SNACKS & DESIGN

TODAY!

ADRIANA

(GOOGLE SHEET IN SLACK)

MEET YOUR INSTRUCTOR

ADRIANA CASTANEDA — INSTRUCTOR

adriana.lcs316@gmail.com

MEET YOUR CLASSMATES

YOU + A NEIGHBOR

HELLO!
NAME,
WHAT YOU DO NOW,
WHAT INSPIRED YOU TO TAKE THE
CLASS,
ONE INTERESTING THING SOMEONE
MAY NOT KNOW ABOUT YOU.

HOMEWORK DEADLINE

SUNDAYS @ 11:59PM

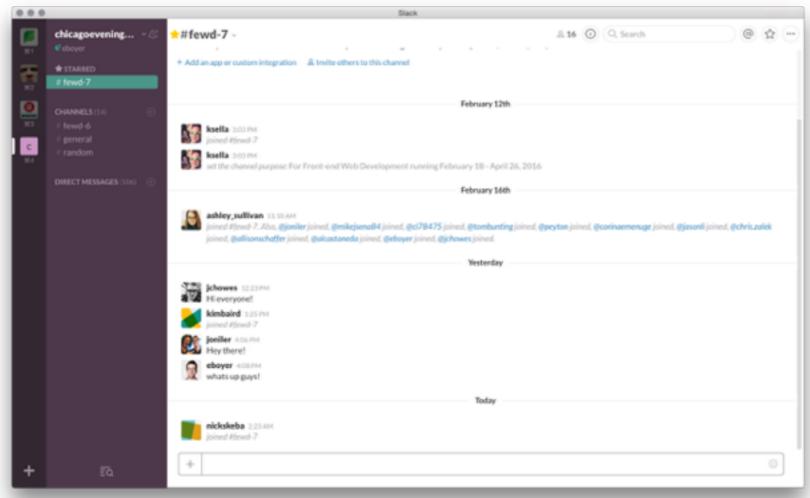# Google Hangouts Over the Weekend

SNACK CALENDAR

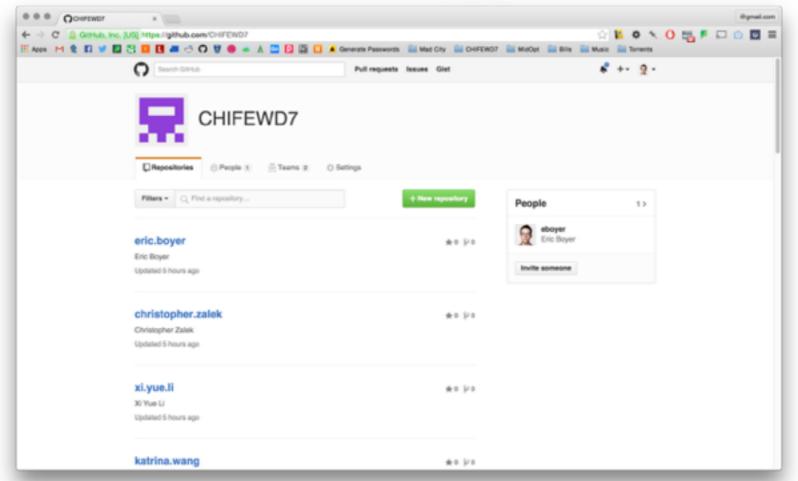[SIGN UP HERE](#)

TOUR OF THE TOOLS

TOOLS

TOOLS

TOOLS

TOOLS

DASHBOARD

LET'S GET STARTED!

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?

