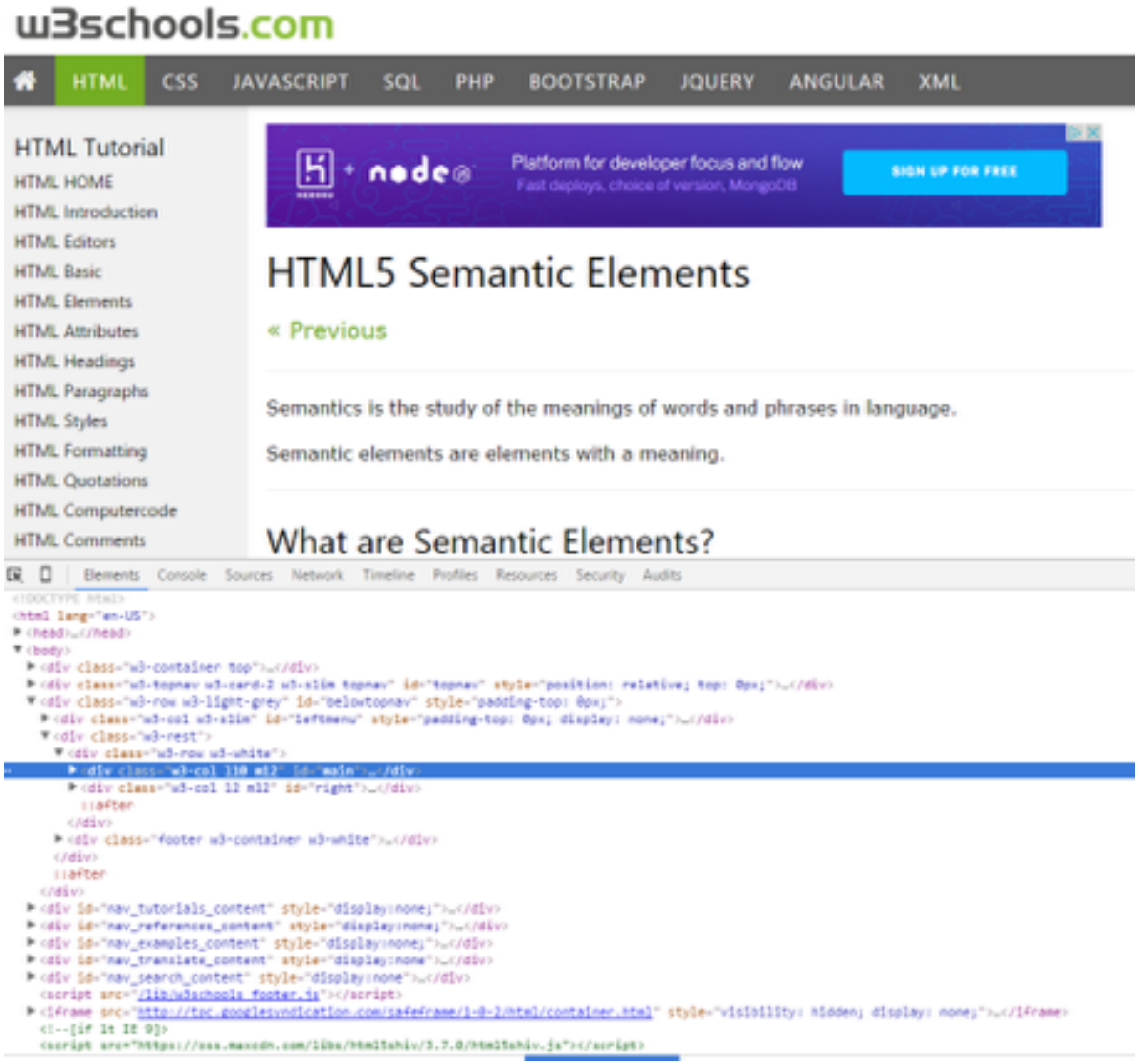
HTML5 offers new semantic elements that define different parts of a web page:

- <header> - Defines a header for a document or a section
- <nav> - Defines a container for navigation links
- <section> - Defines a section in a document
- <article> - Defines an independent self-contained article
- <aside> - Defines content aside from the content (like a sidebar)
- <footer> - Defines a footer for a document or a section
- <details> - Defines additional details
- <summary> - Defines a heading for the <details> element

- HTML5 introduced the concept of **“semantic layouts”** meaning “divs” could be given more “meaningful names.”

- In theory, this helps with organization and search engine optimization.

Divs, Sections, Navs, Etc.…



HTML5 Semantic Elements

Semantics is the study of the meanings of words and phrases in language.

Semantic elements are elements with a meaning.

