
SETUP INSTRUCTIONS

WELCOME TO FEWD!

**Wifi network: GA-GUEST
Password: yellowpencil**

- › **Open Slack**
- › **Download Chrome and make it your default browser**
- › **Download Visual Studio Code text editor**

YOUR INSTRUCTIONAL TEAM



INTRODUCTIONS



Sasha Vodnik

Lead Instructor



Aurielle Perlmann

Instructional Associate

Student Services



MATT JONES
Education Programs Producer

Email: studentservicesSF@google.com
Slack: [studentservicessf](#)

Course logistics

- Access to tools
- Feedback about the course
- Enrollment and finances
- Graduation certificates

Campus questions

- GA Facilities
- GA events outside of class
- Discounts for other courses

Others you may see



NIÑA PINEDA

Front Lines Lead



VANESSA OHTA

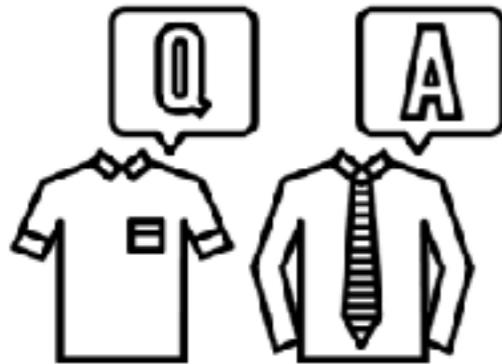
Instruction Manager

MEET YOUR CLASSMATES



Let's get to know each other

STRUCTURE



PAIRS

**INTROS: 5 MIN
SHARING: 10 MIN**



OBJECTIVES

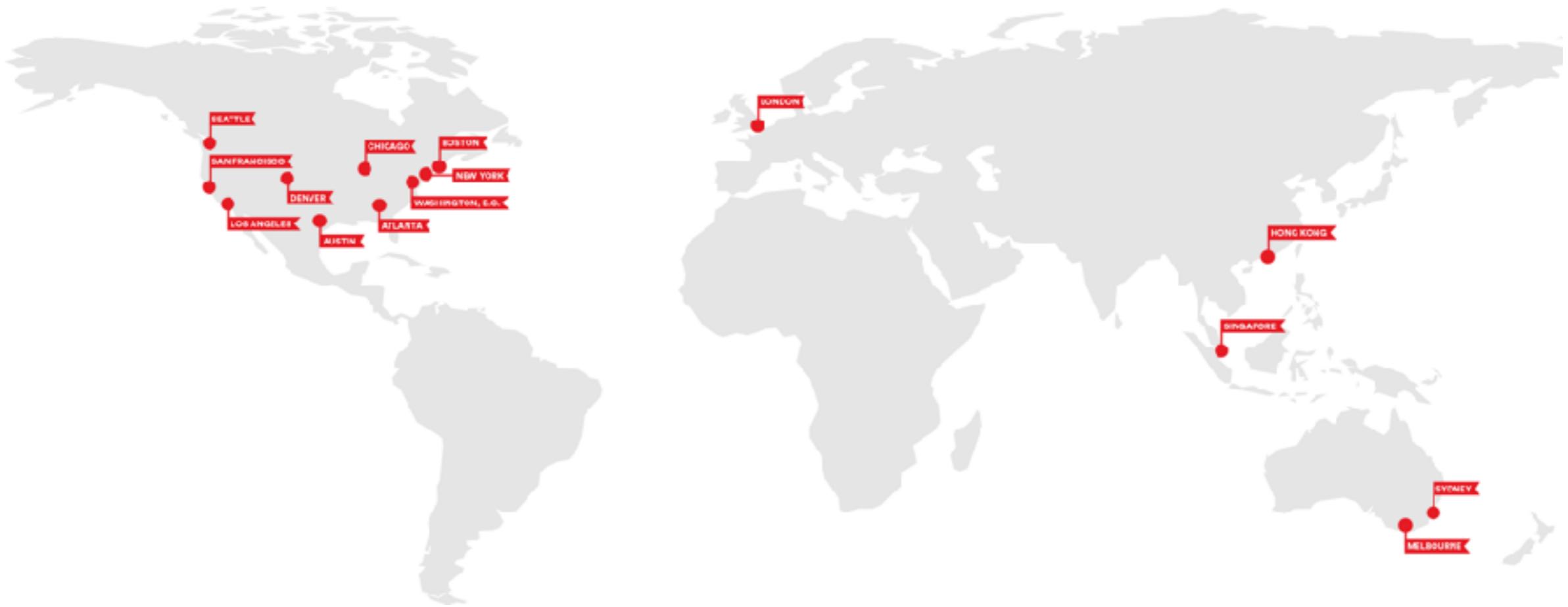
1. Take 5 minutes to get to know your neighbor by finding out:
 - a. Their name
 - b. Why they are taking this course
 - c. A guilty pleasure

2. Be prepared to introduce your neighbor to the rest of the room



THE STUDENT EXPERIENCE

15+ campuses around the world





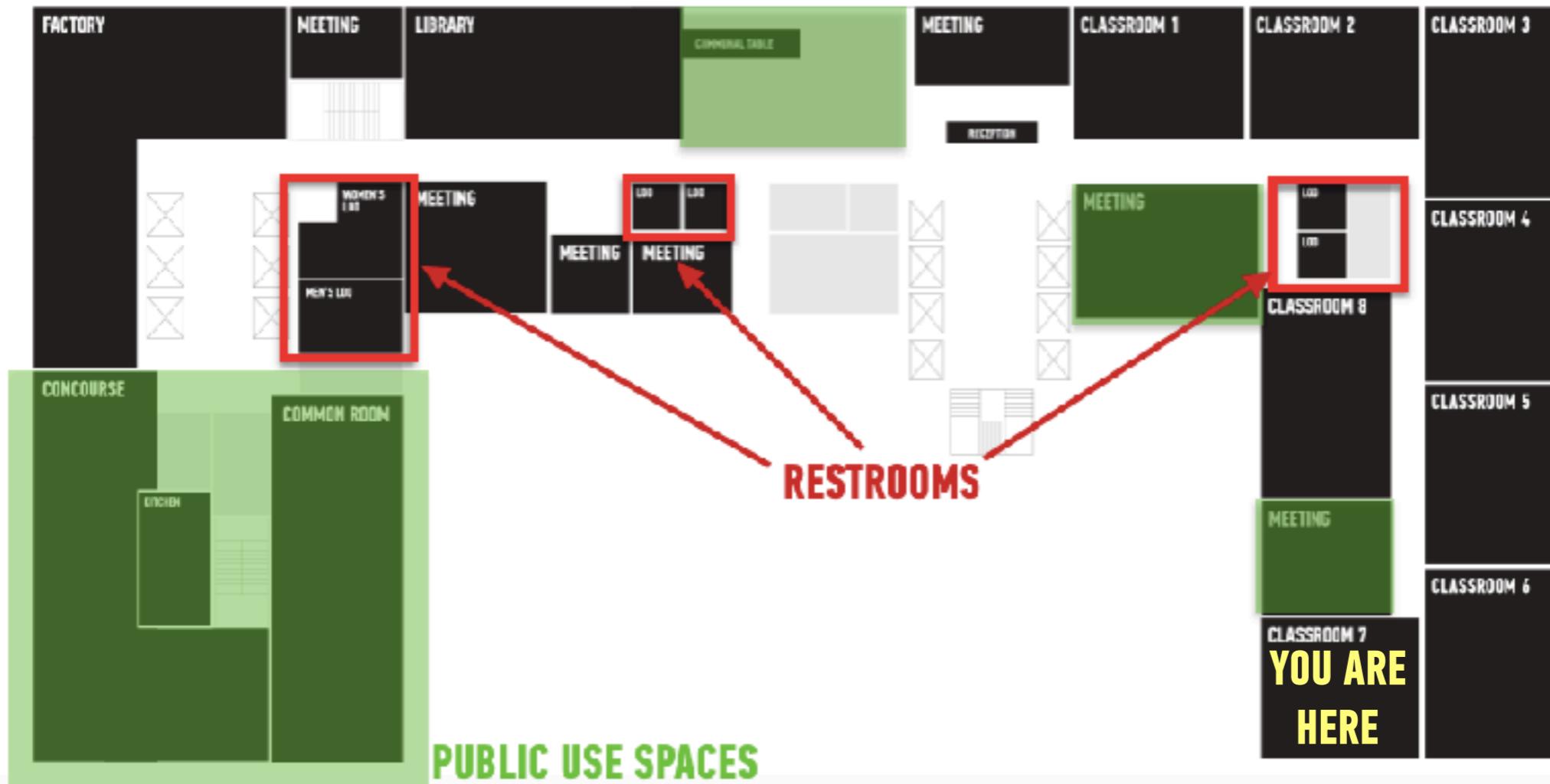
Come work on campus.

We're open:

8am - 10pm, Monday to Friday

10am - 6pm, Saturday and Sunday

San Francisco



Have a question about:

- the campus?
- lost and found?
- loaner equipment?
- free coffee and snacks?



Come here to talk to Front Lines and
they will help you out.





