#### FRONT-END WEB DEVELOPMENT

**SNACKS & DESIGN** 

# TODAY! ADRIANA & JAMIE

(GOOGLE SHEET IN SLACK)

# MEET THE INSTRUCTIONAL TEAM



ADRIANA CASTANEDA — INSTRUCTOR adriana.lcs316@gmail.com



JAMIE PILGRIM — TA

JAMIELEEPILGRIM@GMAIL.CC

# MEET YOUR CLASSMATES

**HELLO!** 

NAME,

WHAT YOU DO NOW,

WHAT INSPIRED YOU TO TAKE THE

CLASS,

ONE INTERESTING THING SOMEONE MAY NOT KNOW ABOUT YOU.

YOU + A NEIGHBOR

## **HOMEWORK DEADLINE**

# SUNDAYS @ 11:59PM

# **OFFICE HOURS**

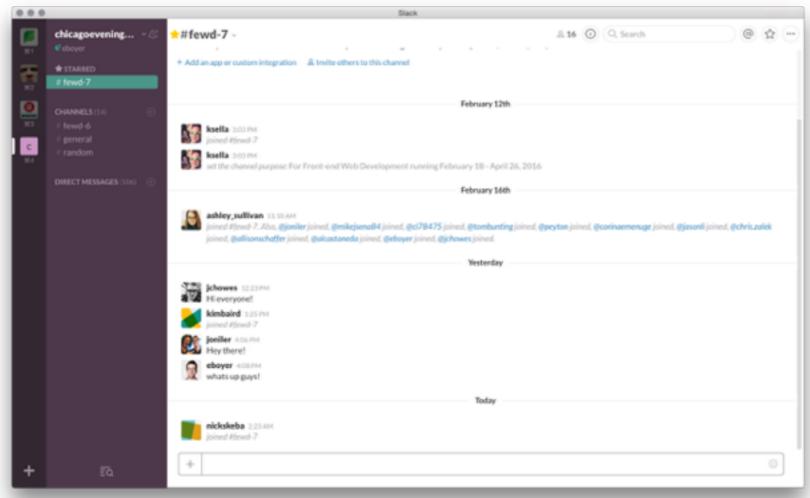
# TBD-WHEN JAMIE 222

# **SNACK CALENDAR**

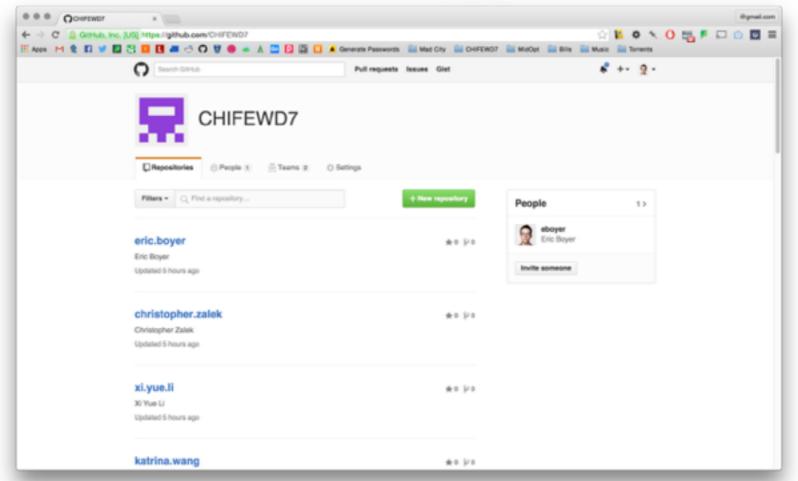
# **SIGN UP HERE**

# TOUR OF THE TOOLS











```
Diam'r
TABLE
         1000
         I STATE PROPERTY.
           to be about a
       T MADERIAL
                                                                                                                                                                                                                                Birth and Maphiel and 241
             1-E-hallon b.
                                                                                                                                                                                                                                                             I STREET,
             I BURNING S
             1 SHOW
             Talamen.
             14 North
                                                                                                                                                                                                                                                                   M.Asseintle
             A REPORT OF
             130,000-000
                                                                                                                                                                                                                                                                 Steam or performed Recognitionally
steam or performed registeration
           VASTIGATE.
             1 kmmi
                                                                                                                                                                                                                                                                 and it was been been be-
               1.57900
           - Langery
                                                                                                                                                                                                                                                                 If he are to be proposed to the second section of the section is
   # Charles
       A motor
                                                                                                                                                                                                                                                               standing bitter
       7 800
       ...
       Street.
       - per
                                                                                                                                                                                                                                                                   menetile opel report between a privipe blancom.
       7 864
         N. Maryland
                                                                                                                                                                                                                                                               VANDAGES A RE
           distant.
                                                                                                                                                                                            Witness in the Control of the Contro
           -
         -
       **
                                                                                                                                                                                                                                                                 MANAGEMENT COMMENT OF PERSONS ASSESSED.
                                                                                                                                                                                                                                                            Company of the contract of the
                                                                                                                                                                                                                                                             THE PARTY OF THE P
```

### DASHBOARD

Instructors Lessons Resources

# Welcome To FEWD

# LET'S GET STARTED!

# HIML BASICS

### **HTML BASICS**

# LEARNING OBJECTIVES

- Provide an overview of the world of web development
- Articulate the role of HTML, CSS and JavaScript in frontend development.
- Recognize the different roles and responsibilities in web development.
- Apply and experiment with HTML tags.