What are Semantic Elements?

```
<!DOCTYPE html>
<html lang="en-US">
▶ <head>…</head>
▼ <body>
  ▶ <div class="w3-container top">…</div>
  ▶ <div class="w3-topnav w3-card-2 w3-slim topnav" id="topnav" style="position: relative; top: 0px;">…</div>
  ▼ <div class="w3-row w3-light-grey" id="belowtopnav" style="padding-top: 0px;">
    ▶ <div class="w3-col w3-slim" id="leftmenu" style="padding-top: 0px; display: none;">…</div>
    ▼ <div class="w3-rest">
      ▼ <div class="w3-row w3-white">
        ▶ <div class="w3-col l10 m12" id="main">…</div>
        ▶ <div class="w3-col l2 m12" id="right">…</div>
          ::after
        </div>
      ▶ <div class="footer w3-container w3-white">…</div>
      </div>
      ::after
    </div>
  ▶ <div id="nav_tutorials_content" style="display:none;">…</div>
  ▶ <div id="nav_references_content" style="display:none;">…</div>
  ▶ <div id="nav_examples_content" style="display:none;">…</div>
  ▶ <div id="nav_translate_content" style="display:none">…</div>
  ▶ <div id="nav_search_content" style="display:none">…</div>
    <script src="/lib/w3schools_footer.js"></script>
  ▶ <iframe src="http://tpc.googlesyndication.com/safeframe/1-0-2/html/container.html" style="visibility: hidden; display: none;">…</iframe>
    <!--[if lt IE 9]>
    <script src="https://oss.maxcdn.com/libs/html5shiv/3.7.0/html5shiv.js"></script>
```

- That said… many (if not most) websites, seem to still be using basic **divs.**
- There are reasons for this that we’ll showcase in later sections.
- Additionally, it’s possible to include “semantics” by using id names and classes.

Divs, Sections, Navs, Etc….

div?

Section?

- **Bottom line:**
  Follow your homework's instructions. But when you get out in the "real world", follow the convention of where you work!

Classes vs. IDs

Classes = Barcode (all iPhones)

IDs = Serial Number (unique iPhone)

When choosing between a CSS ID and a CSS Class follow the convention:

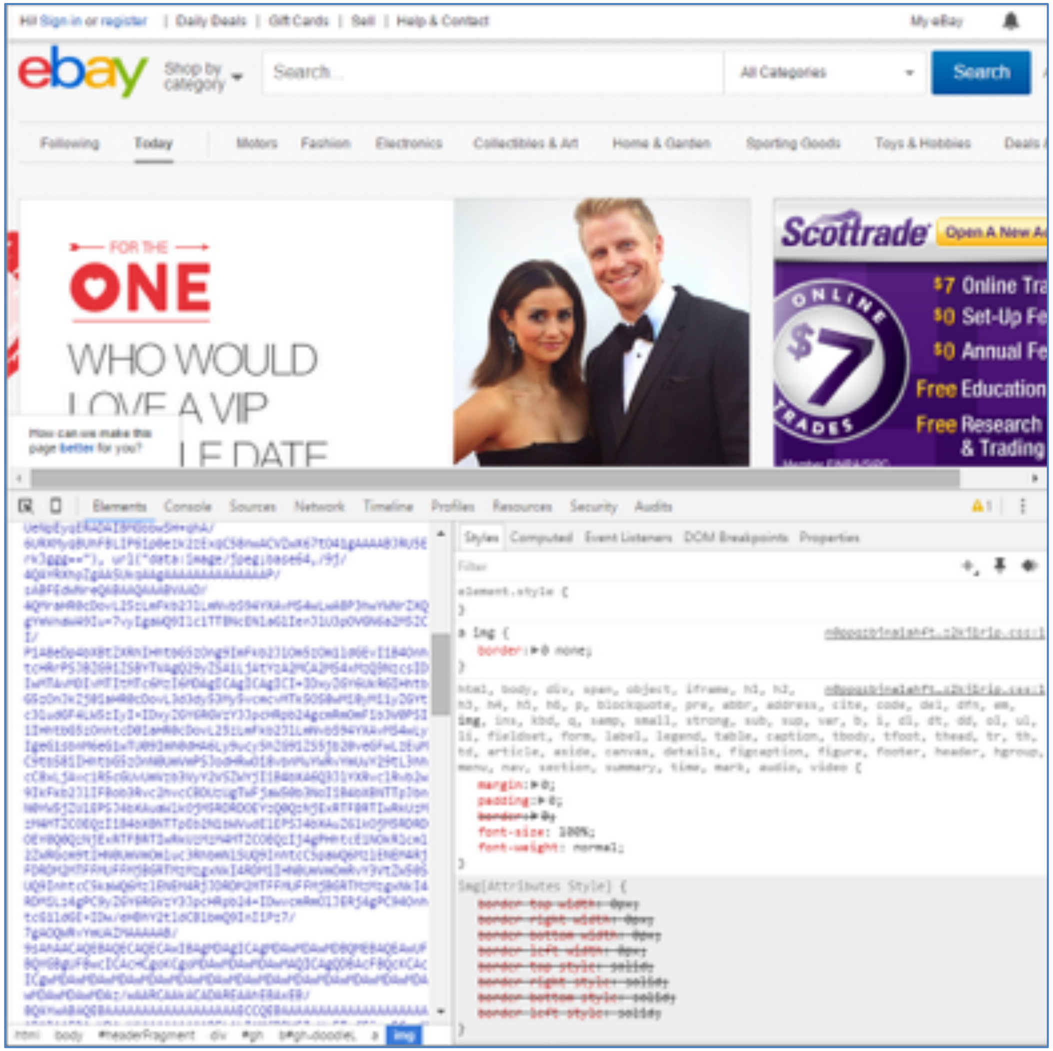
- **Classes (.classname)** are to be used if the same style will be used on multiple HTML elements
- **IDs (#idname)** are to be used if a style is *unique* to that HTML element.