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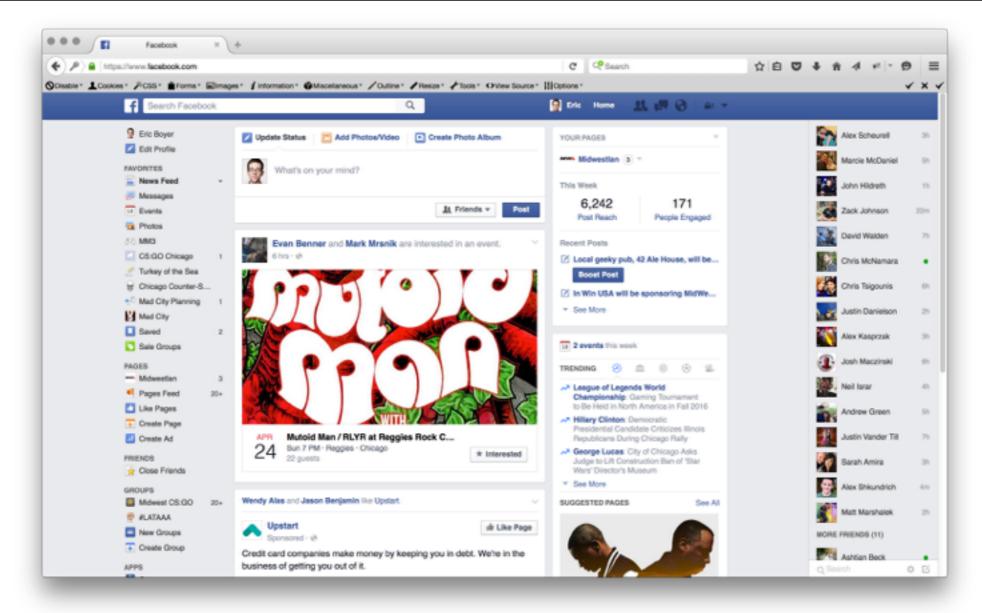
- Make ideas come to life
- Opportunities
- Communication
- Customize Websites
- Help Others
- Jobs
- Leads to other tech related interests
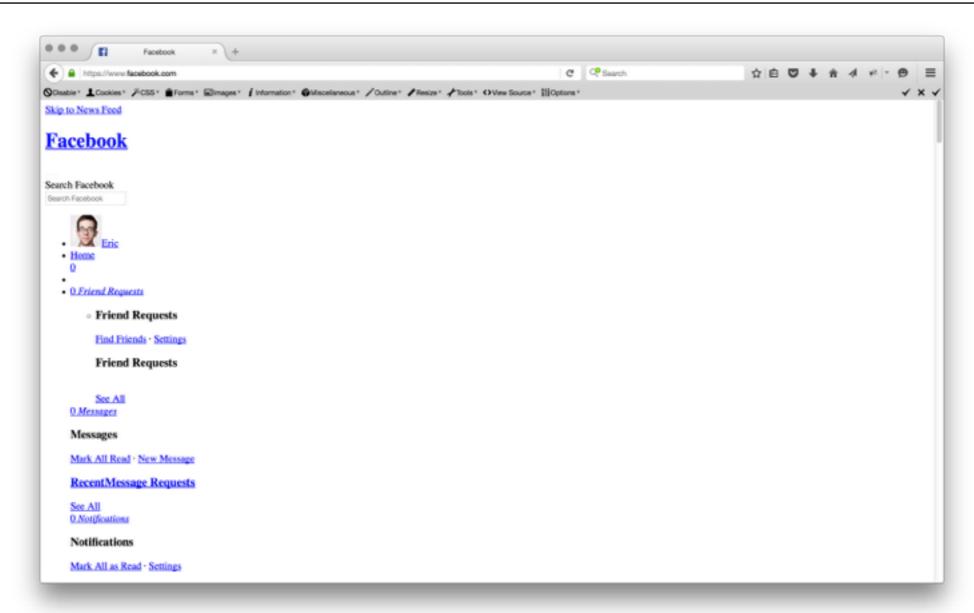
WHY?

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

WHY?

WHY?

HOW DOES THE INTERNET WORK?

CLIENT AND SERVER

CLIENT

SERVER

INTERNET PROTOCOL

IP

CLIENT AND SERVER

CLIENT SERVER

IP Address: 192.168.1.72

SERVER
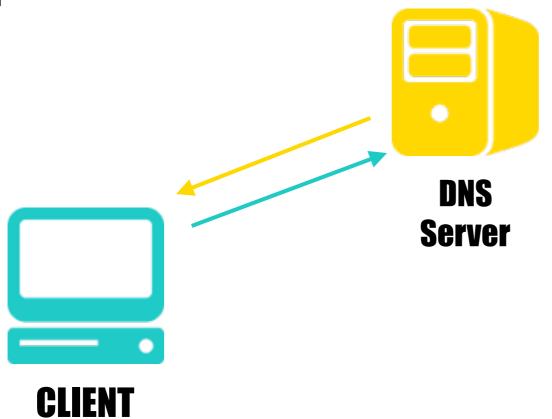
IP Address: 31.13.74.1

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"