COURSE EXPECTATIONS

Course dates

Front End Web Development 64

Course dates:

- Tuesdays and Thursdays, 6:30pm - 9:30pm
- May 8 - July 12

Holidays: none



Classroom culture



Let's all agree to:

- Come on time
- Participate
- Step up, step back
- Ask for help when you need it
- Help each other

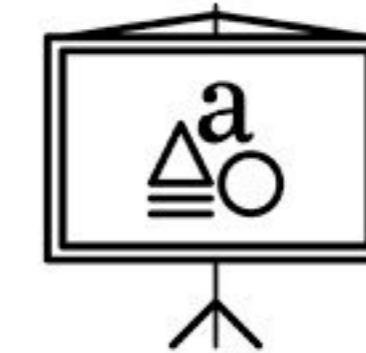
How to get a certificate



Complete 80% of the homework



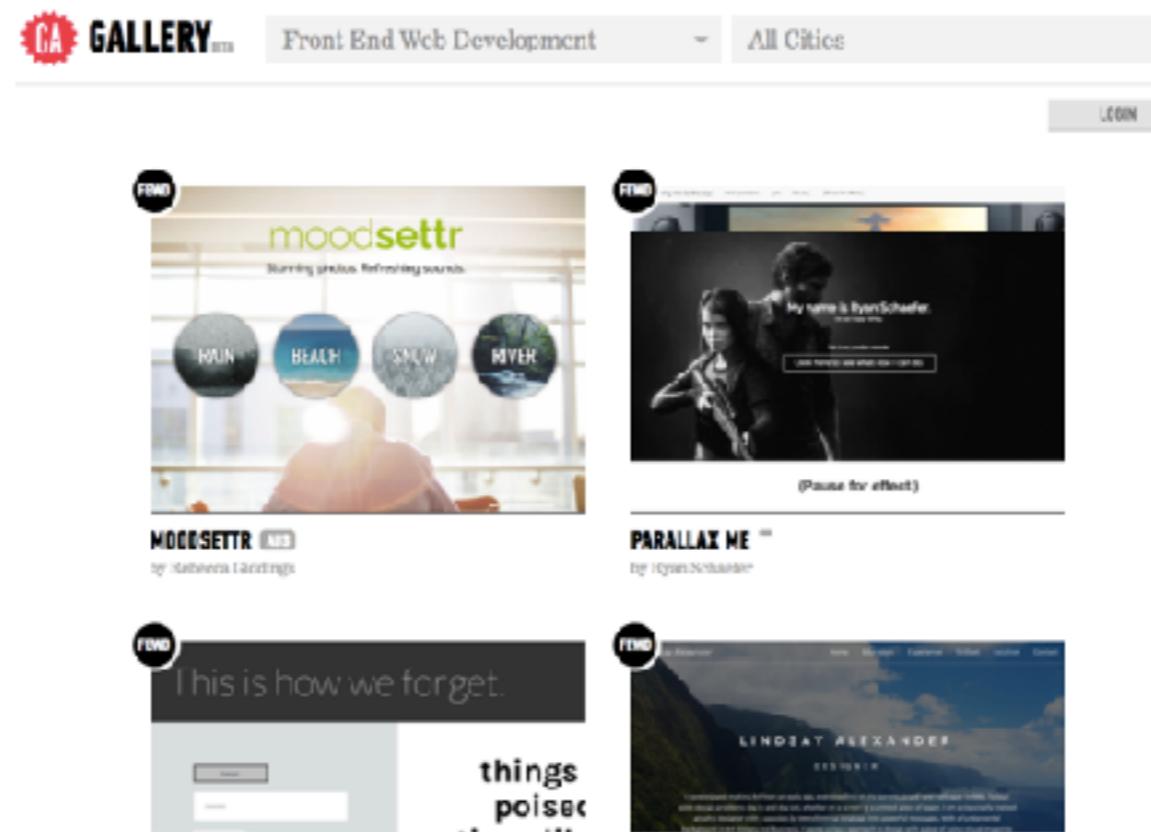
Don't miss more than 3 classes



Complete and present a final project



Final Projects



<https://gallery.generalassemb.ly/FEWD>

GA Values

- › **Grit**
 - › **Teamwork**
 - › **Curiosity**
 - › **Resourcefulness**
 - › **Generosity**
-

GA Values

- **Grit**
- **Teamwork**
- **Curiosity**
- **Resourcefulness**
- **Generosity**



GRIT

We keep going when things get tough.

GA Values

- Grit
- Teamwork
- Curiosity
- Resourcefulness
- Generosity



TEAMWORK

We work together to meet our goals.

GA Values

- ▶ **Grit**
- ▶ **Teamwork**
- ▶ **Curiosity**
- ▶ **Resourcefulness**
- ▶ **Generosity**



CURIOSITY

We accept feedback with poise and professionalism.

GA Values

- Grit
- Teamwork
- Curiosity
- **Resourcefulness**
- Generosity



RESOURCEFULNESS

We take advantage of the many resources around us and ask for help when we need it.

GA Values

- **Grit**
- **Teamwork**
- **Curiosity**
- **Resourcefulness**
- **Generosity**

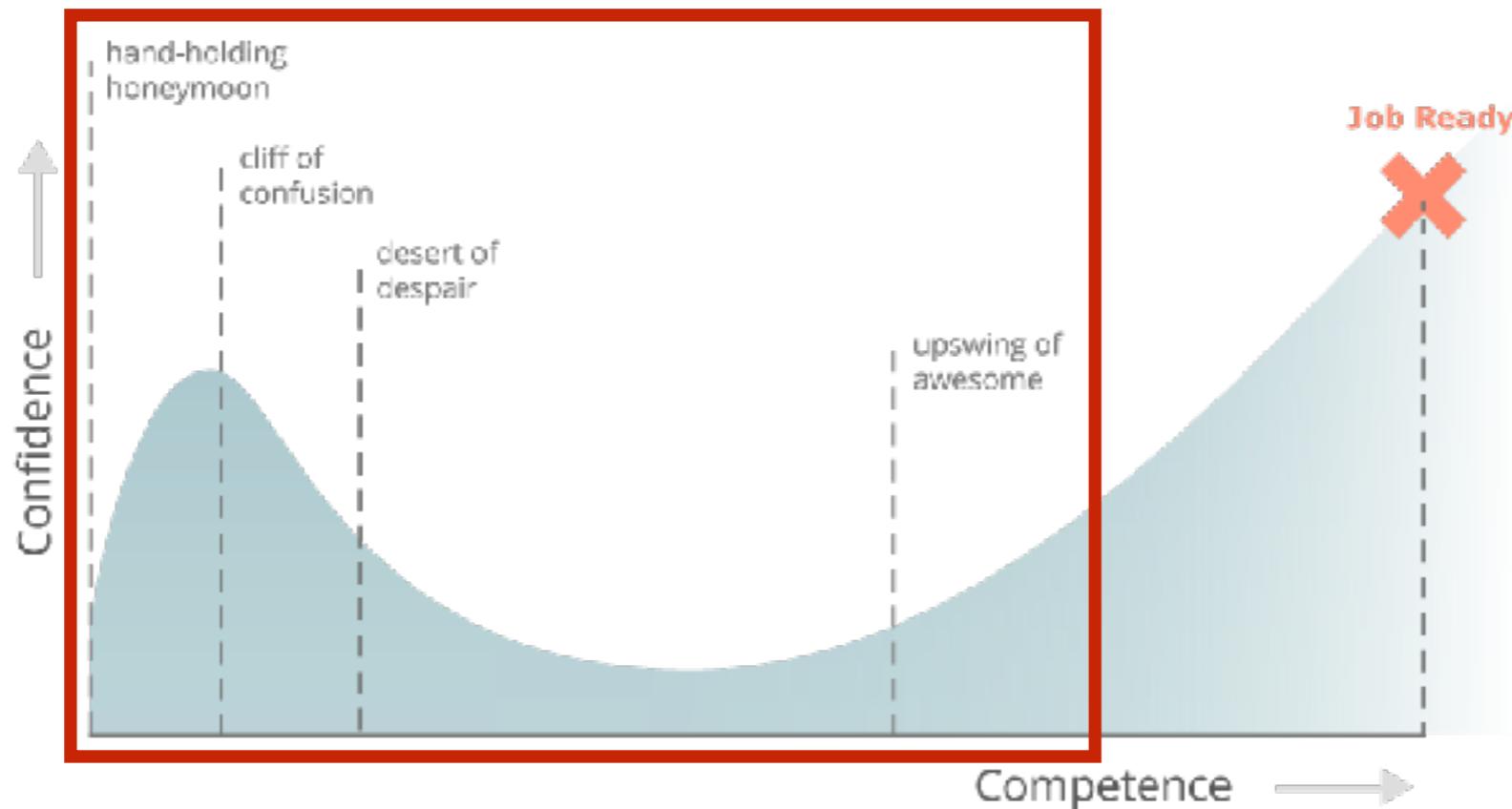


GENEROSITY

We share our experiences, skills, and gifts to help those around us.