Google Developer Tools (Inspector)

- **GDT** is one of the most frequent tools you will use in web dev.

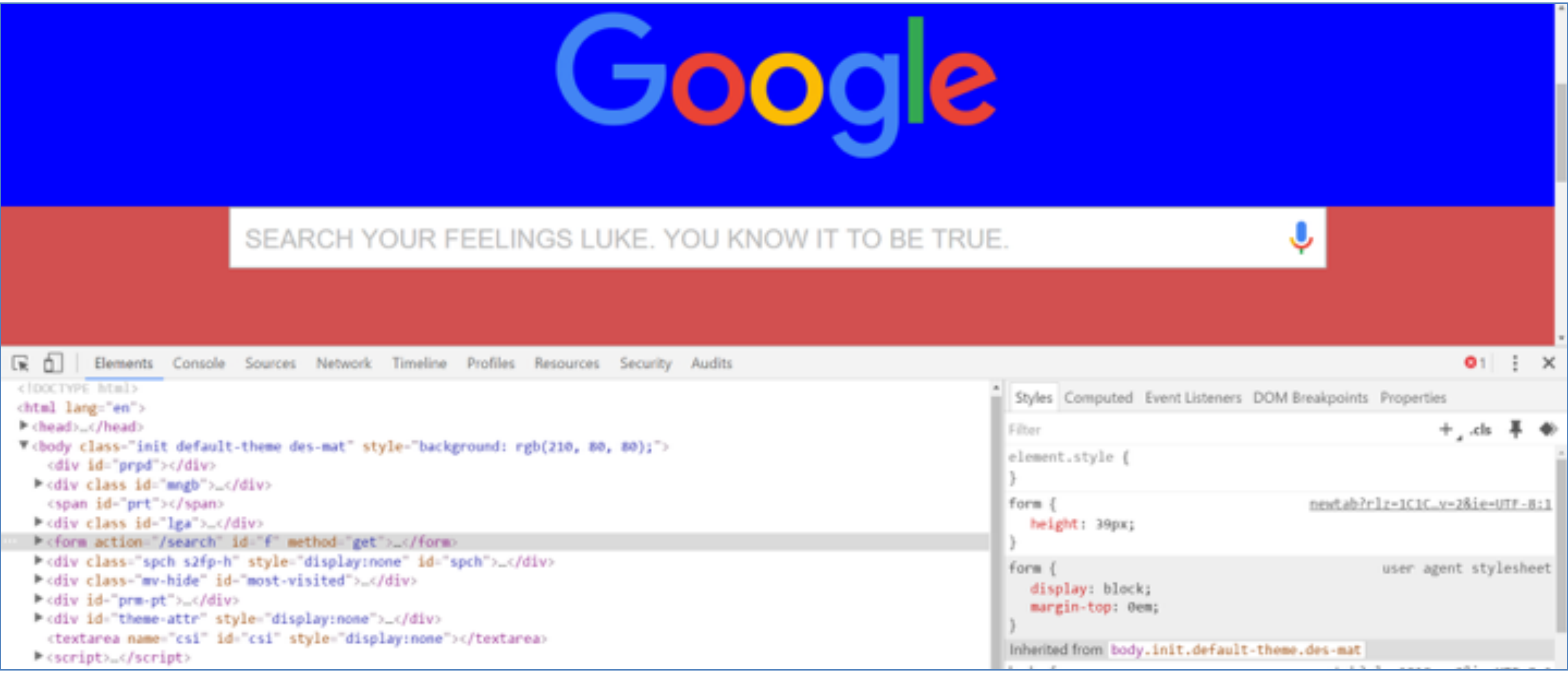
- It allows you to truly, debug your web designs.