DNS
Server

CLIENT

IP address:
31.13.74.1

SERVER
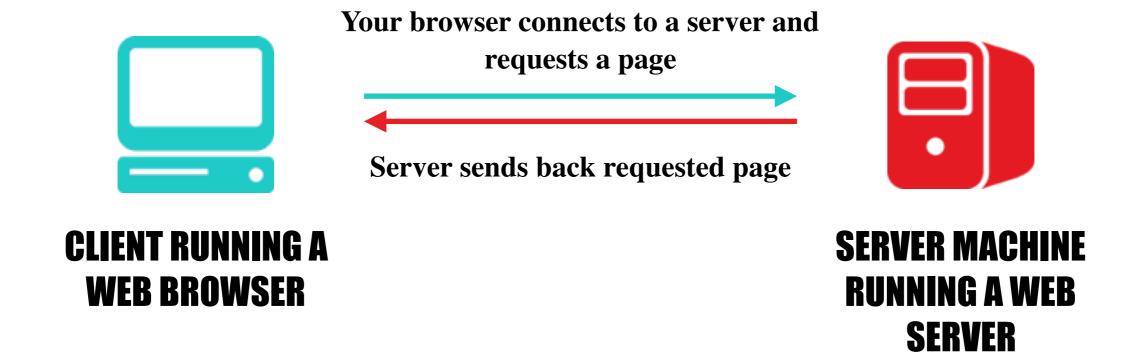
HYPER TEXT TRANSFER PROTOCOL

HTTP

REQUEST/RESPONSE

Your browser connects to a server and requests a page

Server sends back requested page

CLIENT RUNNING A WEB BROWSER

SERVER MACHINE RUNNING A WEB SERVER
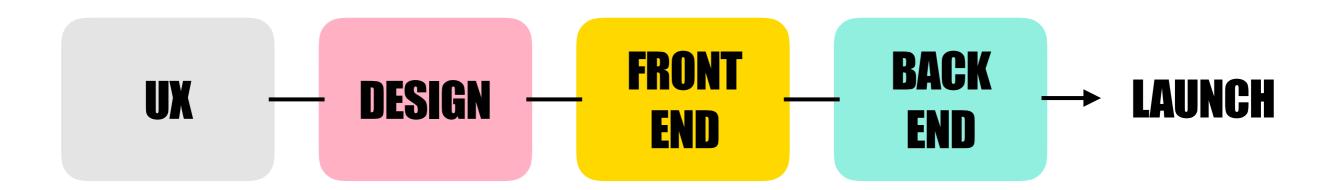
HOW CAN YOU DO THIS?
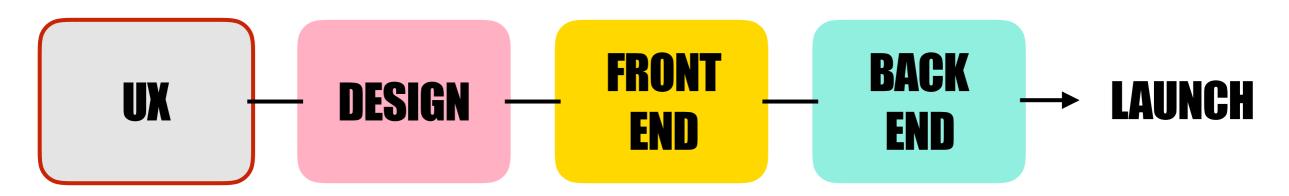
DOMAIN NAME (GANDI.NET, NAME.COM)
HOSTING (NAME.COM, WEBFACTION.COM)