### **AGENDA**



- Web Development Overview
- Intro to Front-End Development
- Intro to HTML
- Lab Time

# WEB DEVELOPMENT OVERVIEW

# WHAT IS FRONT END WEB DEVELOPMENT?

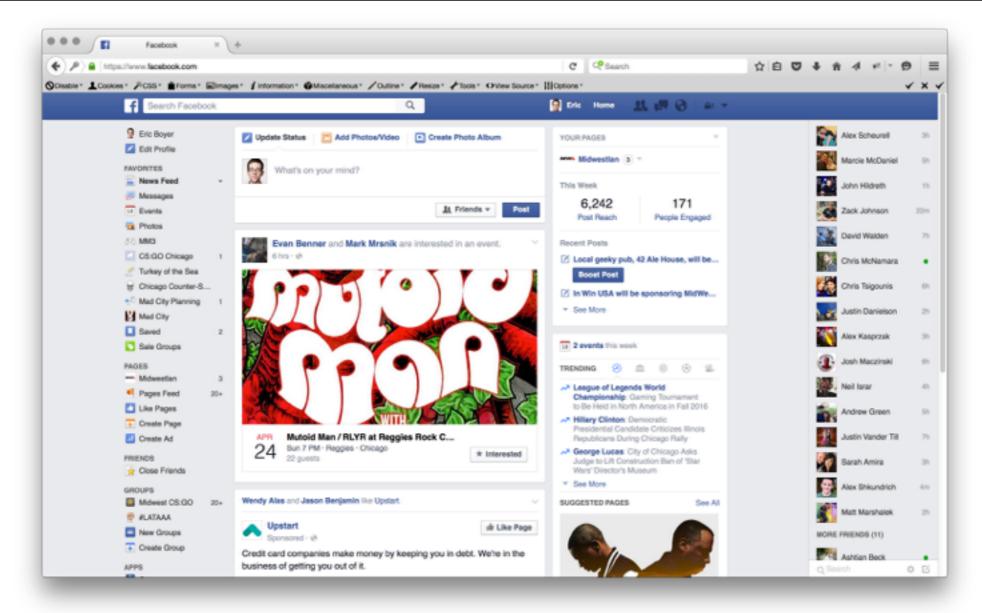
# **GYHW**

- Make ideas come to life
- Opportunities
- Communication
- Customize Websites
- Help Others
- Jobs
- Leads to other tech related interests

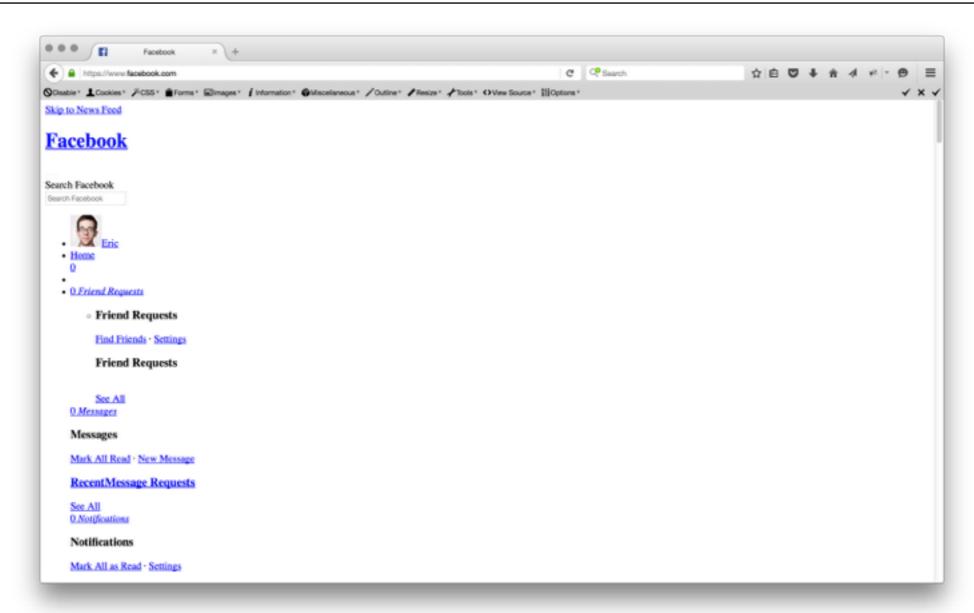
# **WHY?**

"I think everybody in this country should learn how to program a computer because it teaches you how to think." — Steve Jobs

# **GYHW**



# **GYHW**



# HOW DOES THE INTERNET WORK?

### **CLIENT AND SERVER**





## **INTERNET PROTOCOL**



### **CLIENT AND SERVER**



**CLIENT SERVER** 

IP Address: 192.168.1.72



**SERVER** 

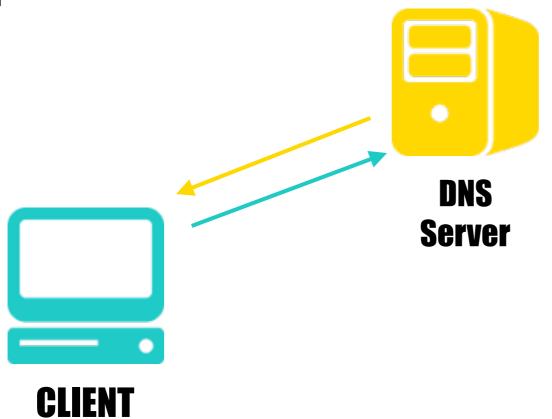
IP Address: 31.13.74.1

#### **DNS SERVER — URL -> IP ADDRESS**

Client (me): I need directions to www.facebook.com"

**DNS Server: "The domain name www.facebook.com maps to this IP address:** 

31.13.74.1"

