OPENING DAY

MEET THE INSTRUCTIONAL TEAM

HELLO!

SARAH HOLDEN — INSTRUCTOR

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LinkedIn

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LinkedIn

INTRODUCTIONS

MEET YOUR CLASSMATES

INTRODUCTIONS

1. Name
2. What do you do?
3. Why are you taking this class?
4. Fun fact!

INTRO MATTERS

FIRST THINGS FIRST

HOMEWORK DEADLINE

MONDAYS @ 11:59PM

OFFICE HOURS

TUESDAYS & THURSDAYS

5:30PM - 6:30PM

SNACK CALENDAR

SIGN UP HERE

COURSE MATERIALS

- Dashboard
- Slack — Communicate with your classmates!
- Syllabus

LET'S GET STARTED!

WHAT IS FRONT-END DEVELOPMENT?

GENERAL ASSEMBLY

HTML BASICS

Sarah Holden

LEARNING OBJECTIVES

- Provide an overview of the world of web development
- 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.

AGENDA

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

WEB DEVELOPMENT OVERVIEW

HOW DOES THE INTERNET WORK?

CLIENT AND SERVER

CLIENT

SERVER

INTERNET PROTOCOL

IP

CLIENT AND SERVER

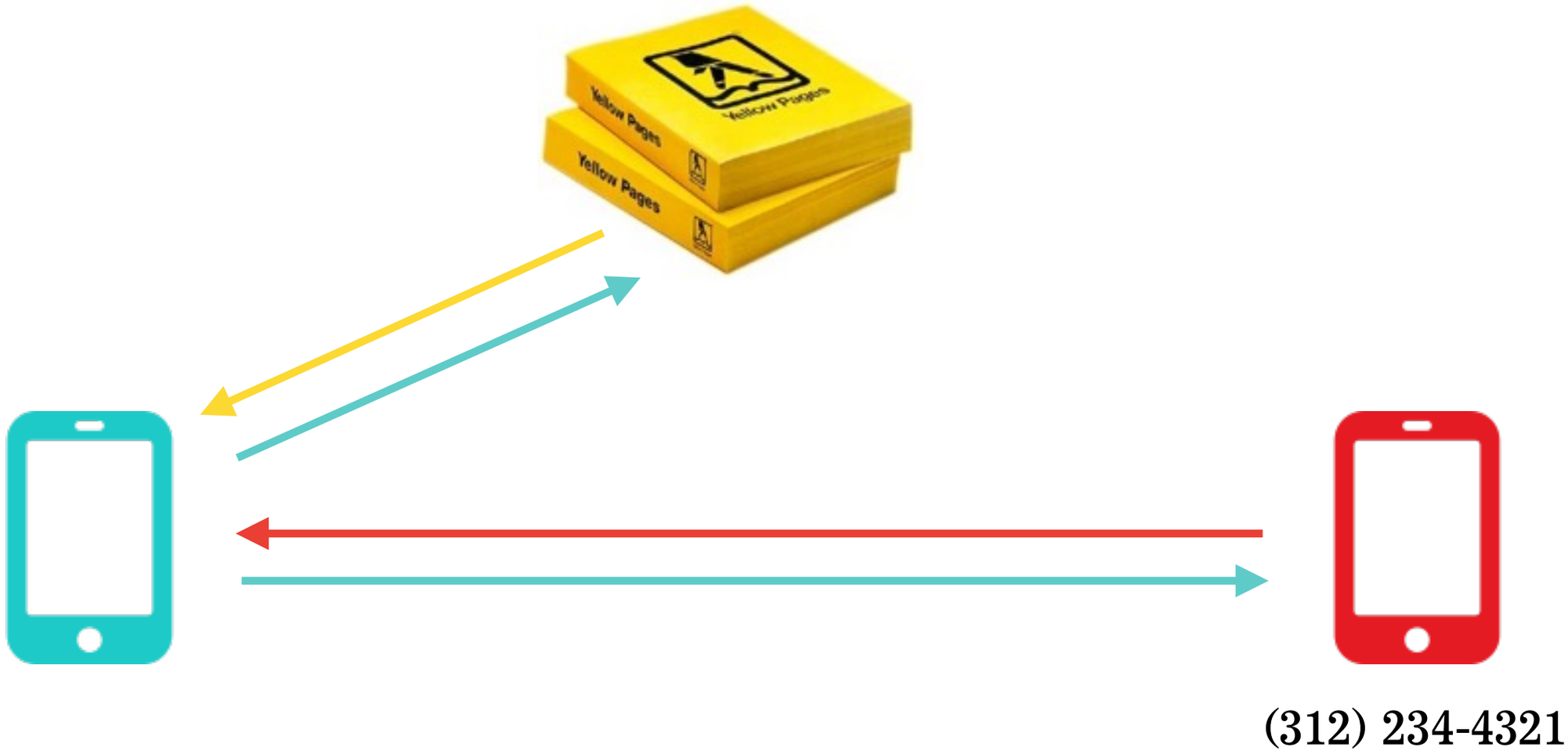
CLIENT

IP Address: 192.168.1.72

SERVER