WEB PRODUCTION WORKFLOW

WEB PRODUCTION WORKFLOW

UX — DESIGN — FRONT END — BACK END → LAUNCH

WEB PRODUCTION WORKFLOW — UX

UX — **DESIGN** — **FRONT END** — **BACK END** → **LAUNCH**
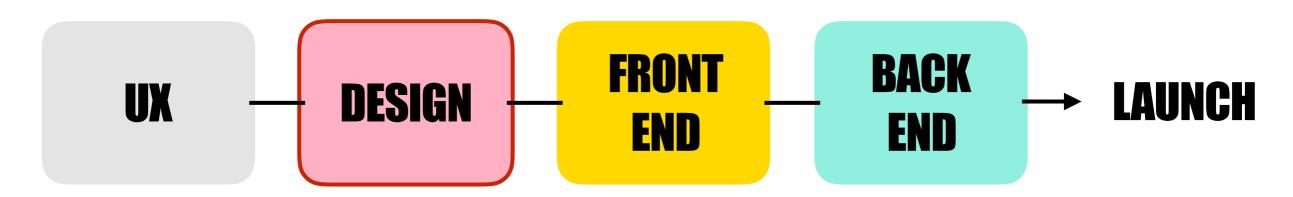
‣ **Figures out how people are going to use a webpage**
‣ **Try to make it as easy as possible for people to use a webpage while achieving the purpose of the webpage.**
‣ **Main deliverables: wireframes, flow charts**
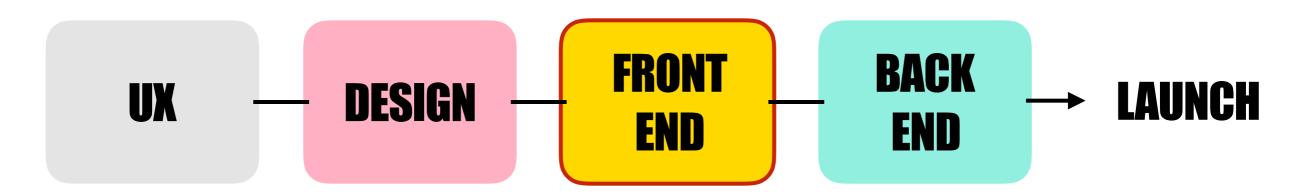
WEB PRODUCTION WORKFLOW — DESIGN

UX — **DESIGN** — **FRONT END** — **BACK END** → LAUNCH
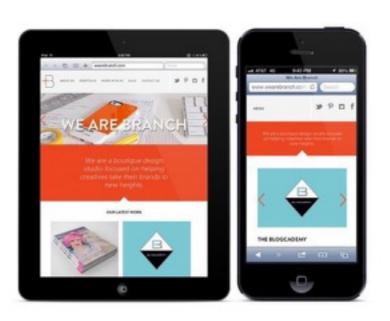
‣ Referred to as UI Designer/Web Designer
‣ Take the wireframes and make them pretty
‣ Logo/Fonts/Color palettes/Layout
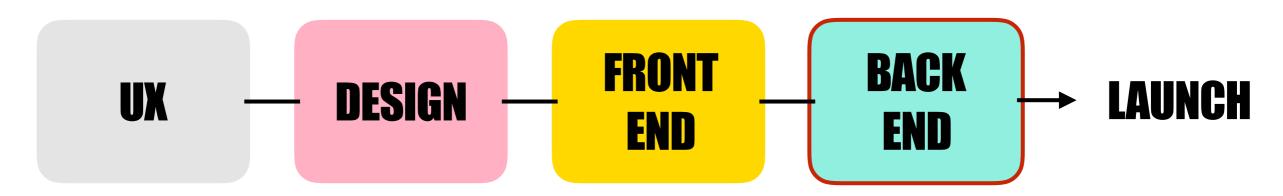
WEB PRODUCTION WORKFLOW — FRONT END