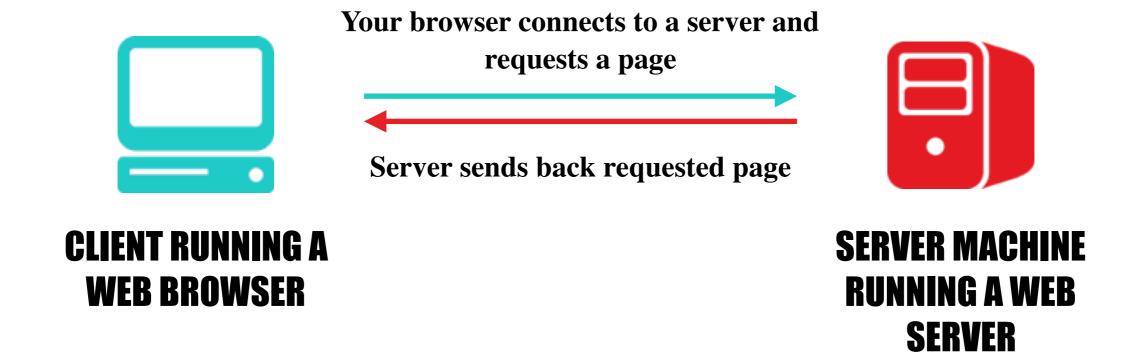




### **HYPER TEXT TRANSFER PROTOCOL**



## **REQUEST/RESPONSE**

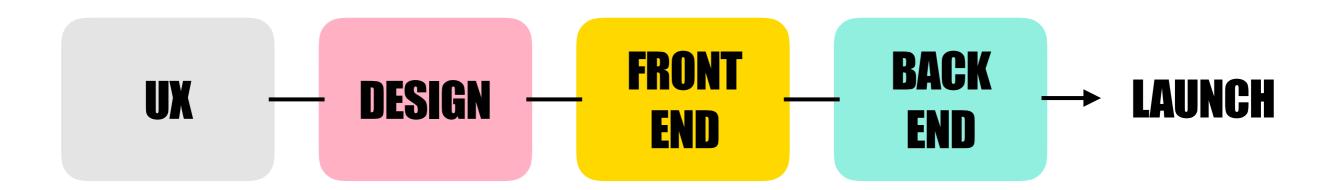


#### **HOW CAN YOU DO THIS?**

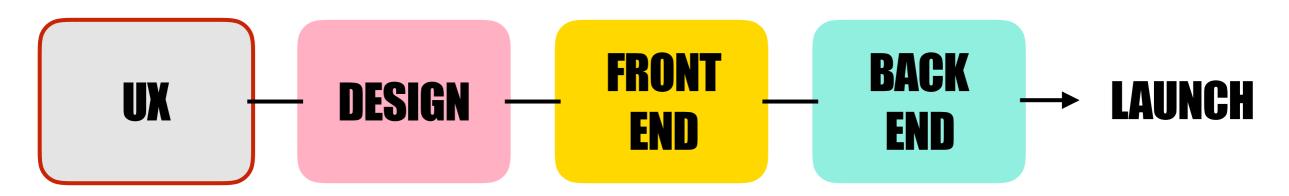
# DOMAIN NAME (GANDI.NET, NAME.COM) HOSTING (NAME.COM, WEBFACTION.COM)

# WEB PRODUCTION WORKFLOW

### **WEB PRODUCTION WORKFLOW**

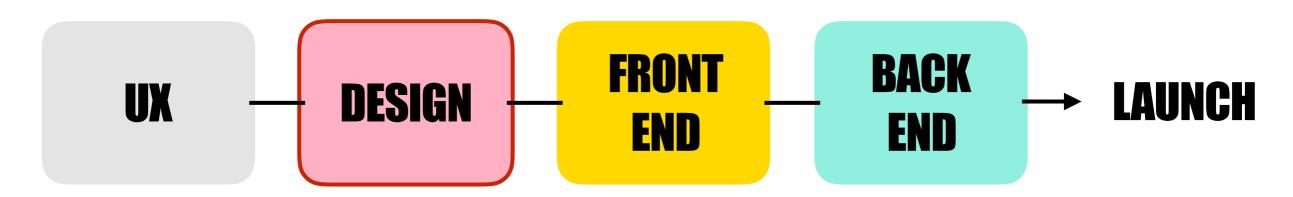


#### **WEB PRODUCTION WORKFLOW — UX**



- Figures out how people are going to use a webpage
- Try to make it as easy as possible for people to use a webpage while achieving the purpose of the webpage.
- Main deliverables: wireframes, flow charts

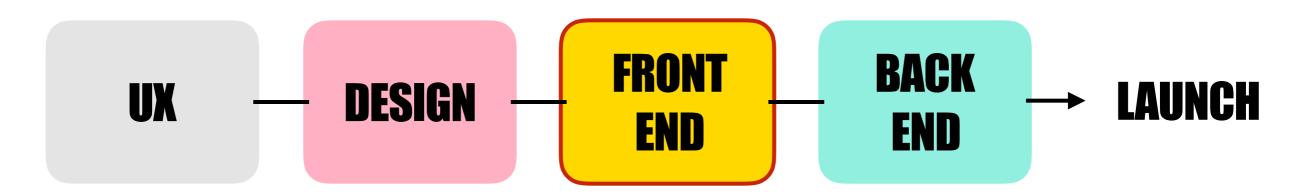
#### **WEB PRODUCTION WORKFLOW** — **DESIGN**



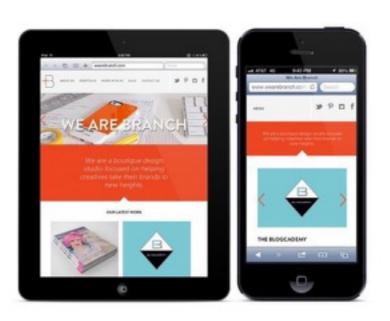
- Referred to as UI Designer/Web Designer
- Take the wireframes and make them pretty
- Logo/Fonts/Color palettes/Layout



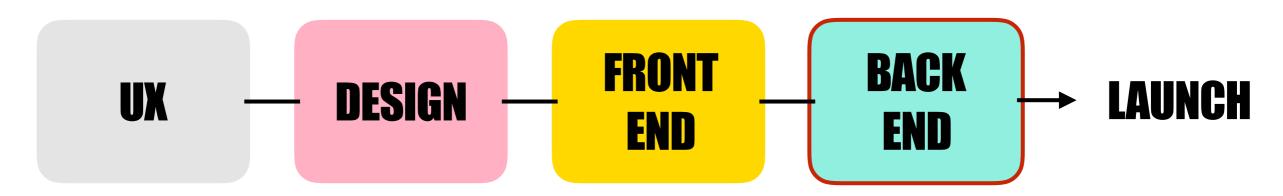
#### **WEB PRODUCTION WORKFLOW** — FRONT END