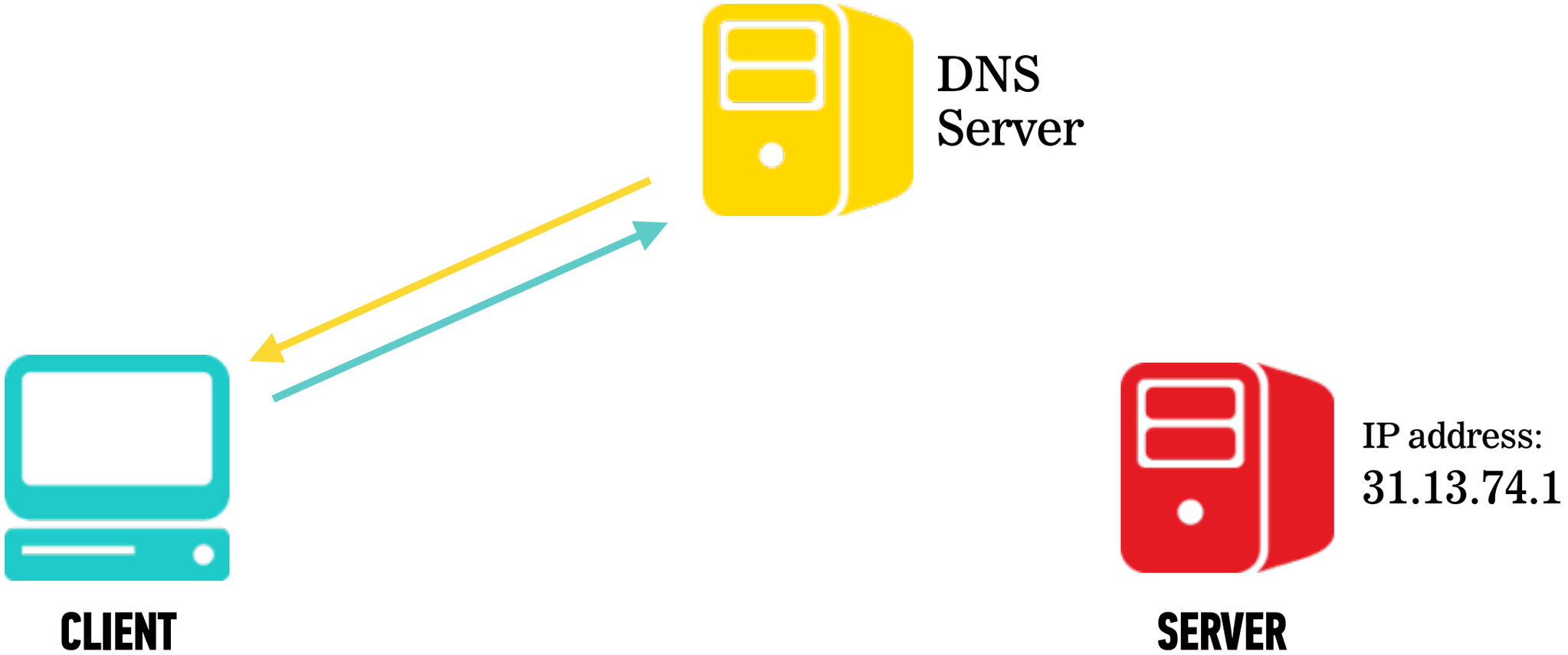
IP Address: 31.13.74.1

DNS SERVER — URL -> IP ADDRESS



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

HTTP

REQUEST/RESPONSE

CLIENT RUNNING A WEB BROWSER

Your browser connects to a server and requests a page

Server sends back requested page

SERVER MACHINE RUNNING A WEB SERVER

HTTP REQUEST

GET

REQUEST

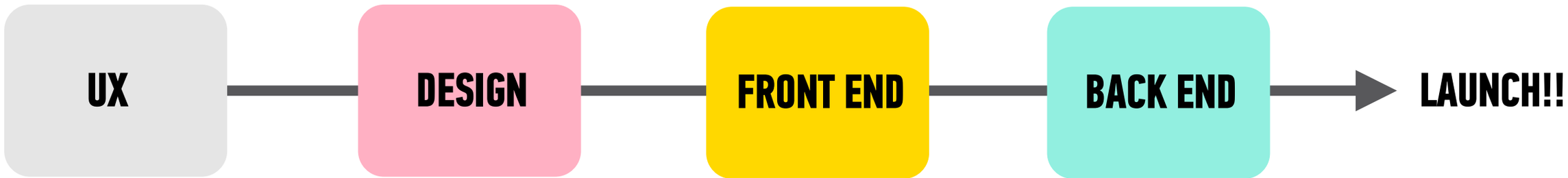
```
GET / HTTP/1.1
HOST: WWW.GOOGLE.COM
...
```

RESPONSE

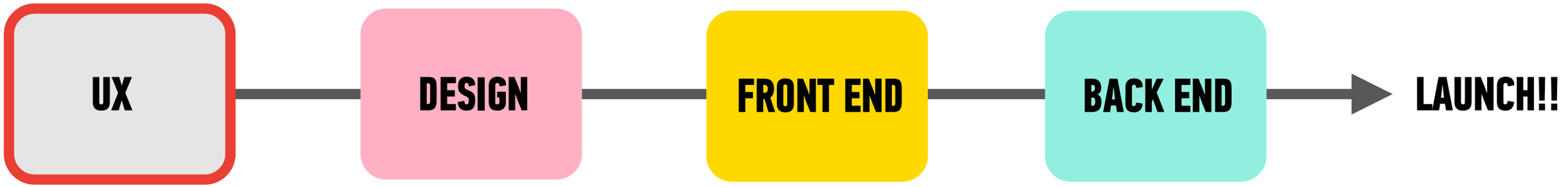
HTTP/1.1 200 OK
CONTENT-TYPE: TEXT/HTML
...