UX — **DESIGN** — **FRONT END** — **BACK END** → **LAUNCH**

‣ **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**
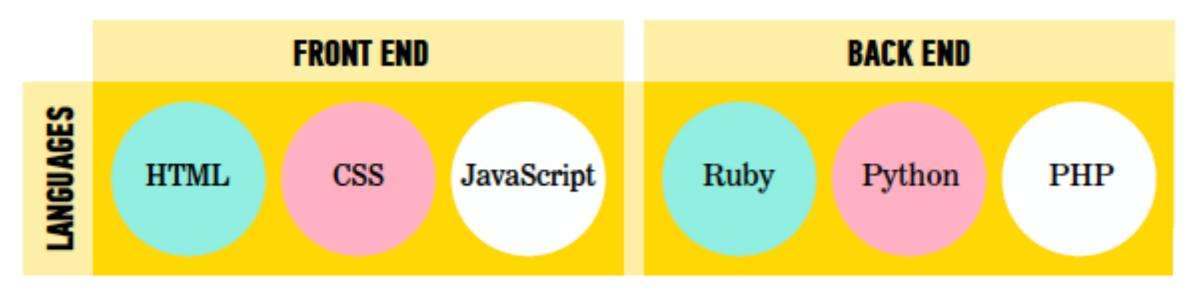
WEB PRODUCTION WORKFLOW — BACK END

UX — DESIGN — **FRONT END** — **BACK END** → LAUNCH

‣ **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

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

EXERCISE

KEY OBJECTIVE

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

TIMING
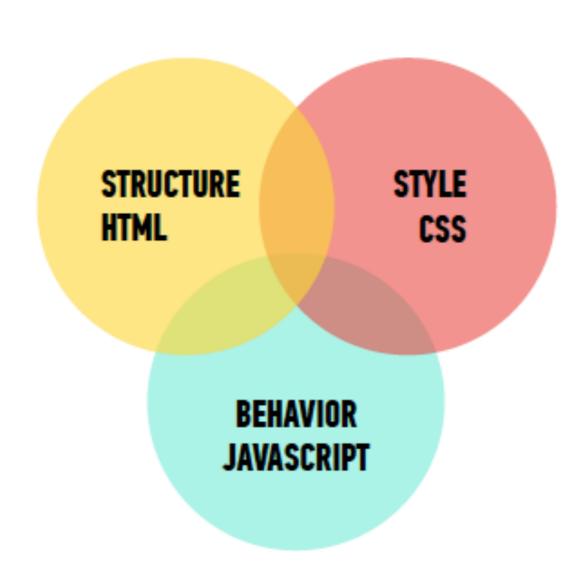
1 min   1. Turn to partner and discuss

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**
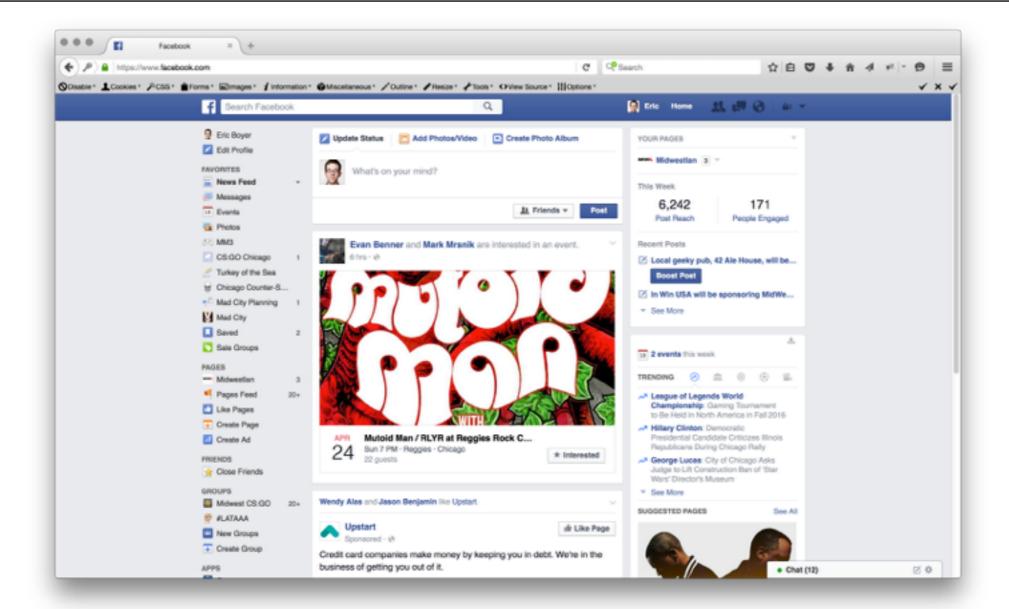
HTML
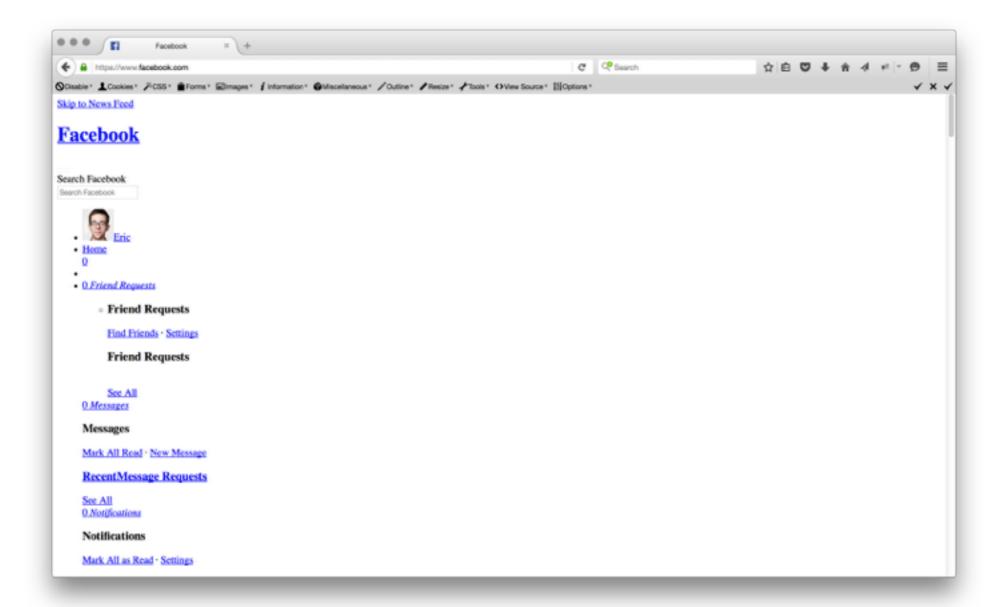
HTML describes the organization and structure of pages