Common Misconceptions: Learning Curve

Coding Confidence vs Competence



Common Misconceptions: Googling



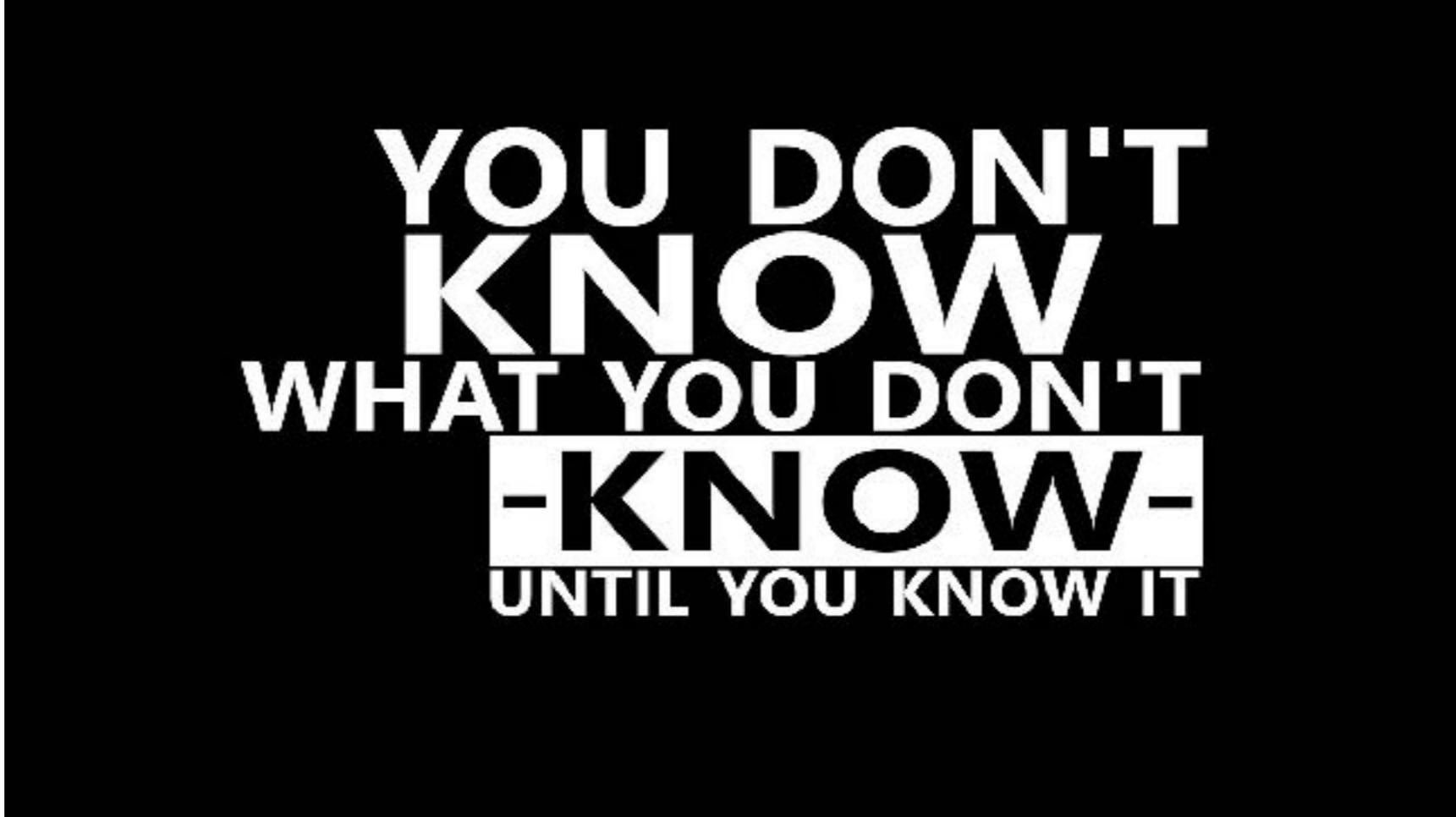
Common Misconceptions: Outside Tutorials



Common Misconceptions: Course Content

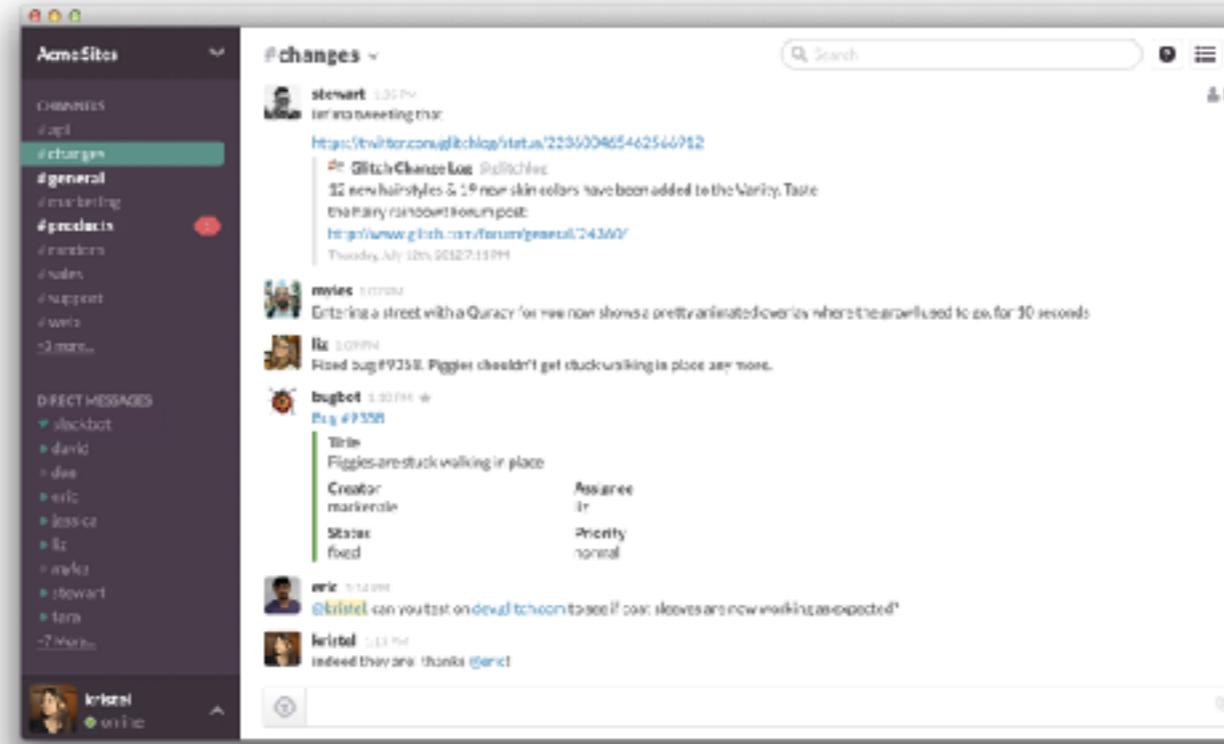


Goals



**YOU DON'T
KNOW
WHAT YOU DON'T
-KNOW-
UNTIL YOU KNOW IT**

Slack



Course materials and communication happens here!

Setting up Slack

Join the following channels:

- **#classroom** - class activities happen here! Also contains all class materials
 - **#homework** - submit homework here & ask homework related questions
 - **#intros** - get to know your classmates!
 - **#resources** - share resources
 - **#curiosity** - ask things you want to know about
-

Our Slackbots

- **Icebreakers** - asks you questions and displays answers in #intros
 - **Donut** - pairs you with another student every week
 - **HeyTaco** - allows you to give kudos to people who help you out!
 - There will be prizes ;)
-

Help Us Help You!

Slack us if:

- You know in advance that you will be missing a class or multiple classes
 - You're sick, overloaded at work, or something comes up and you can't make it to class last minute
 - You will be 10 or more minutes late to class
 - You need to leave early
 - You will be submitting your homework late
-

Help Us Help You!

- 3 then me
 - 30 minutes - then #homework channel on Slack
 - [How to get help](#)
 - Acknowledge those who helped you!!
-

Logistics

- Homework is due Sundays at 11:59pm
- Office hours: **TBD - student poll**
- **Course materials in #classroom Slack channel**
- [Course schedule and assignment outline](#) (subject to change)

FEWD

LET'S GET STARTED!

**WHAT DOES “FRONT-END
DEVELOPMENT” MEAN TO YOU?**

WEEKLY OVERVIEW

WEEK 1

Intro to HTML / Intro to CSS

WEEK 2

CSS Selectors / Layout

WEEK 3

Layout Lab / Grid Systems & Wireframing

HTML BASICS

LEARNING OBJECTIVES

-
- ▶ Articulate the role of HTML, CSS and JavaScript in front-end development.
 - ▶ Recognize the different roles and responsibilities in web development.
 - ▶ Apply and experiment with HTML tags.
 - ▶ Use CSS to add styles to a webpage.