- **<u>Start using it!</u>**



```
element.style {
}
img {
    border: ▸ 0 none;
}
html, body, div, span, object, iframe, h1, h2,
h3, h4, h5, h6, p, blockquote, pre, abbr, address, cite, code, del, dfn, em,
img, ins, kbd, q, samp, small, strong, sub, sup, var, b, i, dl, dt, dd, ol, ul,
li, fieldset, form, label, legend, table, caption, tbody, tfoot, thead, tr, th,
td, article, aside, canvas, details, figcaption, figure, footer, header, hgroup,
menu, nav, section, summary, time, mark, audio, video {
    margin: ▸ 0;
    padding: ▸ 0;
    border: ▸ 0;
    font-size: 100%;
    font-weight: normal;
}
img[Attributes Style] {
    ~~border-top-width: 0px;~~
    ~~border-right-width: 0px;~~
    ~~border-bottom-width: 0px;~~
    ~~border-left-width: 0px;~~
    ~~border-top-style: solid;~~
    ~~border-right-style: solid;~~
    ~~border-bottom-style: solid;~~
    ~~border-left-style: solid;~~
}
```

Modifying Sites



```
<!DOCTYPE html>
<html lang="en">
▶<head>…</head>
▼<body class="init default-theme des-mat" style="background: rgb(210, 80, 80);">
    <div id="prpd"></div>
  ▶<div class id="mngb">…</div>
    <span id="prt"></span>
  ▶<div class id="lga">…</div>
  ▶<form action="/search" id="f" method="get">…</form>
  ▶<div class="spch s2fp-h" style="display:none" id="spch">…</div>
  ▶<div class="mv-hide" id="most-visited">…</div>
  ▶<div id="prm-pt">…</div>
  ▶<div id="theme-attr" style="display:none">…</div>
    <textarea name="csi" id="csi" style="display:none"></textarea>
  ▶<script>…</script>
```

```
element.style {
}
form {                                    newtab?rlz=1C1C…v=2&ie=UTF-8:1
   height: 39px;
}
form {                                    user agent stylesheet
   display: block;
   margin-top: 0em;
}
Inherited from body.init.default-theme.des-mat
```

- **Using Chrome Inspector you can readily edit any webpage** (your own or otherwise) to see the immediate impact of HTML or CSS changes

INSTRUCTOR DEMO!

Instructor: Demo

(Google Developer Tools)

> YOUR TURN!!

Suggested Time: 15 min

Assignment

For the next 15 minutes, take a website that you commonly use (Amazon, Google, Huff Po, etc.) and heavily modify it using the Google Developer Tools.

Be sure to at least modify:

- Content (Change words)
- Colors
- Spacing
- Etc.

Send a screenshot to the class' slack profile when you're done.

> YOUR TURN!!

Suggested Time: 10 min

Assignment

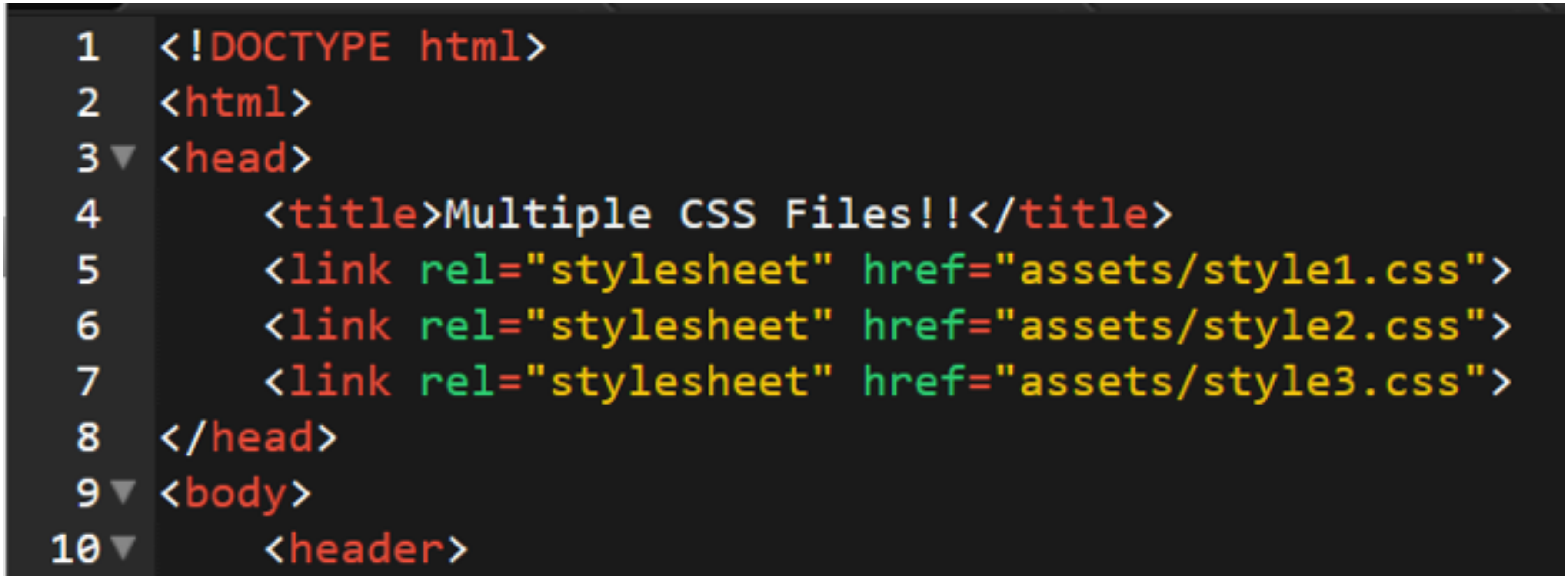
For the next 10 minutes, take any site that you've been working on in-class or for homework, and utilize Google Developer Tools to help you "test changes".