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
      2. 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>
    <p> This is a paragraph about web pages. </p>
    <a href="….."> This is a link to another page. </a>
  </body>
</html>
```

WHAT IS CSS?
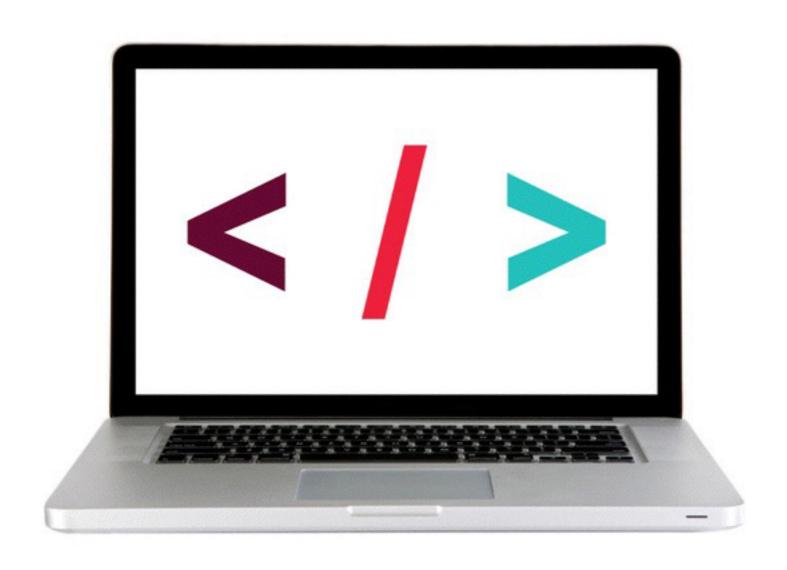
‣ **CSS associates style rules with HTML elements**