AGENDA

Front-End vs. Back-End

Intro to Front-End Development

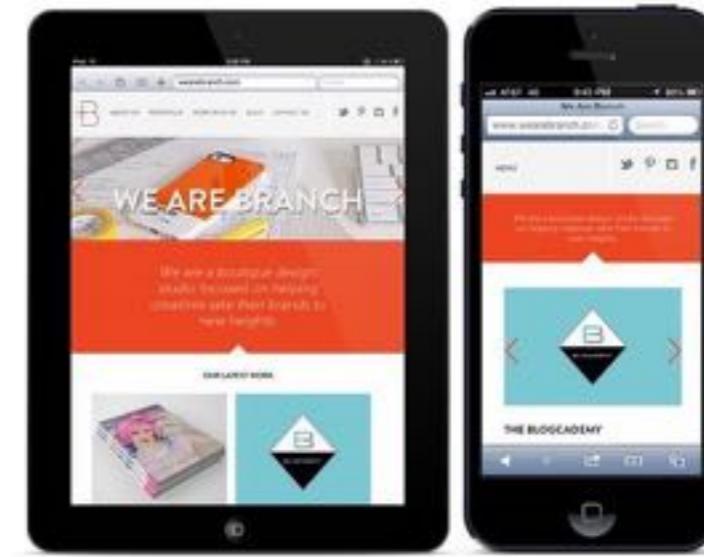
Intro to HTML & CSS

Lab Time

FRONT END VS. BACK END

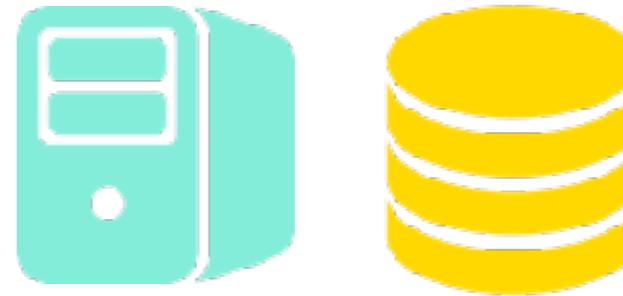
WEB PRODUCTION WORKFLOW — FRONT END

- ▶ Take a design and turn it into code and assets
- ▶ Create the visual interface for a website — everything the user sees and interacts with.
- ▶ Other responsibilities: accessibility, performance, cross-browser and cross-device functionality

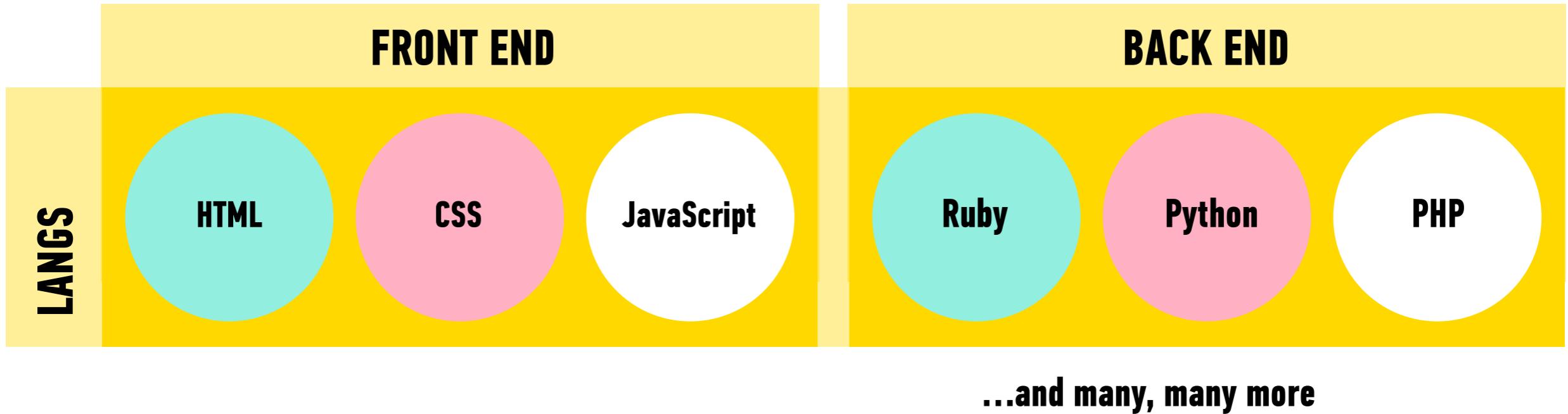


WEB PRODUCTION WORKFLOW — BACK END

- ▶ Give the application/webpage a 'memory'
- ▶ Talk to the database – getting data, adding and updating data
- ▶ Authenticate users

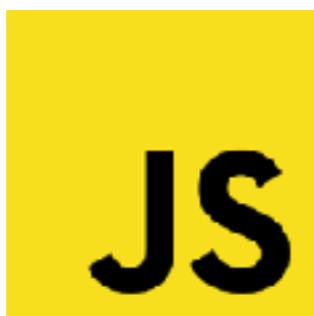


FRONT END VS. BACK END

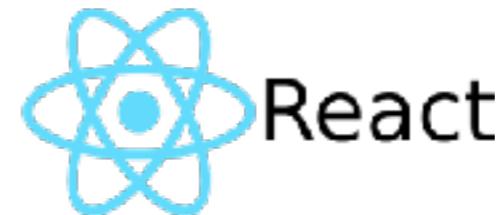


FRONT END TOOLS IN THIS CLASS

What we will learn



What we will NOT learn



ACTIVITY



KEY OBJECTIVE

Describe the role and responsibilities of the front-end developer. How do these differ from those of the back-end developer?

TIMING

1. Discuss with a partner
2. Share your response with the class in Slack

BONUS

Come up with an analogy!

INTRO TO FRONT-END WEB DEVELOPMENT

WHAT IS A WEBSITE?

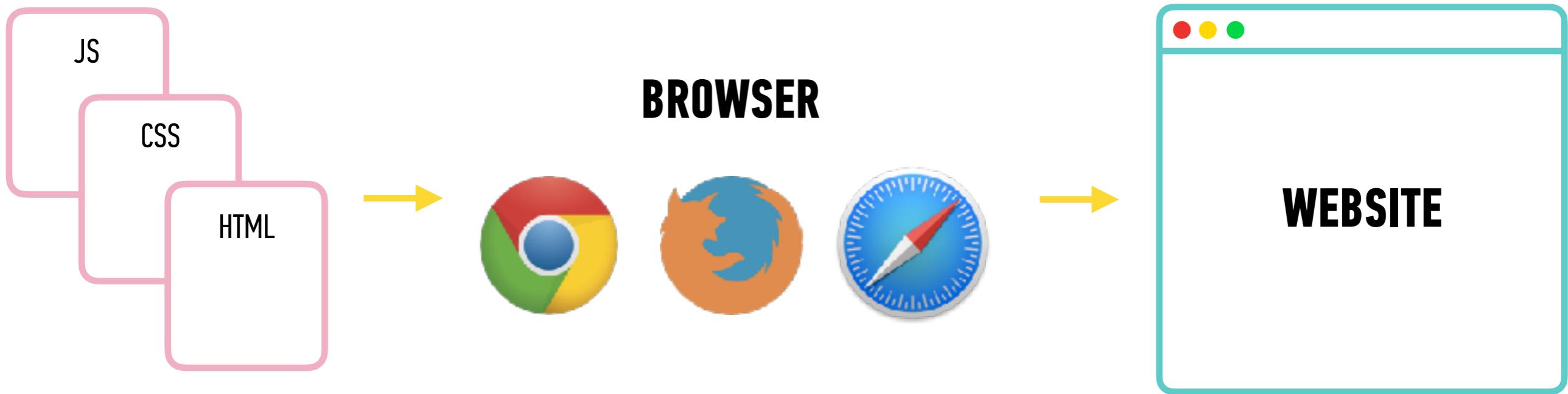
CLIENT AND SERVER

BROWSER

(Chrome, Firefox, Safari, etc.)



CLIENT AND SERVER



- ▶ Browsers are applications that read code files and use them to render a web page.
- ▶ Browsers only know how to interpret HTML, CSS, JavaScript.

HOW HTML, CSS, & JS FIT TOGETHER

THE FRONT END TRIO

Separation of responsibilities

HTML

Defines the structure and content of a page.