WEB PRODUCTION WORKFLOW

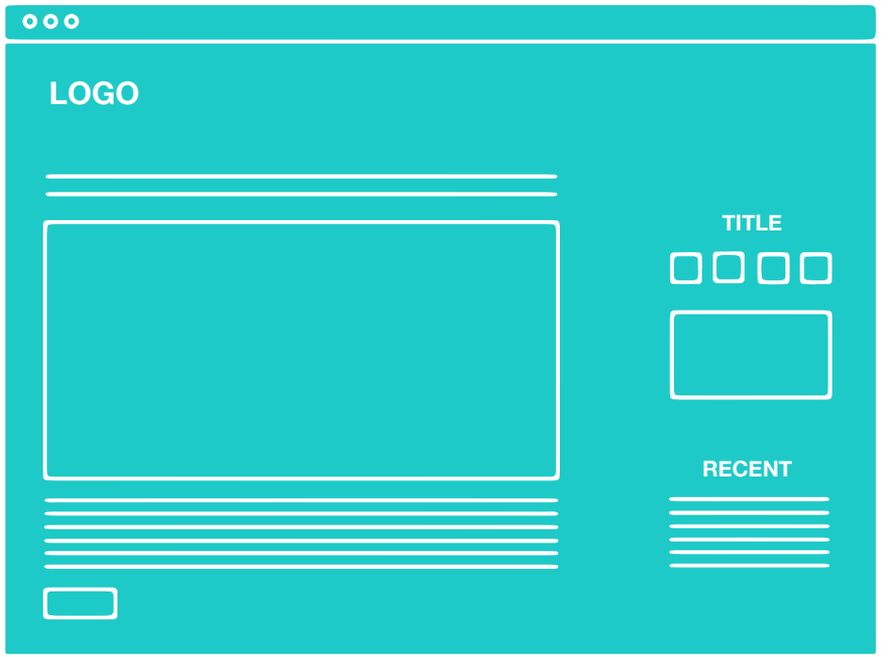
WEB PRODUCTION WORKFLOW



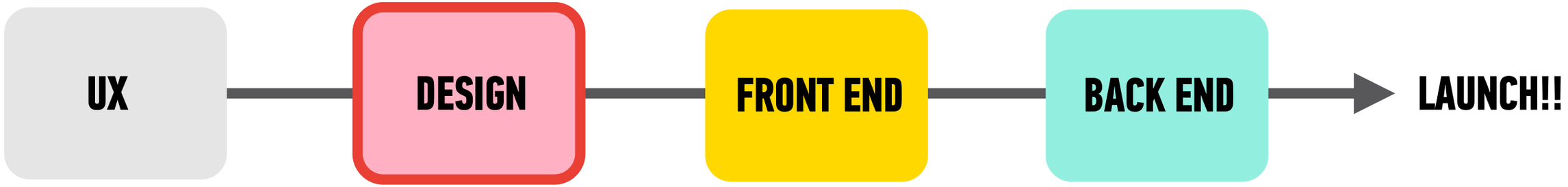
WEB PRODUCTION WORKFLOW — UX DESIGNER



- 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

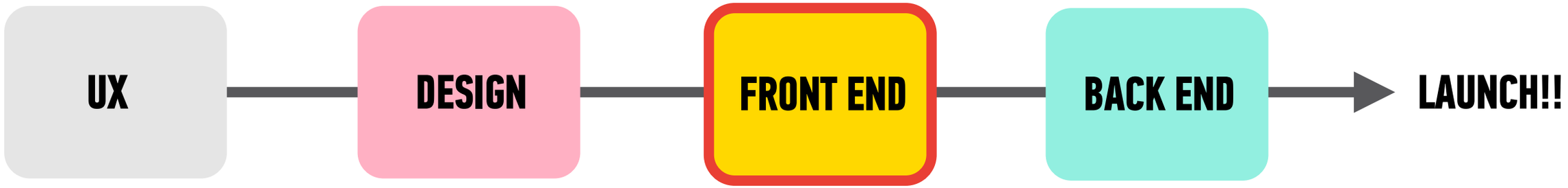


WEB PRODUCTION WORKFLOW — UI DESIGNER

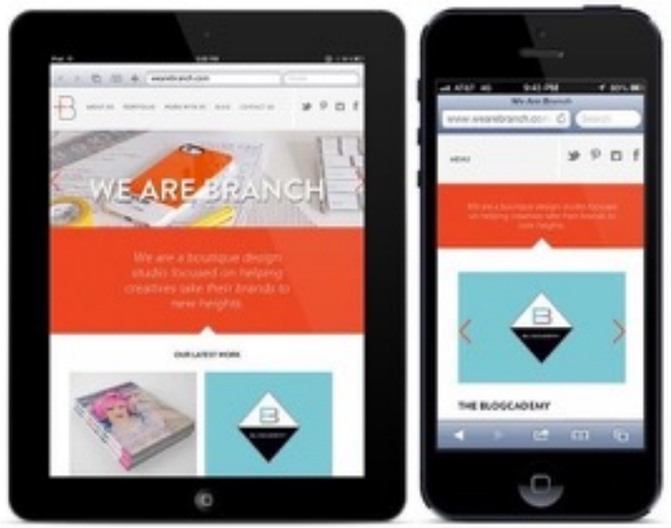


- Referred to as UI Designer/Web Designer
- Take the wireframes and make them pretty