- Take the design and turn it into code and assets
- Uses HTML/CSS to create the structure for a page and add styles
- Add interactions with JavaScript
- Other responsibilities: accessibility, performance, cross-browser and cross-device functionality



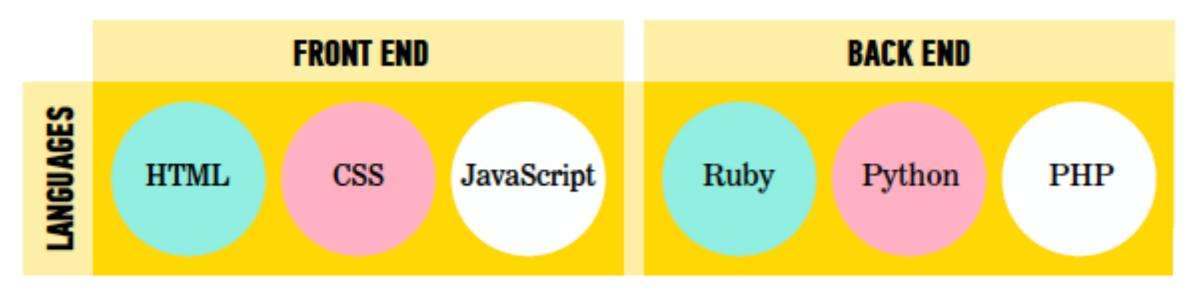
# **WEB PRODUCTION WORKFLOW — BACK END**



- Give the application/webpage a 'memory'
- Handle page request and send back the right page
- Talking to the database getting data, adding and updating data
- Authenticate users
- Communicate with APIs



# FRONT END VS BACK END



...and many, many more

# HTML CSS JAVASCRIPT

# EVERYTHING THAT YOU SEE AND INTERACT WITH WHEN USING THE WEB IS HTML, CSS, AND JAVASCRIPT.

# HTML CSS JAVASCRIPT

# **CHALLENGES**

DEVICE RESOLUTIONS (RETINA, 4K, LOW RESOLUTIONS)
DEVICE SIZES (PHONE, TABLET, DESKTOP)
BROWSERS (FIREFOX, CHROME, SAFARI,
INTERNET EXPLORER 7, 8, 9, MICROSOFT EDGE)
PERFORMANCE

# **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

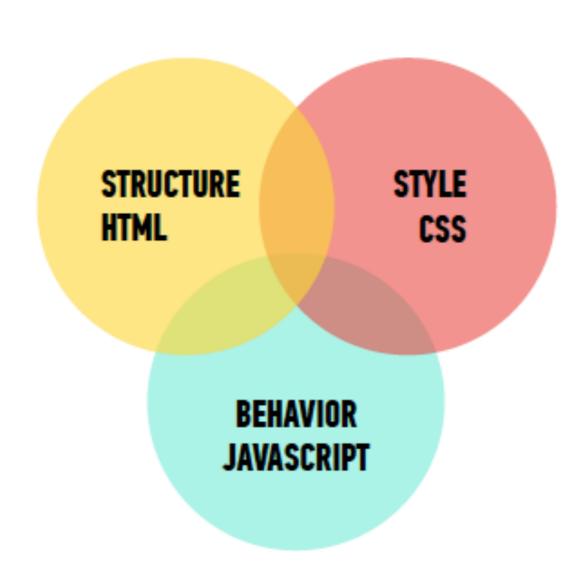
1 min 1. Turn to partner and discuss

2 min 2. Share with rest of class

# INTRO TO FRONT-END WEB DEVELOPMENT

# THE THREE AMIGOS

- ► HTML = Noun
- CSS = Adjective
- Javascript = Verb



# HTML

# What is HTML?

- HyperText Markup Language
- Describes the structure of a webpage
- Originally designed to share scientific research papers