CSS

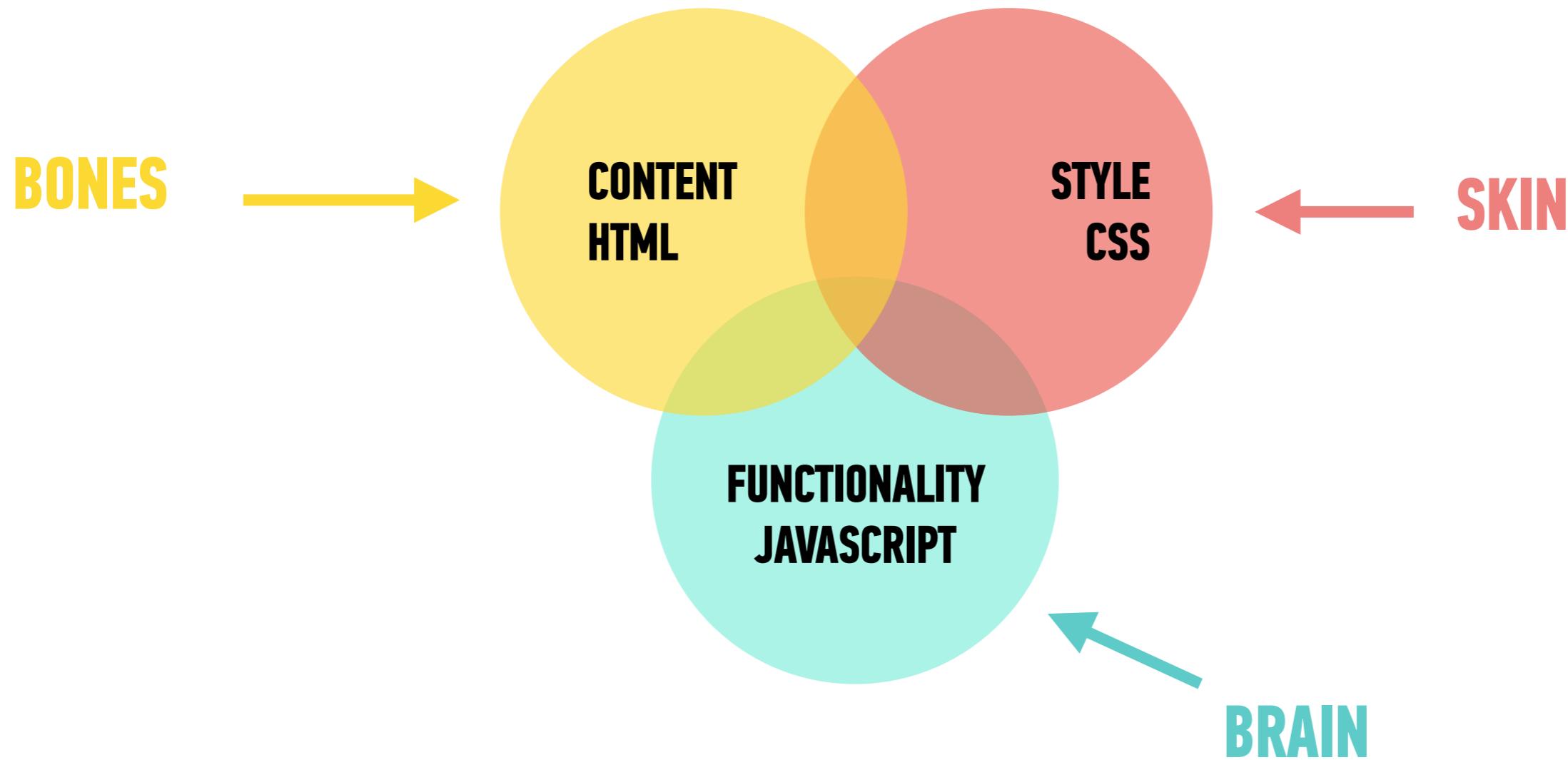
Defines the style, layout, and some simple behaviors.

JavaScript

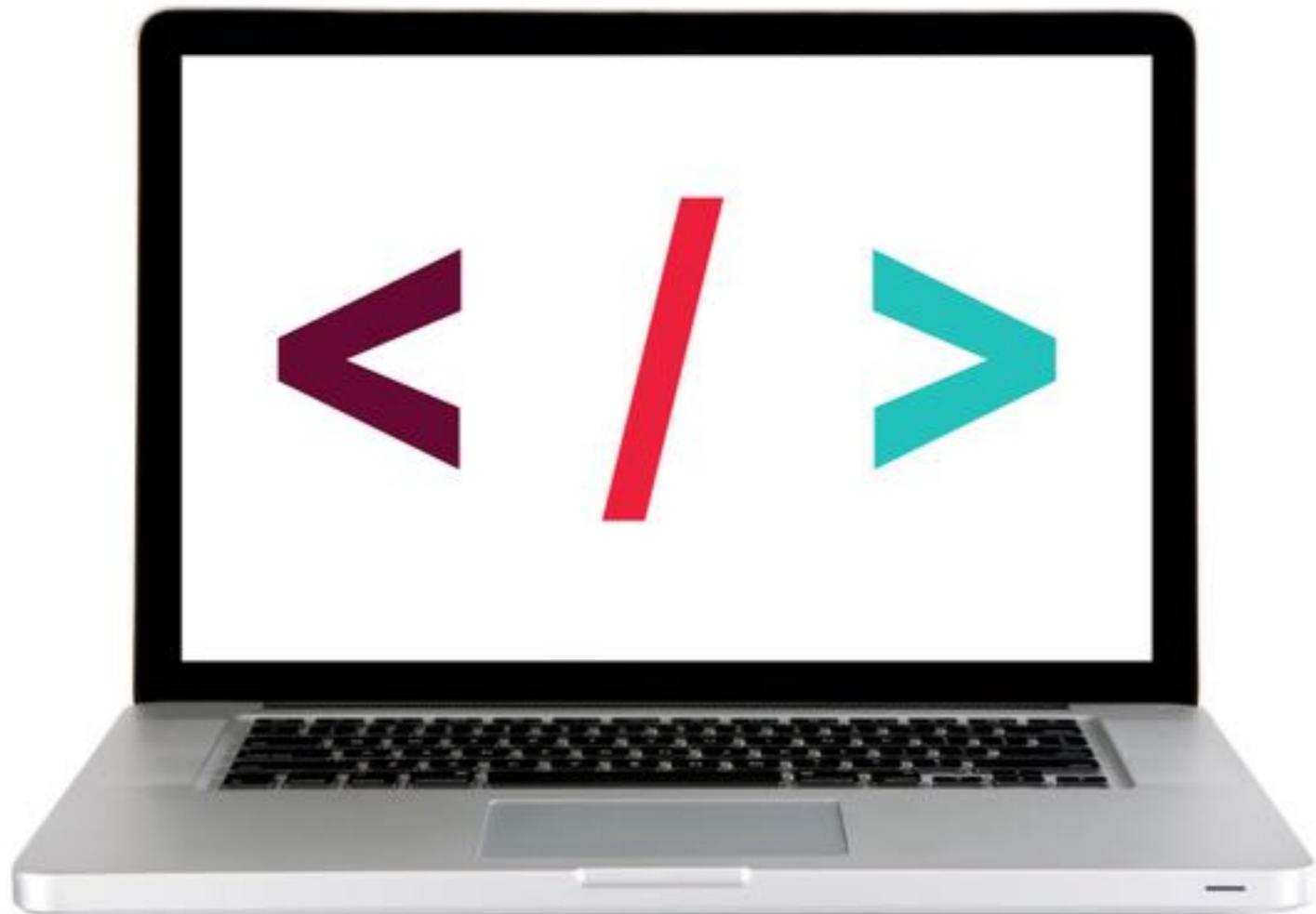
Allows for complex behaviors on a page.



THE TRIPLE SCOOP: STRUCTURE, STYLE, BEHAVIOR



DEMO: BANANA CAT



ACTIVITY: DISTINGUISH BETWEEN HTML, CSS, AND JS



DIRECTIONS

1. Visit hoodline.com.
2. Split up into groups of 2 or 3
3. Write down 1 example of HTML, 1 example of CSS, and one example of JS
4. We'll share with the class after!

HTML BASICS

HTML BASICS

WHAT IS HTML?

WHAT IS HTML?

≡ SECTIONS Q SEARCH

U.S. INTERNATIONAL ☰

LOGIN ☰

The New York Times

Monday, January 5, 2015 | Today's Paper | My Times | 20°F | Dow +1.80%

World U.S. Politics New York Business Opinion Technology Science Health Books Arts Style Food Home Travel Magazine Real Estate

New York City Police Sharply Cut Arrests for a Second Week

By J. DAVID GOODMAN and AL MACKIE with additional reporting by MICHAEL WALTERS

Police officers arrested less than half as many people and wrote more than 40 percent fewer summonses than in the same period a year ago, building on a dramatic drop in activity that began shortly after the murder of two uniformed patrol officers.

126 Comments

Republicans Say They'll Act Fast to Push Their Agenda

By JONATHAN HILLARD

Eager to show that it can govern well, the Republican Party that takes control of Congress beginning Tuesday is likely to begin by trying to quickly advance energy and health care legislation.

880 Comments

Afghan Cares for the Living by Carrying the Dead

By ZEINA AHN and TONY KARUMBA

Malik Abdul Hakin, who has lost two sons, is now a funeral director and returning the bodies of both Taliban and government casualties.

Home Schooling: More Pupils, Less Regulation



PHOTO: RICHARD DREW/THE NEW YORK TIMES

The Opinion Pages

When Skepticism Counts
Novelist David Bullock and others on the role of conspiracy theories in society.

Editorial: Race and Voting Rights in Ferguson

OP-ED COLUMNISTS

- Blow: Privilege of Arrest Without Incident
- Krugman: Presidents and the Economy

The Central Crisis in New York Education
By THE EDITORIAL BOARD
New York, which regards itself as a bastion of liberalism, has the most racially and economically segregated schools in the nation.