```css
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
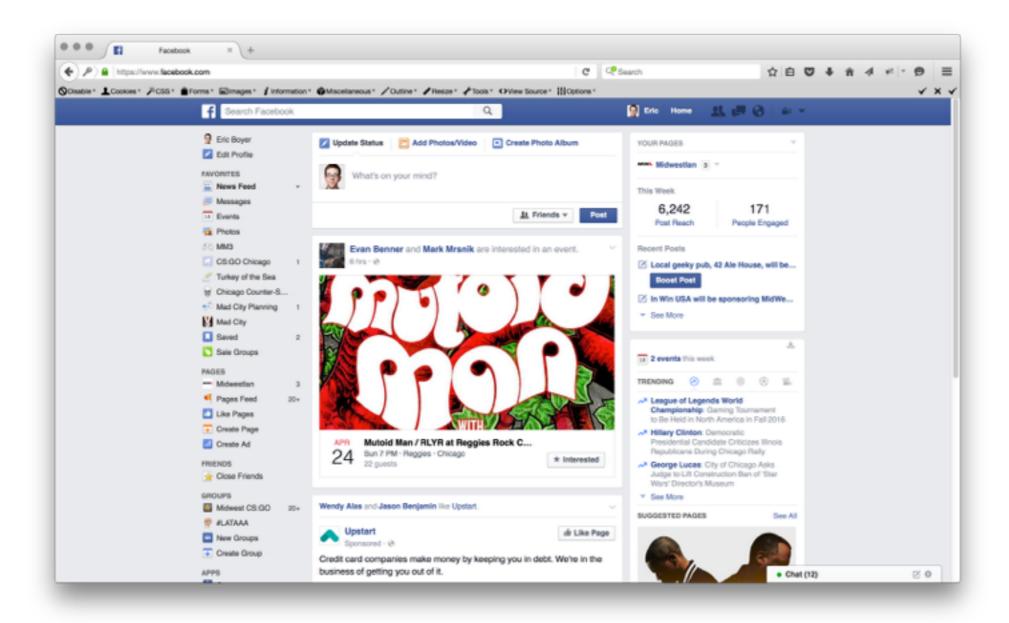
Fast, small, feature-rich JavaScript library

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

LOG IN ⚙

U.S. INTERNATIONAL 中文

The New York Times

Monday, January 5, 2015 | 📰 Today's Paper | ▶ Video | ☀ 36°F | Dow -1.80% ↓

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

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

📌 Pin It

Fred R. Conrad/The New York Times

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 on the role of conspiracy theories in society.

ROOM for DEBATE

· 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

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 ↗

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 ↗

U.S. INTERNATIONAL 中文

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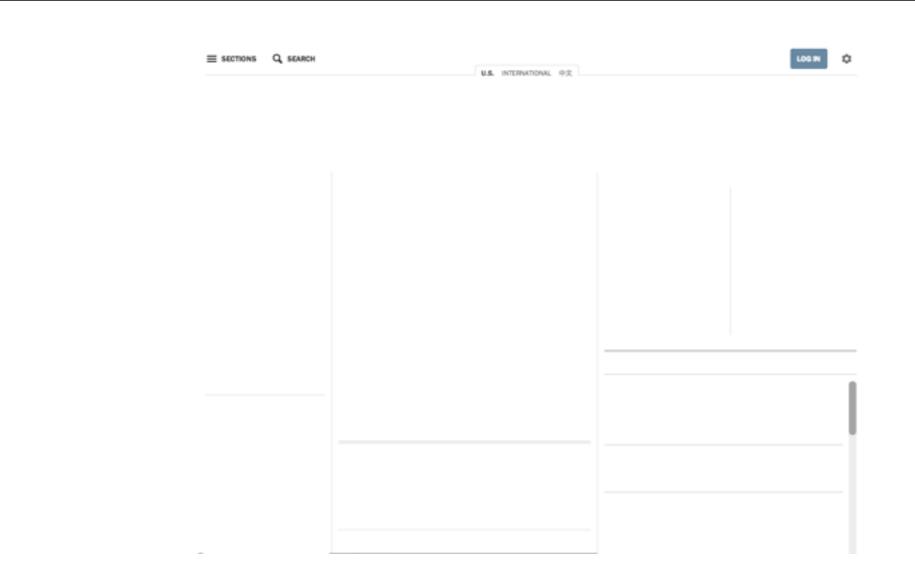Milwaukee Journal Sentinel ↗

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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\>