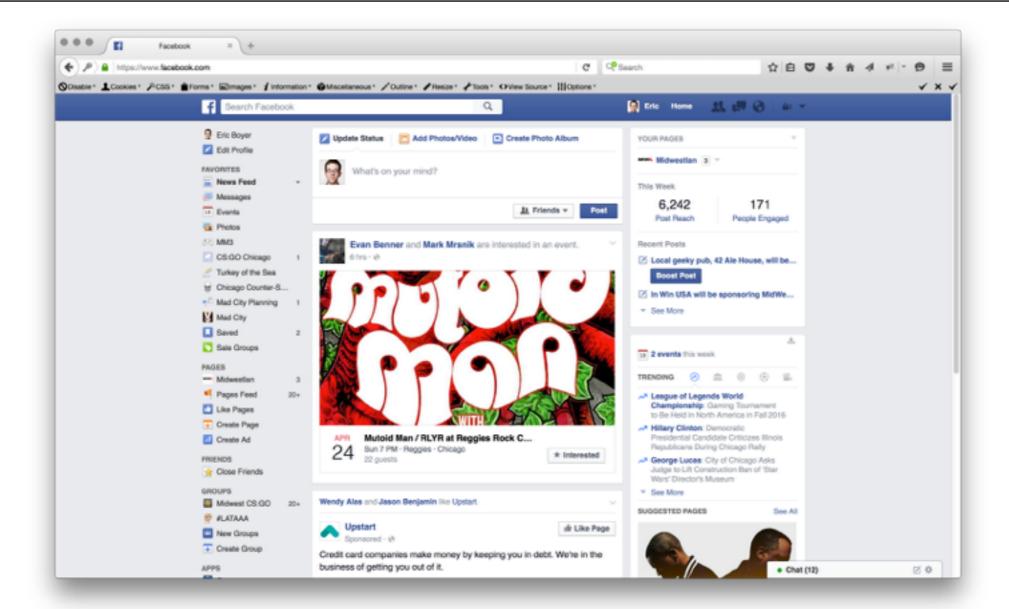
# HTML

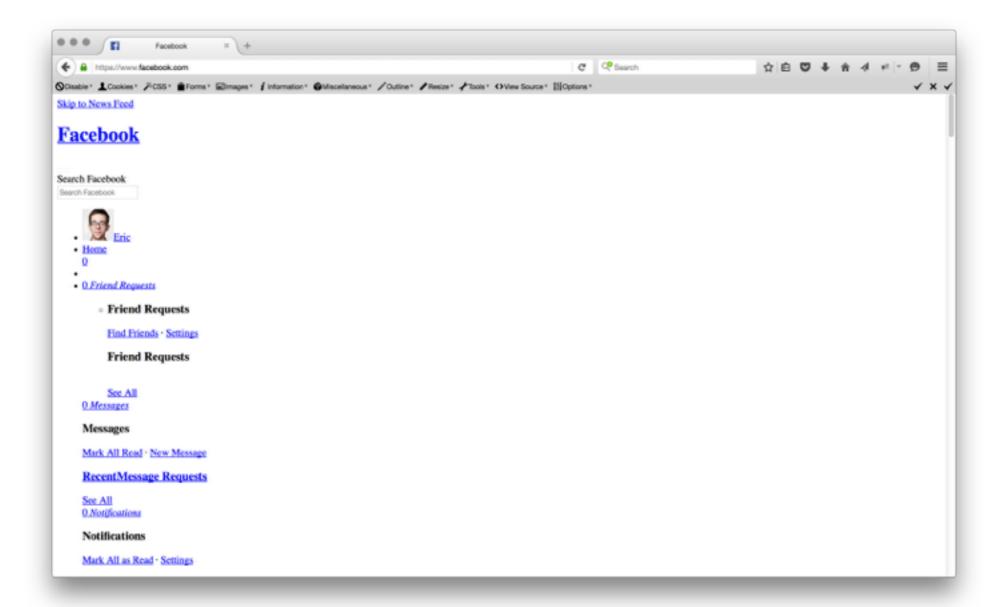
# HTML describes the organization and structure of pages

- I. Background of 1893 Columbian Exposition
  - A. Continued tradition of big fairs
    - 1. Previous world's fairs
      - a. London and the Crystal Palace, 1851
      - b. Philadelphia, 1876
    - 2. Chicago fair to be larger than earlier fairs
  - B. Emphasized cultural achievements
    - 1. Planners D. H. Burnham and F. L. Olmsted
    - Nation's top artists, inventors, industrialists
- II. Background of George W. G. Ferris

# HTML

```
<!DOCTYPE html>
<html>
 <head>
  <title> This is a Web Page </title>
 </head>
 <body>
  This is a paragraph about web pages. 
  <a href="...."> This is a link to another page. </a>
 </body>
</html>
```