Editorial: Shifting Politics on the Death Penalty

Op-Ed: Losing the Fight Against Tuberculosis

Watching

261 A judge in Wisconsin ordered a trial for Dustin Diamond, best known as Screech from "Saved by the Bell," on charges stemming from a bar fight on Christmas night.
Milwaukee Journal Sentinel

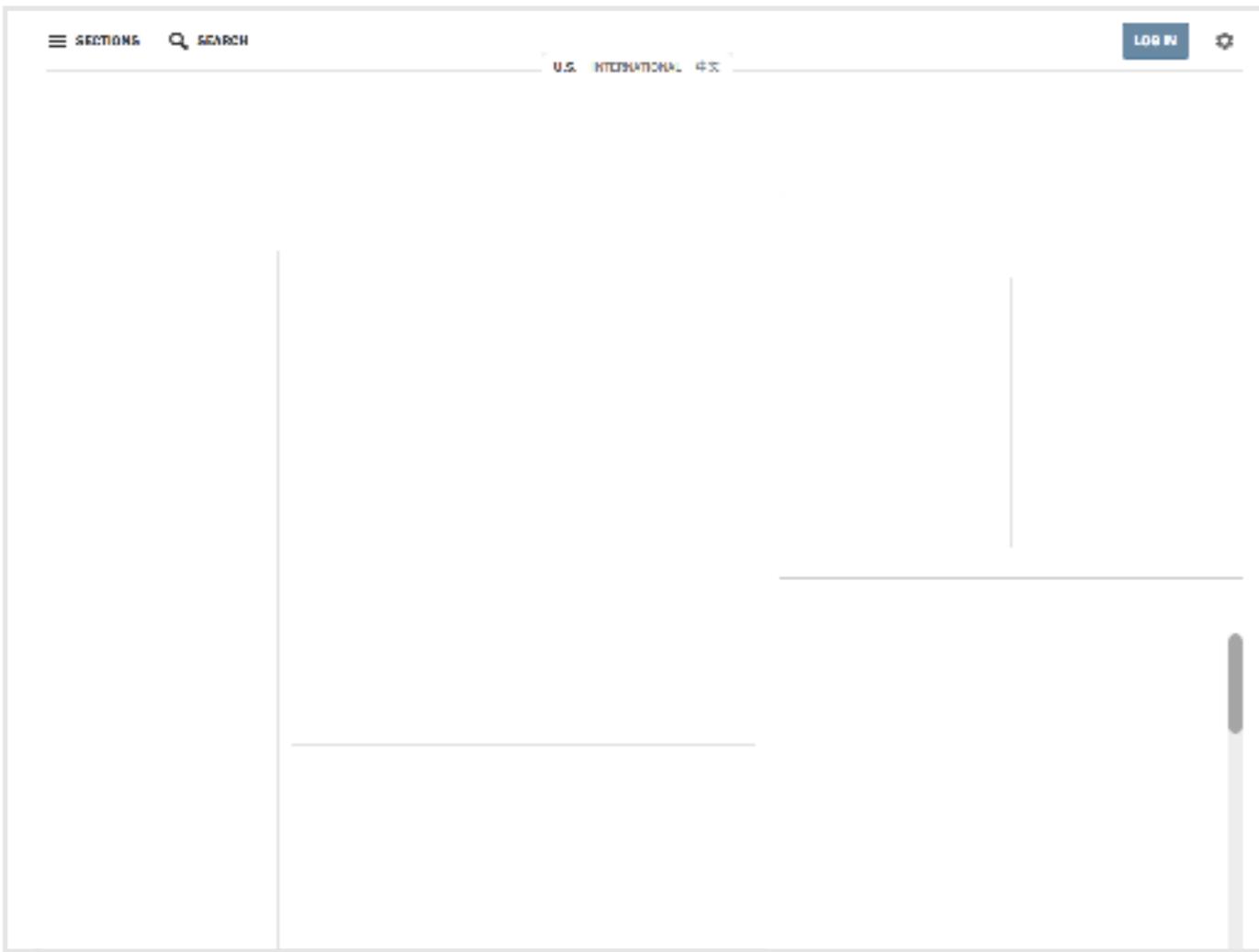


221 Markets tumbled in Europe and the U.S. as the cost of oil fell, rippling around the world.
The New York Times

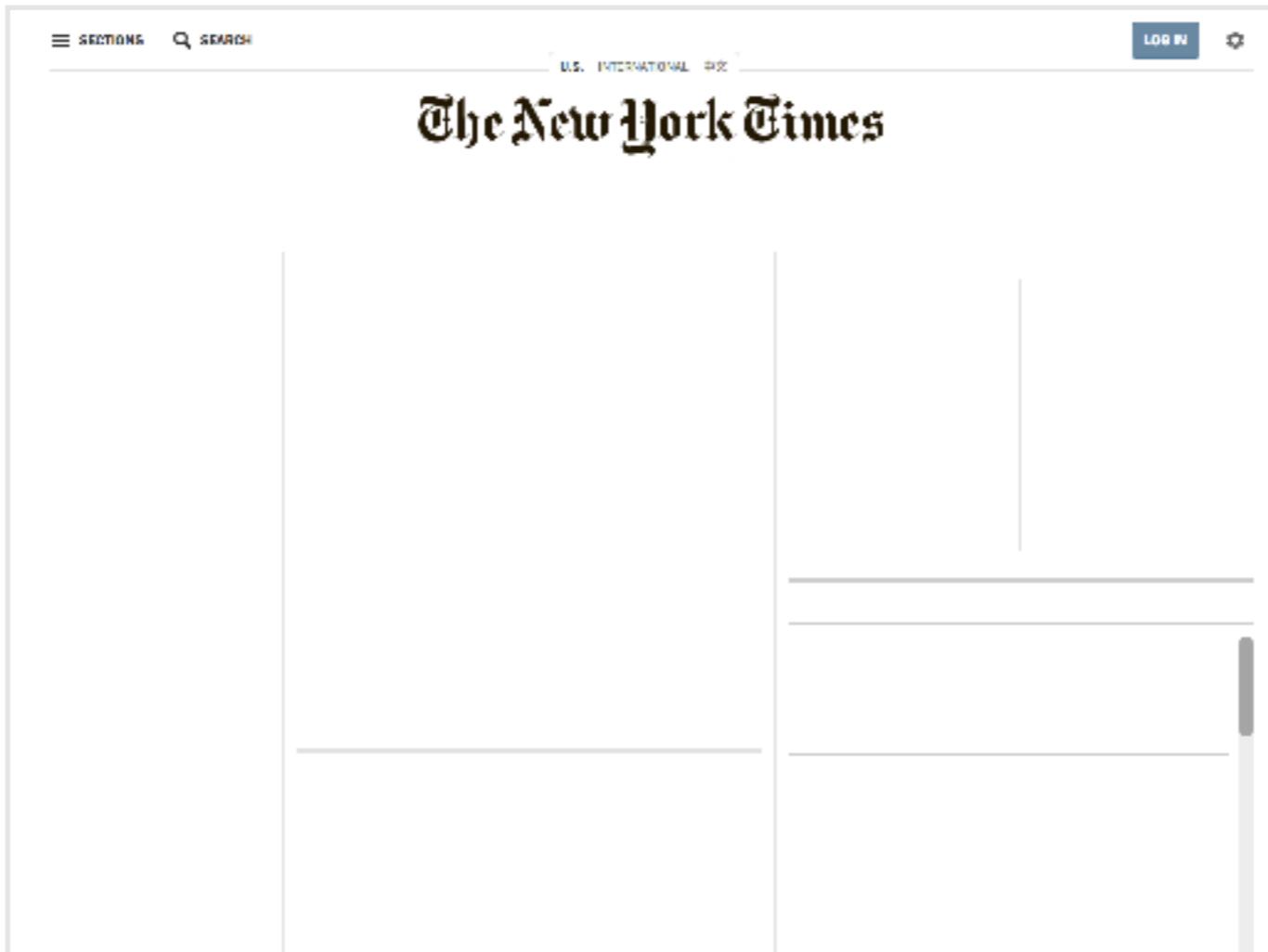
251 Gov. Jerry Brown, already California's longest-serving governor, will be sworn in Monday for his fourth term. He has said he aims to shore up the state's fiscal numbers.
The Los Angeles Times



WHAT IS HTML?



WHAT IS HTML?



WHAT IS HTML?



The screenshot shows the front page of The New York Times website. At the top, there is a navigation bar with 'SECTIONS' and a search icon. Below the navigation is a language selector showing 'U.S.', 'INTERNATIONAL', and '简体中文'. On the right side of the header are 'LOG IN' and a gear icon.

The New York Times

New York City Police Sharply Cut Arrests for a Second Week

Republicans Say They'll Act Fast to Push Their Agenda

Bess Myerson, a Beauty Queen Who Reigned in Politics, Dies

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When Skepticism Counts The Central Crisis in New York Education

Watching

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≡ SECTIONS SEARCH

U.S. INTERNATIONAL 中文

The New York Times

Monday, January 5, 2015 Today's Paper Video 36°F Dow +1.80%

New York City Police Sharply Cut Arrests for a Second Week

By J. DAVID GOODMAN and AL BAKER 53 minutes ago

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208 Comments

Republicans Say They'll Act Fast to Push Their Agenda

By CARL HULSE 12:07 PM ET

Eager to show that it can govern well, the Republican Party that takes control of Congress beginning Tuesday is likely to begin by trying to quickly advance energy and health care legislation.

830 Comments

Bess Myerson, a Beauty Queen Who Reigned in Politics, Dies

Ms. Myerson, the first Jewish Miss America, was one of a select group of American figures to parlay pop culture celebrity into positions of public influence. She was 90.