Be sure to at least modify:

- Content (Change words)
- Colors
- Spacing
- Etc.

CSS Resets

Loading Multiple CSS Files ***(Very Important!!!)***



```html
<!DOCTYPE html>
<html>
<head>
    <title>Multiple CSS Files!!</title>
    <link rel="stylesheet" href="assets/style1.css">
    <link rel="stylesheet" href="assets/style2.css">
    <link rel="stylesheet" href="assets/style3.css">
</head>
<body>
    <header>
```

- One of the most powerful aspects of CSS is the ability to deploy multiple CSS files simultaneously.
- This allows developers the ability to create complex designs – made up of multiple design elements.
- Just remember the loading ***order matters!!!***

INSTRUCTOR DEMO!

Instructor: Demo

(1-3_CSSFiles.html | 1-MultipleCSS)

What Browser?

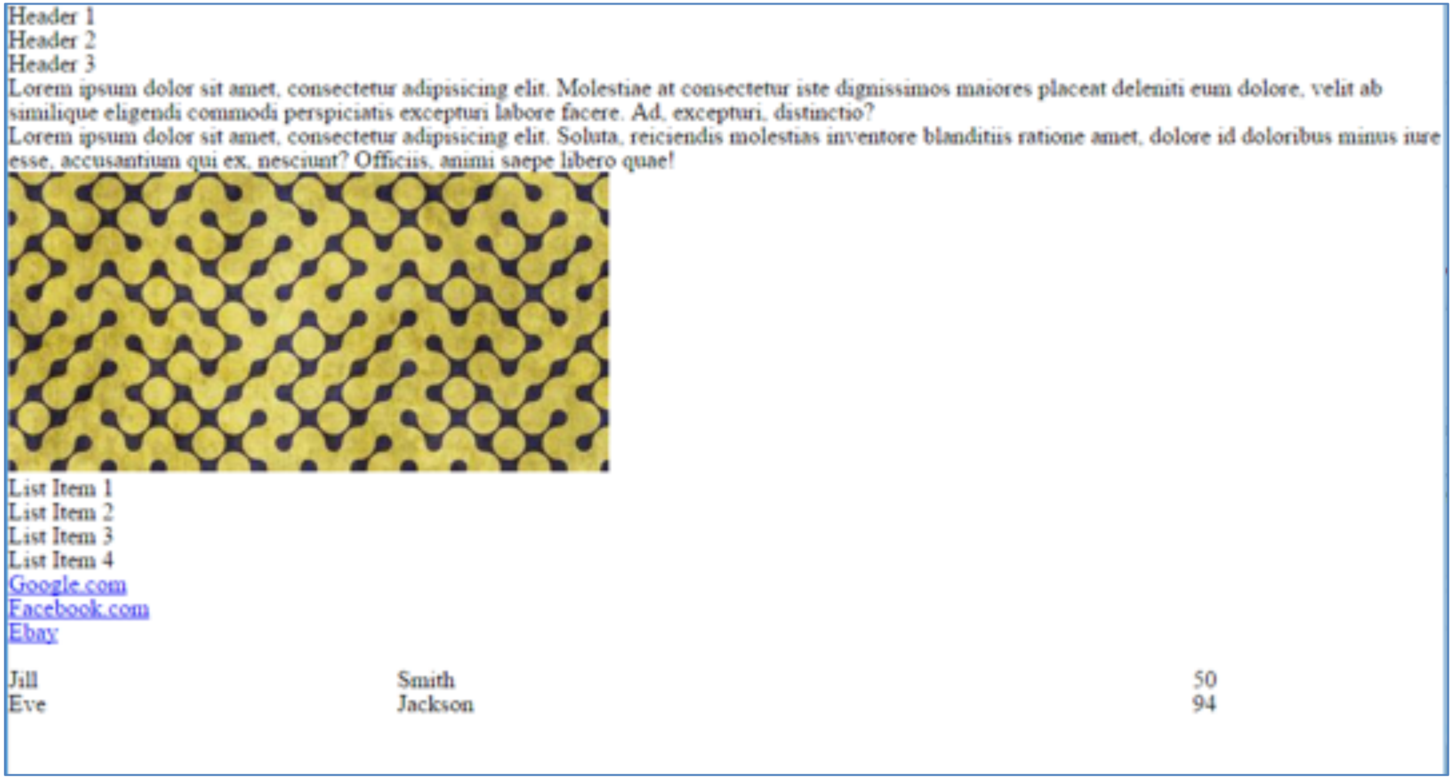
By a show of hands…

Which browser do you use?