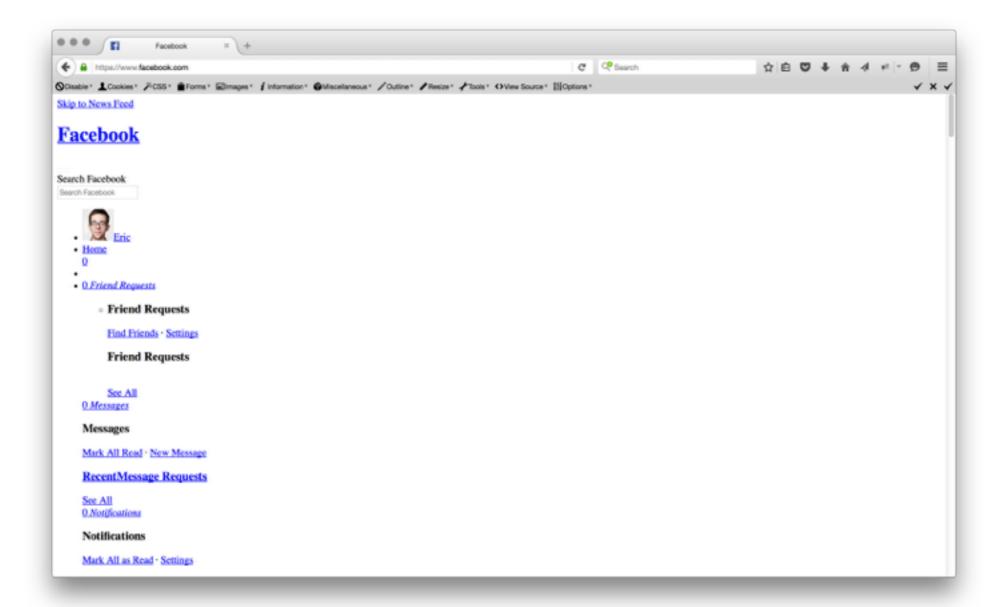


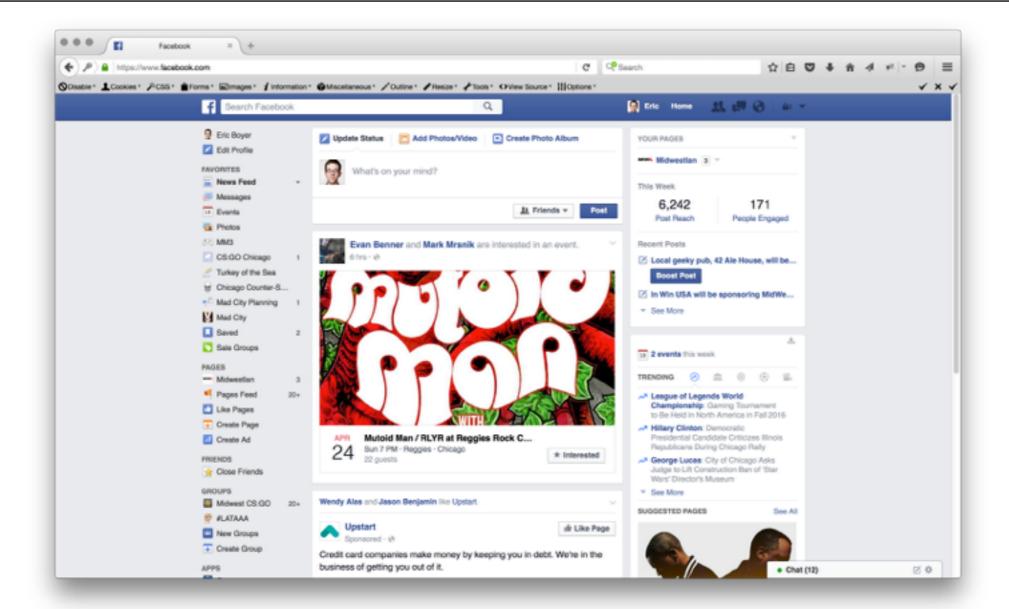


# **WHAT IS CSS?**

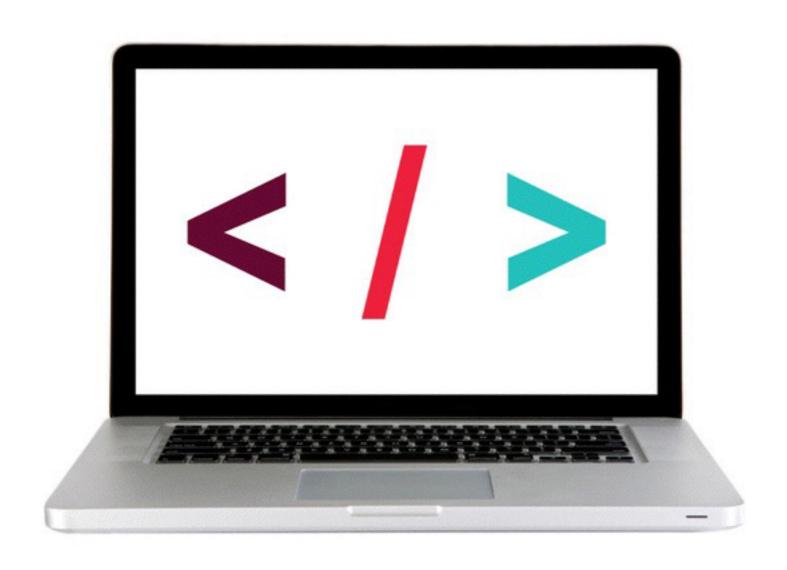
CSS associates style rules with HTML elements

```
body {
font-family: Arial;
color: white;
background-color: blue;
}
```





# LET'S TAKE A CLOSER LOOK



# WHAT IS JAVASCRIPT

- Javascript defines how content behaves
- Interactions and animations
- Heavily used in single-page web apps

```
var color = prompt("What is your favorite color?");
document.getElementsByTagName('h1')[0].innerHTML = color
```

# **JQUERY IS YOUR FRIEND**

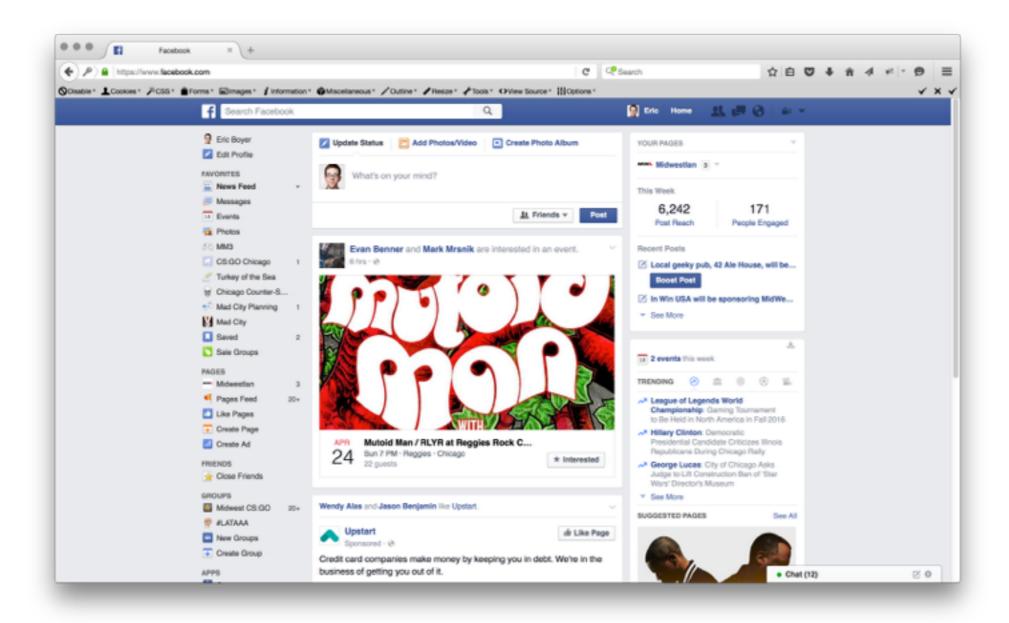
Fast, small, feature-rich JavaScript library

```
Javascript
```

```
document.getElementsByTagName('h1')[0].innerHTML = color
```

```
jQuery
$('h1').html(color);
```