By ENID NEMY and WILLIAM McDONALD

Afghan Cares for the Living by Carrying the Dead

By AZAM AHMED 12:07 PM ET

Malik Abdul Hakim, who has lost two sons, is revered for collecting and returning the bodies of both Taliban and government casualties.

Home Schooling: More Pupils, Less Regulation

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Milwaukee Journal Sentinel >

22m **Markets tumbled in Europe and the U.S.** as the declining price of oil sent ripples around the world.
The New York Times

25m **Gov. Jerry Brown**, already California's longest-serving governor, will be sworn in Monday for his fourth term. He has said he aims to shore up the state's fiscal turnaround.
The Los Angeles Times >

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≡ SECTIONS SEARCH

U.S. INTERNATIONAL 中文

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The New York Times

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Fred R. Conrad/The New York Times

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The New York Times

Monday, January 5, 2015 Today's Paper | in Video | ☰ 20°F Dow +0.80%

World U.S. Politics New York Business Opinion Technology Science Health Books Arts Style Food Home Travel Magazine Real Estate

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By J. DAVID GOODMAN and AL HARRIS JR. Updated 10:00 AM ET

Police officers arrested less than half as many people and wrote more than 40 percent fewer summonses than in the same period a year ago, building on a dramatic drop in activity that began shortly after the murder of two uniformed patrol officers.

120 comments

Republicans Say They'll Act Fast to Push Their Agenda

By CANDICE HILLING

Eager to show that it can govern well, the Republican Party that takes control of Congress beginning Tuesday is likely to begin by trying to quickly advance energy and health care legislation.

140 comments

Afghan Cures for the Living by Carrying the Dead

By ZAHRA AHMAD TORAYI

Malik Abdul Hakin, who has lost two sons, is known for collecting and returning the bodies of both Taliban and government casualties.

Home Schooling: More Pupils, Less Regulation



PHOTO: ERIC R. CARLSON/THE NEW YORK TIMES

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By KELLY HENRY and WILLIAM MEDINA

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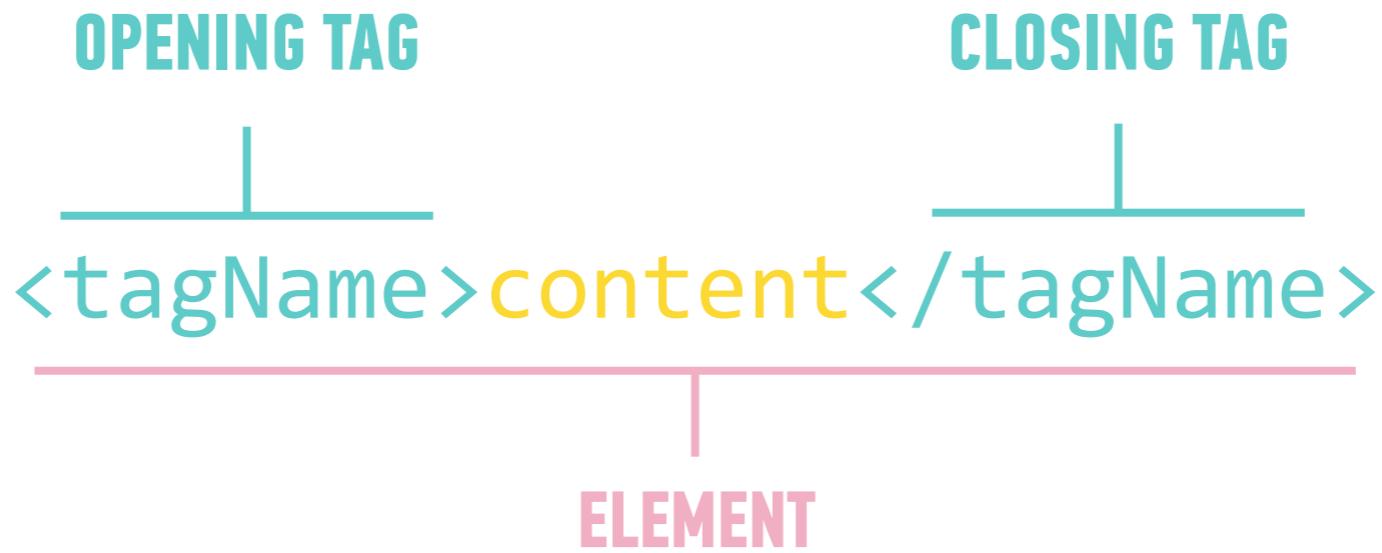
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The Los Angeles Times

STRUCTURAL MARKUP

HOW DO I WRITE HTML?



STRUCTURAL TAGS — HEADINGS & PARAGRAPHS

ELEMENT	DESCRIPTION	EXAMPLE
h1	Main headings	<code><h1>The Explorer</h1></code>
h2 - h6	Subheadings	<code><h2>Articles</h2></code>
p	Paragraph of text	<code><p>This is a really cool site.</p></code>

STRUCTURAL TAGS — UNORDERED LISTS

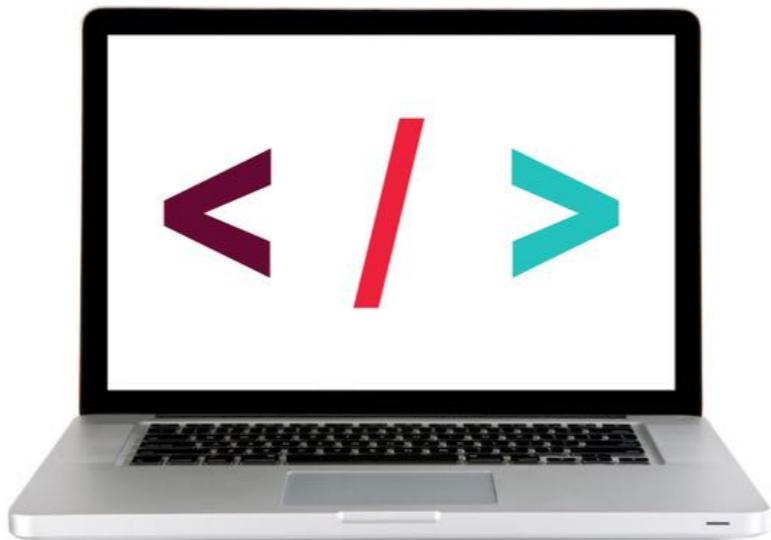
ELEMENT	DESCRIPTION	EXAMPLE
ul	Unordered List	<pre> Monday Tuesday Wednesday </pre>
li	List Item	

STRUCTURAL TAGS — UNORDERED LISTS

Elements can be nested inside other elements.

```
<ul>
    <li>Monday</li>
    <li>Tuesday</li>
    <li>Wednesday</li>
</ul>
```

DEMO: HTML STRUCTURAL MARKUP



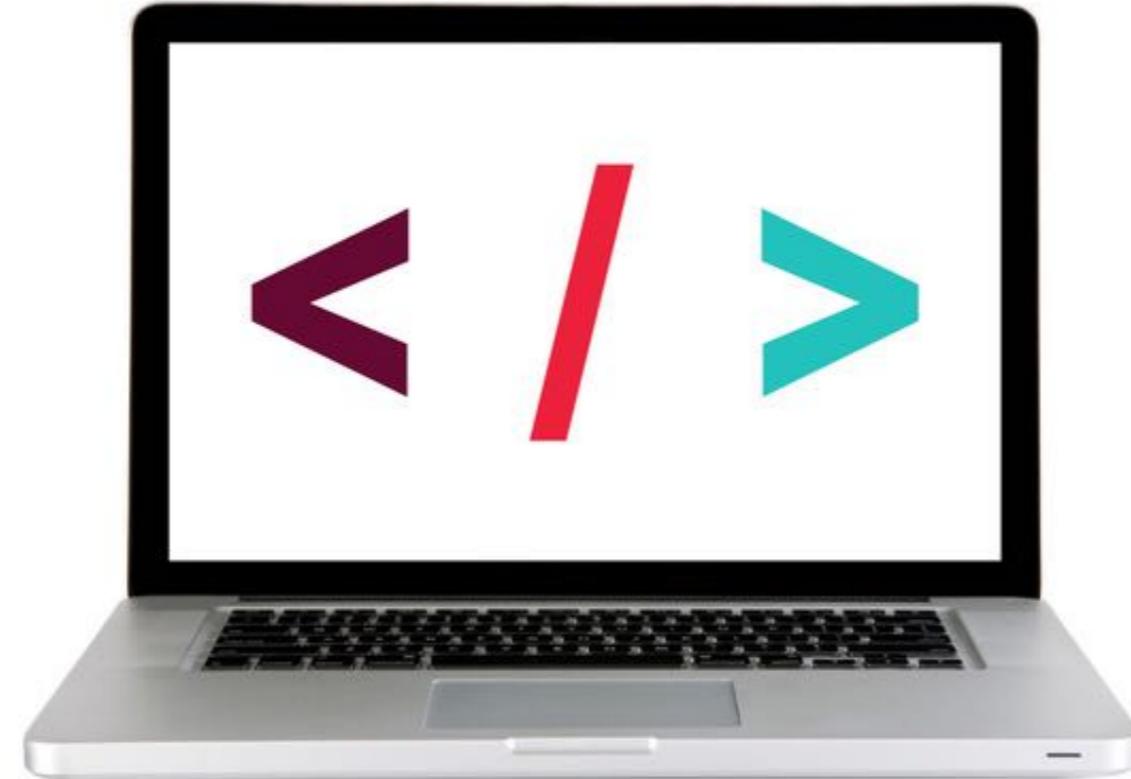
Create a free CodePen Account

<http://codepen.io/>

WHY CODEPEN?