- Logo/Fonts/Color palettes/Layout

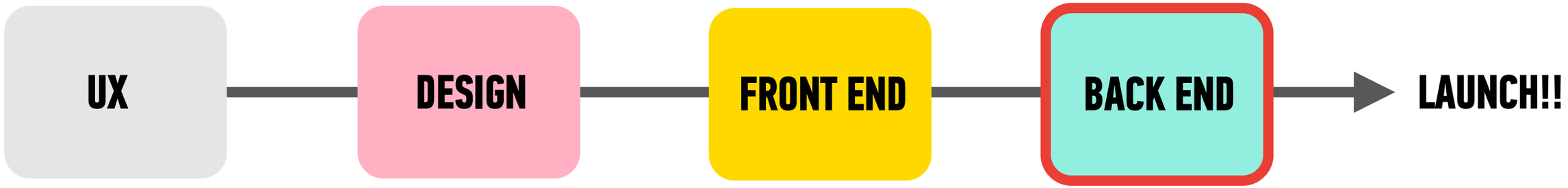
WEB PRODUCTION WORKFLOW — FRONT END



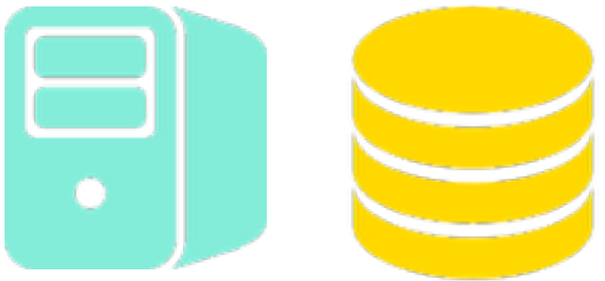
- Take the design and turn it into code and assets
- Uses HTML/CSS to create the structure for a page and add styles
- Add interactions with JavaScript
- Other responsibilities: accessibility, performance, cross-browser and cross-device functionality