# WHAT IS JS



# WHAT IS JS



# LET'S GET EVERYTHING SET UP!



**Download here** 

**SUBLIME TEXT 3** 

**CHROME** 

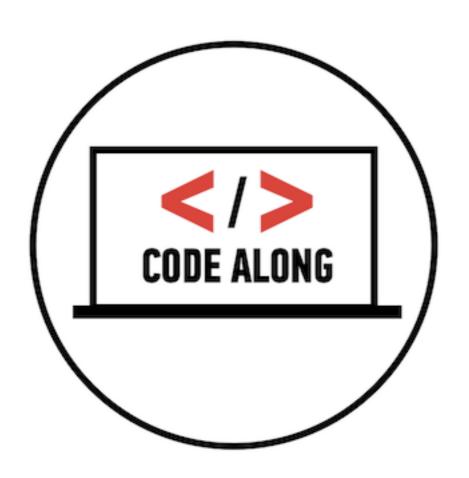
**Download here** 

PACKAGE CONTROL

**Install here** 

To open package control:

command + shift + p





Monday, January 5, 2015 ☐ Today's Paper ■ Video 🏠 36°F Dow-1.80% 4

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

### New York City Police Sharply Cut Arrests for a Second Week

By J. DAVID GOODMAN and AL. BAKER 53 minutes ago

Police officers arrested less than half as many people and wrote more than 90 percent fewer summonses than in the same period a year ago, building on a drastic drop in activity that began shortly after the murder of two uniformed patrol officers. # 108 Comments

### Republicans Say They'll Act Fast to Push Their Agenda

By CARL HULSE

■830 Comments

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.



### 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

### The Opinion Pages

### When Skepticism Counts Novelist David Baldacci and others

DEBATE 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

### 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 >

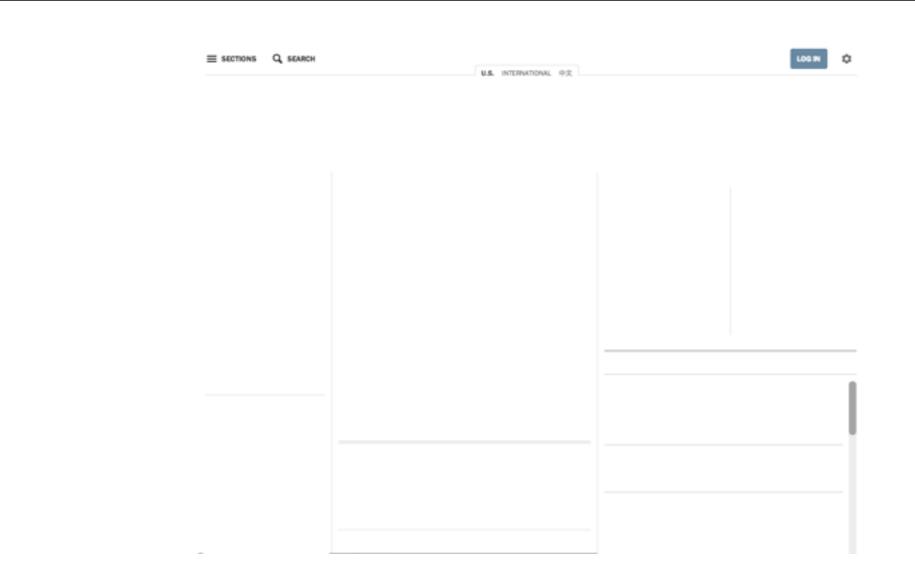
Markets tumbled in Europe and the U.S. as the declining price of oil sent ripples around the world. The New York Times

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 >







New York City Police Sharply Cut Arrests for a Second Week		The Op When Skepticism Counts	inion Pages The Central Crisis in New York Education
Republicans Say	Bess Myerson, a Beauty Queen Who Reigned in Politics, Dies	Watching	
They'll Act Fast to Push Their Agenda	Afghan Cares for the Living by Carrying the Dead  Home Schooling: More Punils, Less Regulation		

Monday, January 5, 2015 IIII Today's Paper I ■ Wideo Sa 36°F Dow-1.80% 4

### New York City Police Sharply Cut Arrests for a Second Week

By J. DAVID GOODMAN and AL. BAKER 53 minutes ago

Police officers arrested less than half as many people and wrote more than 90 percent fewer summonses than in the same period a year ago, building on a drastic drop in activity that began shortly after the murder of two uniformed patrol officers.

#108 Comments

### Republicans Say They'll Act Fast to Push Their Agenda

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

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

Home Schooling: More Pupils, Less Regulation

### The Opinion Pages

### When Skepticism Counts Novelist David

Novelist David

Baldacci and others
on the role of
conspiracy theories in society.

### 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.

### Watching

now 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 right.

Mileaukee Journal Sentinel #

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

Sov. 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 \*

Monday, January 5, 2015 IIII Today's Paper I ■ Video Sc 36°F Dow-1.80% 4

### New York City Police Sharply Cut Arrests for a Second Week

By J. DAVID GOODMAN and AL. BAKER 53 minutes ago Police officers arrested less than half as many people and wrote more than 90 percent fewer summonses than in the same period a year ago, building on a drastic drop in activity that began shortly after the murder of two uniformed patrol officers. #108 Comments

### Republicans Say They'll Act Fast to Push Their Agenda

By CARL HULSE 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 ARMED 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 easualties.



### Home Schooling: More Pupils, Less Regulation

### The Opinion Pages

### When Skepticism Counts

Novelist David Baldacci and others on the role of conspiracy theories in society.

### 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.

### Watching

now 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 +

Markets tumbled in Europe and the U.S. as the declining price of oil sent ripples around the world.

The New York Times

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 turneround.