- ▶ Allows you to play around with HTML/CSS/JS in real time
- ▶ No computer setup
- ▶ Inspiration - look at other peoples' cool projects
- ▶ Copy and save “pens” that you like
- ▶ We'll be using it for **in-class demos and exercises**

DEMO: HTML STRUCTURAL MARKUP



<https://codepen.io/svodnik/pen/VxrRYP>

ATTRIBUTES — LINKS AND IMAGES

WHAT IF I WANT TO ADD AN IMAGE OR LINK?

We could try something like...

<a>Click here

But how would the website know **where** to link to?

But how would the website know **what** to display?

HTML ELEMENTS HAVE ATTRIBUTES!

```
<tagName attribute="attributeValue">content</tagName>
```

ATTRIBUTES — EXAMPLE

```
<pizza crust="thin" toppings="pepperoni"></pizza>
```

ANCHORS (“LINKS”)

- ▶ Specify which page you want to link using the `href` attribute.
- ▶ Users can click on anything between the opening and closing `<a>` tags.

```
<a href="http://www.amazon.com/">Amazon</a>
```

PAGE THE LINK TAKES
YOU TO

CLICKABLE TEXT

IMAGES

LINKING TO AN IMAGE IN MY WEBSITE FOLDER:

```

```

PATH TO IMAGE FILE

TEXT DESCRIPTION

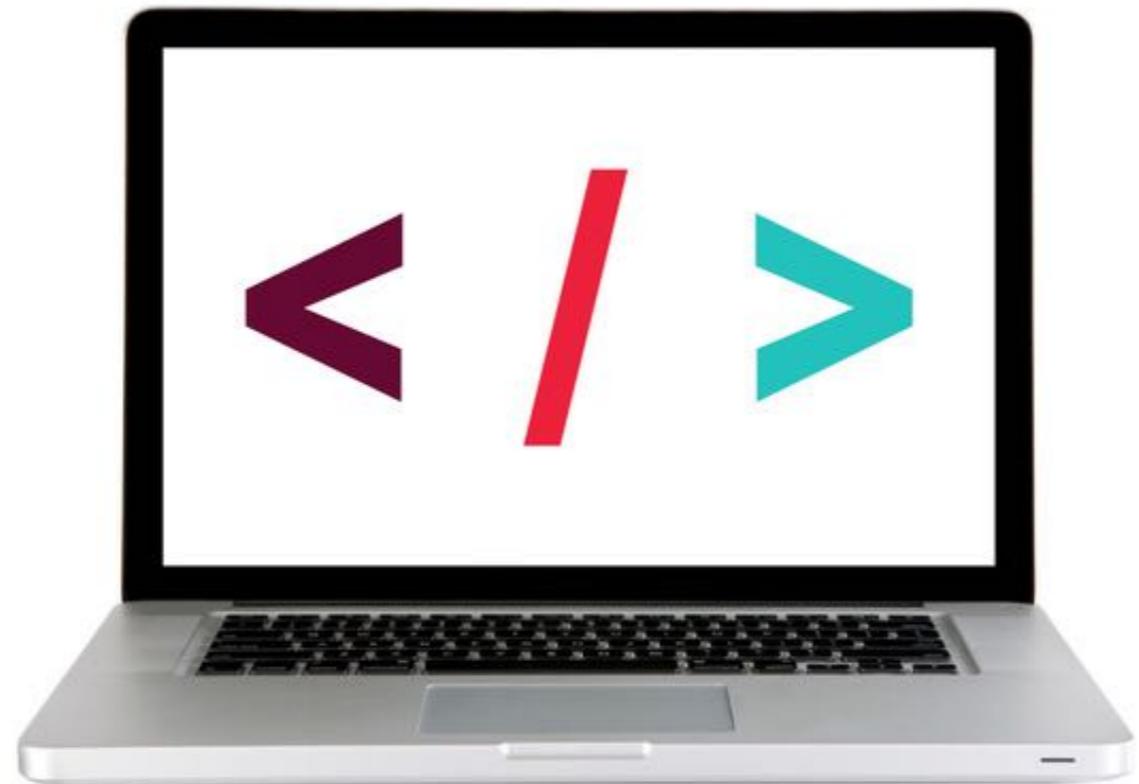
LINKING TO AN IMAGE ONLINE

```

```

PATH TO IMAGE FILE INCLUDING HTTP OR HTTPS

DEMO: HTML ATTRIBUTES, LINKS, AND IMAGES



<https://codepen.io/svodnik/pen/wjPOaX>

LAB: PRACTICE WRITING HTML



DIRECTIONS

1. Add HTML to structure the text in this [CodePen](#)
2. Use [this image](#) as a guide

BONUS:

1. Google the `hr` element. Look at 2 - 3 sites for examples and see if you can figure out what it does and how you would add it to your pages.

CSS BASICS

HTML

WHAT IS CSS?

WHAT IS CSS?



A demonstration of what can be accomplished through CSS-based design. Select any style sheet from the list to load it into this page.

Download the example [HTML FILE](#) and [CSS FILE](#)

THE ROAD TO ENLIGHTENMENT

Littering a dark and decayed road lay the past relics of browser-specific tags, incompatible DOMs, broken CSS support, and abandoned browsers.

We must clear the mind of the past. Web enlightenment has been achieved thanks to the tireless efforts of folk like the W3C, WASC, and the major browser creators.

The CSS Zen Garden invites you to relax and meditate on the important

MID CENTURY
MODERN
by Andrew Lehman

GARMENTS
by Dan Mill

STEFFI
by Steffen Kneller

APOTHECARY
by Trent Walton

<http://www.csszengarden.com/>

WHAT IS CSS?

We use CSS to add styles to the HTML elements on our page.

What we are styling
(selector)



```
p {  
    color: blue;  
    font-size: 20px;  
    font-style: italic;  
    line-height: 22px;  
}
```

A yellow callout box contains a snippet of CSS code. On the left, a teal arrow points to the word 'p' which is labeled 'What we are styling (selector)'. On the right, a teal bracket encloses the entire block of code, which is labeled 'Styles!'.

Styles!

COLOR

PROPERTY	VALUE	DESCRIPTION	EXAMPLE
color	color	Text color	color: #22475E;
background-color	color	Background color	background-color: green;

Muir Woods

Keffiyeh next level retro, brunch sriracha dreamcatcher mixtape jean shorts XOXO master cleanse keytar Kickstarter. Neutra kale chips Vice health goth ethical, flannel single-origin coffee stumptown meditation Kickstarter mumblecore yr cronut master cleanse keytar.

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Keffiyeh next level retro, brunch sriracha dreamcatcher mixtape jean shorts XOXO master cleanse keytar Kickstarter. Neutra kale chips Vice health goth ethical, flannel single-origin coffee stumptown meditation Kickstarter mumblecore yr cronut master cleanse keytar.

```
body {  
  background-color: #22475E;  
}
```

```
h1, p {  
  color: #98D2BF;  
}
```

TYPEFACE TERMINOLOGY — PART 1

PROPERTY	VALUES	EXAMPLE
text-align	left, center, right, justify	text-align: center;
text-transform	uppercase, lowercase, capitalize	text-transform: uppercase;
text-decoration	none, <u>underline</u>	text-decoration: underline;
line-height	px value	line-height: 22px;

TYPEFACE TERMINOLOGY — PART 2

PROPERTY	VALUES	EXAMPLE
font-weight	normal, bold	font-weight: bold;
font-style	regular, italic	font-style: italic;
font-size	px value	font-size: 20px;

FONT FAMILY

PROPERTY	VALUES	EXAMPLE
font-family	"font name", sans-serif, serif	font-family: "Georgia", serif;

Arial Georgia

- We can provide a comma-separated list for the value.
- The browser will display the first font that is available on that computer.

ACTIVITY: ADD CSS TO YOUR HTML



DIRECTIONS

1. Revisit your [Codepen](#)
2. Write CSS to replicate [this mock](#)
3. Google anything you can't figure out. Be sure to include "html" or "css" in the search query.

BONUS: Write CSS to replicate [this advanced mock](#).

HTML BASICS

LEARNING OBJECTIVES

- ▶ Articulate the role of HTML, CSS and JavaScript in front-end development.
- ▶ Recognize the different roles and responsibilities in web development.
- ▶ Apply and experiment with HTML tags.
- ▶ Use CSS to add styles to a webpage.

WEEKLY OVERVIEW

WEEK 1

Intro to HTML / Intro to CSS

WEEK 2

CSS Selectors / Layout

WEEK 3

Layout Lab / Grid Systems & Wireframing

Exit Tickets!

Class #1