Battle of the Browsers

- Under-the hood there are often significant differences between how browsers **render** webpages.
- These differences in rendering agents can mean HTML/CSS gets displayed differently in each.
- As designers/developers, creating **cross-browser compatible** websites is critical.

Reset.css (or Normalize.css)



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 saepe 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

- Reset.css ensures that all browser-specific css has been reset, so it appears the same in all browsers.

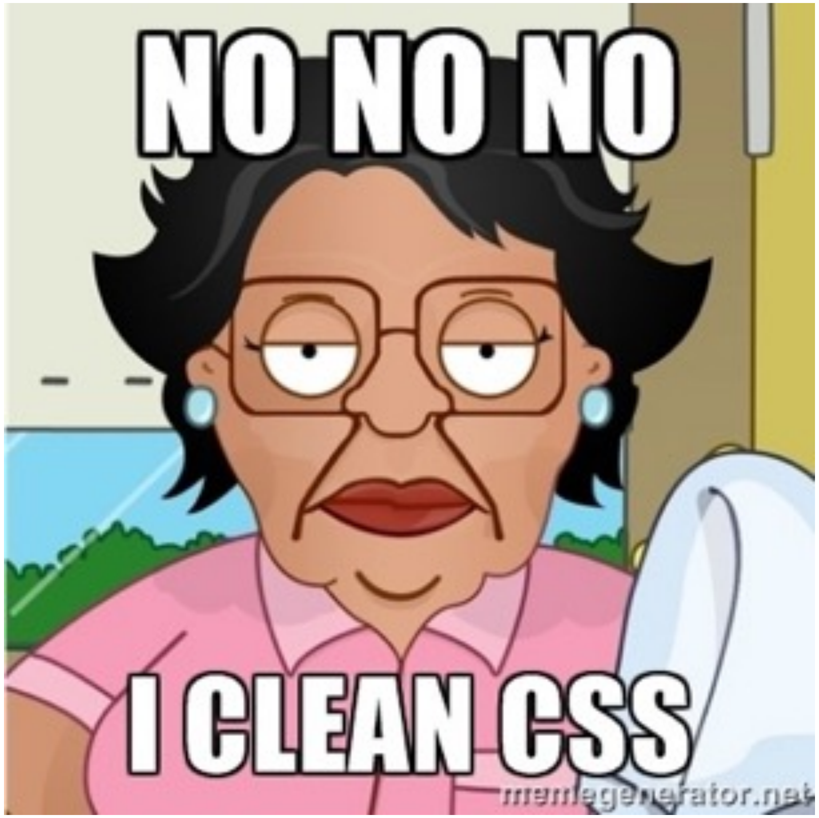
- This means you will have to re-style everything yourself

INSTRUCTOR DEMO!

Instructor: Demo

(Example.html | 2-ResetCSS)

Why CSS Resets Matter

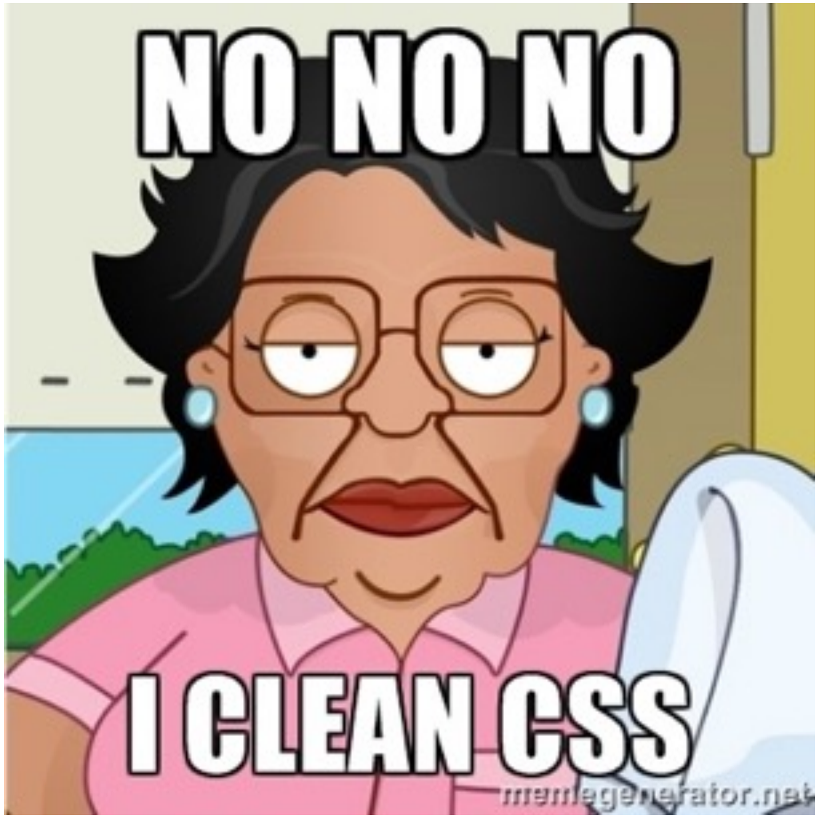


1. It’s important for creating browser-compatible websites

2. It’s an example of using someone else’s CSS in _your_ website!!!

3. It’s a common Front-End Developer Interview question.

Why CSS Resets Matter



1. It’s important for creating browser-compatible websites

2. It’s an example of using someone else’s CSS in *your* website!!!

3. It’s a common Front-End Developer Interview question.

> YOUR TURN!!