The Los Angeles Times &

Opening tag

Closing tag

<tag name>content</tag name>

Element

- HTML has six "levels" of headings
- <h1> is used for main headings
- <h2> <h6> are used for subheadings

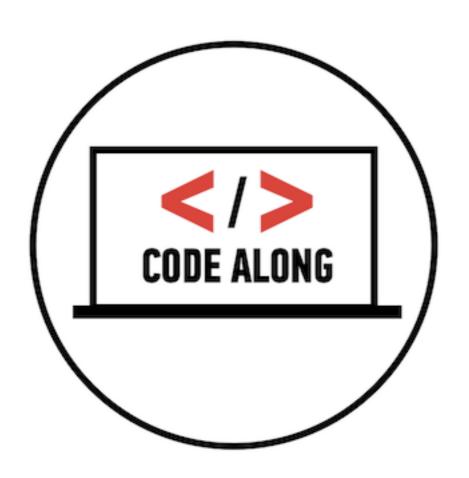
<h1><h2><h3><h4><

- The tag defines a paragraph of text.
- By default, browsers will show each paragraph on a new line with some space between it and any subsequent paragraphs.



- When the browser comes across two or more spaces next to each other, it only displays one space.
- Similarly, if the browser comes across a line break, it treats that as a white space.
- This is known as white space collapsing.
- Developers often take advantage of this to make their code easier to read.





# **For Immediate Release**

General Assembly, which started in New York as a startup incubator, now offers classes and workshops in technology, design, and entrepreneurship, with campuses around the world in:

- Atlanta
- Austin
- Boston
- Chicago
- Hong Kong
- London
- Los Angeles
- Melbourne
- New York City
- San Francisco
- Seattle
- Sydney
- · Washington D.C

These days, code literacy is an essential skill. You'll learn how to think like a programmer, how to build your first website and so much more..

Emerson Taymore

For more information, visit General Assembly's website.



### **KEY OBJECTIVE**

Add markup to the GA press release

### TIMING

5 min

1. Add markup to the press release. Use tags such as the <h1>, , , and tags.

- The <strong> element indicates that its content has a strong importance.
- By default, browsers will show the contents of a strong element in bold.



- The <em> tag indicates emphasis that may subtly change the meaning of a sentence.
- By default, browsers will show the contents of a strong element in italic.



I think John was there I think John was there

- Blockquote is used for longer quotes that take up an entire paragraph.
   The element is still used inside the
- The element is still used inside the <br/> <blockquote> element.

► The <q> element is used for shorter quotes that sit within a paragraph.



# 

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

Attribute Name

# <tagName name="value"></tagName>

Attribute Value

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





## **KEY OBJECTIVE**

Finish adding markup to the GA Press Release

### TIMING

3 min

 Finish adding markup to the press release by adding in the <blockquote> and <a> tags.

#### Best Chocolate Chip Cookies



Fact warm and oujey with a place of cold milk.

Adopted from The New York Times

#### PREP TIME

27 minutes

#### COOKING TIME

20 minutes plan or least 24 bount stalling time

#### SKILL LEVEL

Day

#### YHLD

2 down 1 inch arelates

#### INGREDIENTS

- Trape minus Trabinopono sala finar
   121 nego hende finar
   121 nego hende finar
   114 nego hende finar
   114 nego hende finar
   112 nego fina Trabinopono persistent nego
   112 nego fina Trabinopono
   112 nego

#### INSTRUCTIONS

- 2. Sink caller flows howed flows, histing youth shaling provider and such into a medium howel. See assists.

  2. Using an electric mixer, crosse regarder the factor, which sugar, and former sugar it a large howel settli vary light, whose 5 measures.

  3. And sugar, most in little, mixing well other each addition.

  4. Sinks as the results.

  5. Solders regard to low, and day impredience and mix settli just contributed. See 18 seconds.

  5. Solders regard to low, and day impredience and mix settli just contributed. See 18 seconds.

  6. Solders regard to low, and day impredience and mixing down.

  7. Price plants; very equation design and enfrageness for 19 to 10 to hours. Design may be used in batches, and can be refrigered for any any in the plant of the second low special plants.

  8. Made sough to those, producer-over to 1000°F Line a behing when with purchassing long relations procured and design just a set of pull hability on the behing alone, making users to the historismical point relationship prices that are applied up for a first state of pull hability on the behing alone, making users to the historismical point schooling prices that are pricing up for a first school pull hability of the user alone.

  8. Special English with our suit and habits and politics between the self out, 30 or mixeum. Trender insensitizely in a view fact.

  8. Septime English with our said self-alone and politics between the self-out.

  8. Septime English with our said and habits and politics between the self-out.

  8. Septime English with our said and habits and politics between the self-out.

  8. Septime English with our said and habits and politics between the self-out.

  8. Septime English with our said and habits and politics between the self-out.

  8. Septime English with our said and habits and politics between the self-out.

#### EXPERT TIPS

The accent in righer Describer Chip Cookies with a more argitationed flavor is lesting the simple and the 20 in 76 boun below.

- RELATED RECIPES.
- Anualog Cheolise Chip Entitled
   Borr and Protect Cheolise Chip Cookie
   Brayald Schoolise Chip Cookie
   Brayald Schoolise Chip Cookie
   Browned State and Cheonia Cheolise Chip Cookie
   Browned State and Cheonia Cheolise Chip Cookie
   Cheolise Chip Cookie
   Cheolise Chip Cookie



### **KEY OBJECTIVE**

- Add markup to chocolate chip cookie recipe
- Google and implement tag
- Optional: Google and implement <img> tag

### TIMING

2 min 15 min

- Review copy in index.html and plan out structure with partner
- Add markup to recipe. You'll want to use at least 8 of the tags discussed in class as well as the tag.
- 3. Optional: Google and implement <img> tag
- 4. Optional: Add extra tags not covered in class

### IF YOU FINISH EARLY

Start on resume, which will be homework for next week

# LEARNING OBJECTIVES

- Provide an overview of the world of web development
- Articulate the role of HTML, CSS and JavaScript in frontend development.
- Recognize the different roles and responsibilities in web development.
- Apply and experiment with HTML tags.

# HOMEWORK

- Familiarize yourself with Slack
- Begin to organize what you're doing in the class into folders
- Sign up for github.com and message me your username on Slack
- Optional: Start thinking about an "About Me" page that you'll be creating next week

# EXITTICKETS

BOOKMARK THIS LINK
EXIT TICKET