\<h5\>

\<h6\>
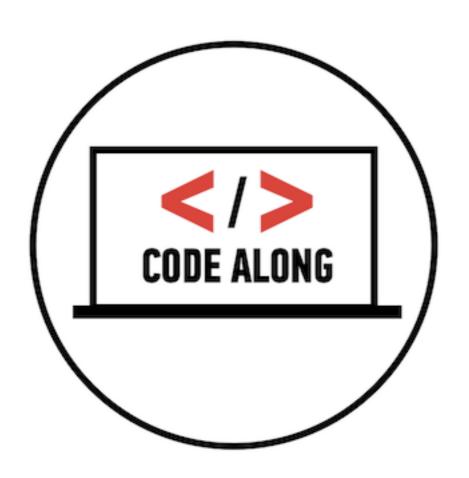
- The <p> tag defines a paragraph of text.
- By default, browsers will show each paragraph on a new line with some space between it and any subsequent paragraphs.

<p>

‣ 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.

`<br>`

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.

EXERCISE

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>, <p>, <ul>, and <li> 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.**

<strong>

<em>

I think John was there
I *think* John was there

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

<blockquote>

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

<q>

LINKS

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

Attribute
Name

Attribute
Value

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

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

Page the link takes you to

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

Text to display

EXERCISE

KEY OBJECTIVE

‣ Finish adding markup to the GA Press Release

TIMING

3 min

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

Best Chocolate Chip Cookies

Eat warm and enjoy with a glass of cold milk.

Adapted from The New York Times

PREP TIME

20 minutes

COOKING TIME

20 minutes plus at least 24 hours' chilling time

SKILL LEVEL

Easy

YIELD

2 dozen 5-inch cookies

INGREDIENTS

- 2 cups minus 2 tablespoons cake flour
- 1 2/3 cups bread flour
- 1 1/4 teaspoons baking soda
- 1 1/2 teaspoons baking powder
- 1 1/2 teaspoons coarse salt
- 2 1/2 sticks unsalted butter
- 1 1/4 cups light brown sugar
- 1 cup plus 2 tablespoons granulated sugar
- 2 large eggs
- 2 teaspoons natural vanilla extract
- 1 cup dark chocolate chips
- 1 cup milk chocolate chips
- 1 teaspoon sea salt

INSTRUCTIONS

1. Sift cake flour, bread flour, baking soda, baking powder and salt into a medium bowl. Set aside.
2. Using an electric mixer, cream together the butter, white sugar, and brown sugar in a large bowl until very light, about 5 minutes.
3. Add eggs, one at a time, mixing well after each addition.
4. Beat in the vanilla.
5. Reduce speed to low, add dry ingredients and mix until just combined, 5 to 10 seconds.
6. Drop chocolate chips in and incorporate them without breaking them.
7. Press plastic wrap against dough and refrigerate for 24 to 36 hours. Dough may be used in batches, and can be refrigerated for up to 72 hours.
8. When ready to bake, preheat oven to 350°F. Line a baking sheet with parchment paper and scoop 1/3 cup mounds of dough (the size of golf balls) onto baking sheet, making sure to turn horizontally any chocolate pieces that are poking up for a more attractive cookie.
9. Sprinkle lightly with sea salt and bake until golden brown but still soft, 18 to 20 minutes. Transfer immediately to a wire rack.
10. Repeat with remaining dough, or reserve dough, refrigerated, for baking remaining batches the next day.
11. Eat warm, with a glass of milk.

EXPERT TIPS

The secret to richer Chocolate Chip Cookies with a more sophisticated flavor is letting the dough rest for 24 to 36 hours before baking.

RELATED RECIPES

- Amazing Chocolate Chip Cookies!
- Beer and Pretzel Chocolate Chip Cookies
- Bisquick® Chocolate Chip Cookies
- Browned Butter and Coconut Chocolate Chip Cookies
- Buttery Chocolate Chip Cookies
- Cherry Chocolate Chip Cookies

EXERCISE

KEY OBJECTIVE

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

TIMING

2 min
1. Review copy in index.html and plan out structure with partner

15 min
2. Add markup to recipe. You'll want to use at least 8 of the tags discussed in class as well as the <ol> 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**

EXIT TICKETS

BOOKMARK THIS LINK

EXIT TICKET