Suggested Time: 10 min

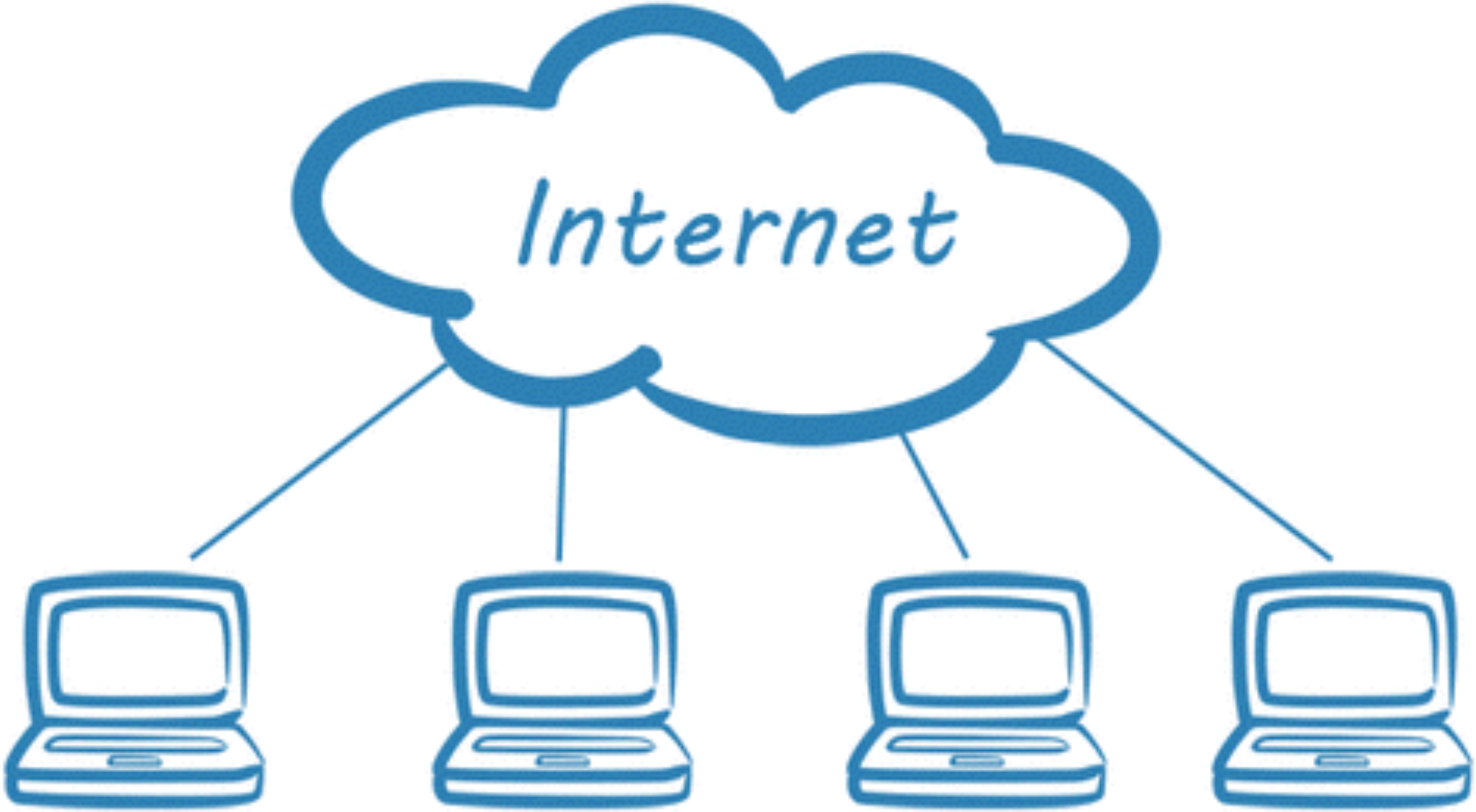
Assignment

Follow the instructions given via slack to incorporate a reset.css file into a basic HTML file.

Note the impact the reset file makes after its inclusion.

To the Web with Heroku!

The Internet



A *deep* and <u>complex</u> diagram above on how the internet works.

The World Will See Our Greatness!

- **Heroku provides a cloud application hosting platform –** which means we can deploy our websites and applications onto their servers for the world to see.

Together Now…

Let's all login to Heroku

INSTRUCTOR DEMO!

Instructor: Demo

(Heroku Deployment)

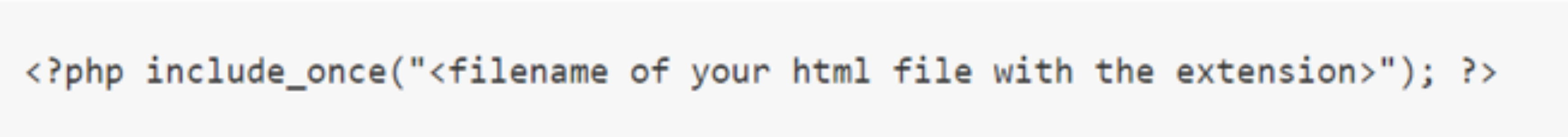
Deploying Static Websites to Heroku

Basic Steps:

1. Go to folder you want to host (must be .git enabled)

2. Add a file called composer.json and include an empty bracket {}.

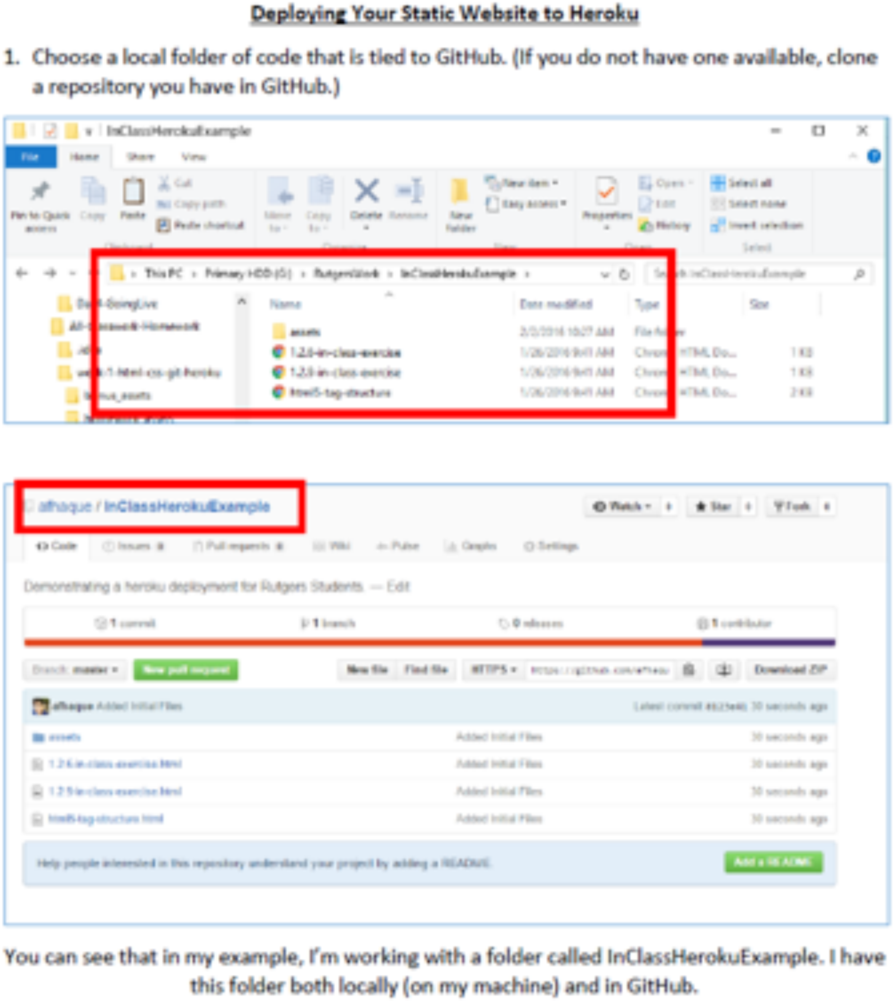
3. Add a file called index.php with the following inside:



```
<?php include_once("<filename of your html file with the extension>"); ?>
```

4. Run Heroku login (for windows users, remember the workaround!)
5. Run git remote –v
6. Run heroku create
7. Run git remote –v
8. Run git push heroku master

Follow our Guide!



Deploying Your Static Website to Heroku

1. Choose a local folder of code that is tied to GitHub. (If you do not have one available, clone a repository you have in GitHub.)

afhaque / InClassHerokuExample

Demonstrating a heroku deployment for Rutgers Students — Edit

You can see that in my example, I'm working with a folder called InClassHerokuExample. I have this folder both locally (on my machine) and in GitHub.

Step-by-step guide on creating Heroku Deployments

> YOUR TURN!!

Suggested Time: 30 min

Assignment

Time to take your newfangled website and deploy it to the cloud. Setup your own instance of Heroku and deploy one of your HTML creations to Heroku.

Additional instructions to be sent via Slack.

Practice Through Frustration

Keep Practicing!

It gets better.

Questions?

Homework 1 - Help?