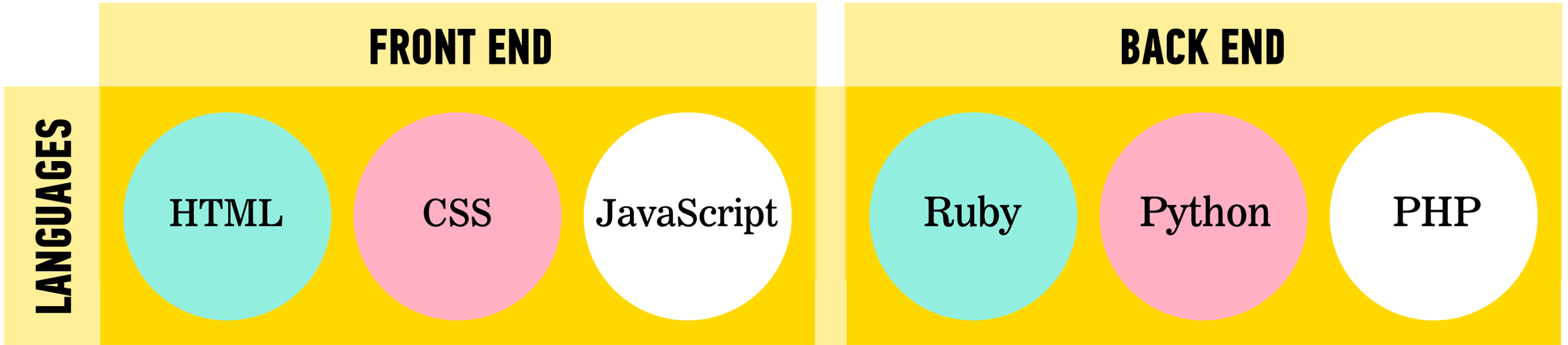
WEB PRODUCTION WORKFLOW — BACK END



- 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

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

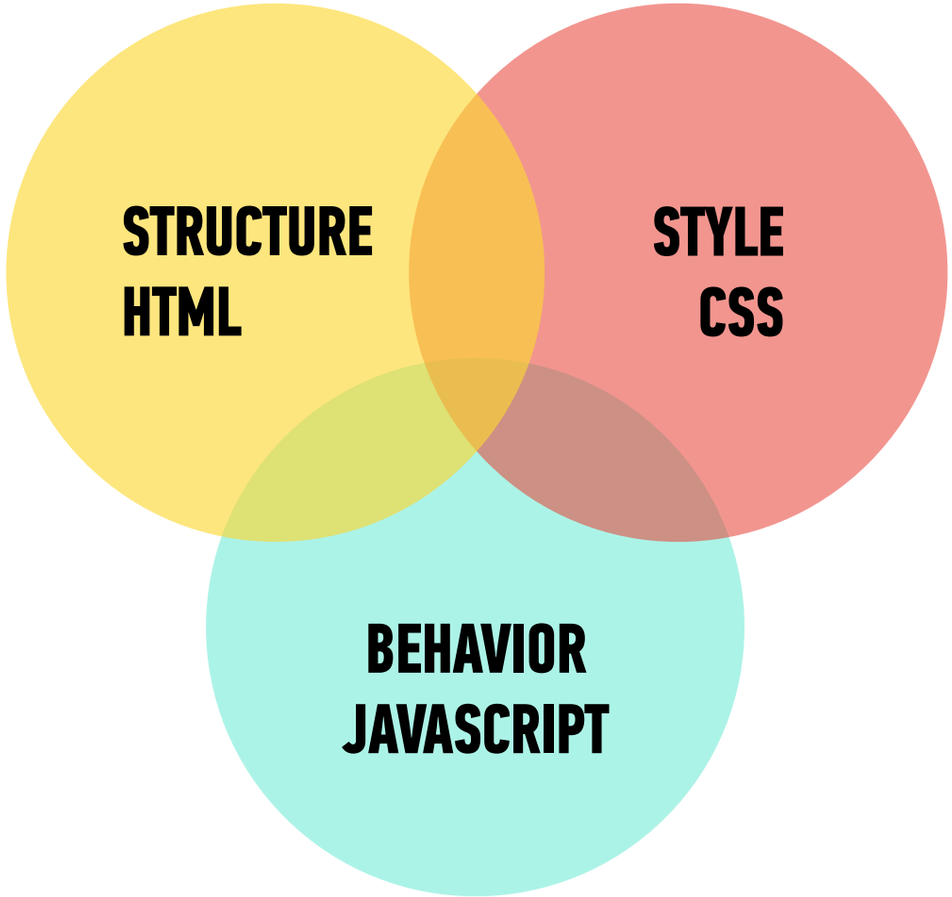
BONUS

Come up with an analogy!

INTRO TO FRONT-END WEB DEVELOPMENT

THE THREE AMIGOS: STRUCTURE, STYLE, BEHAVIOR

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



WHAT IS HTML?

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

WHAT IS HTML?

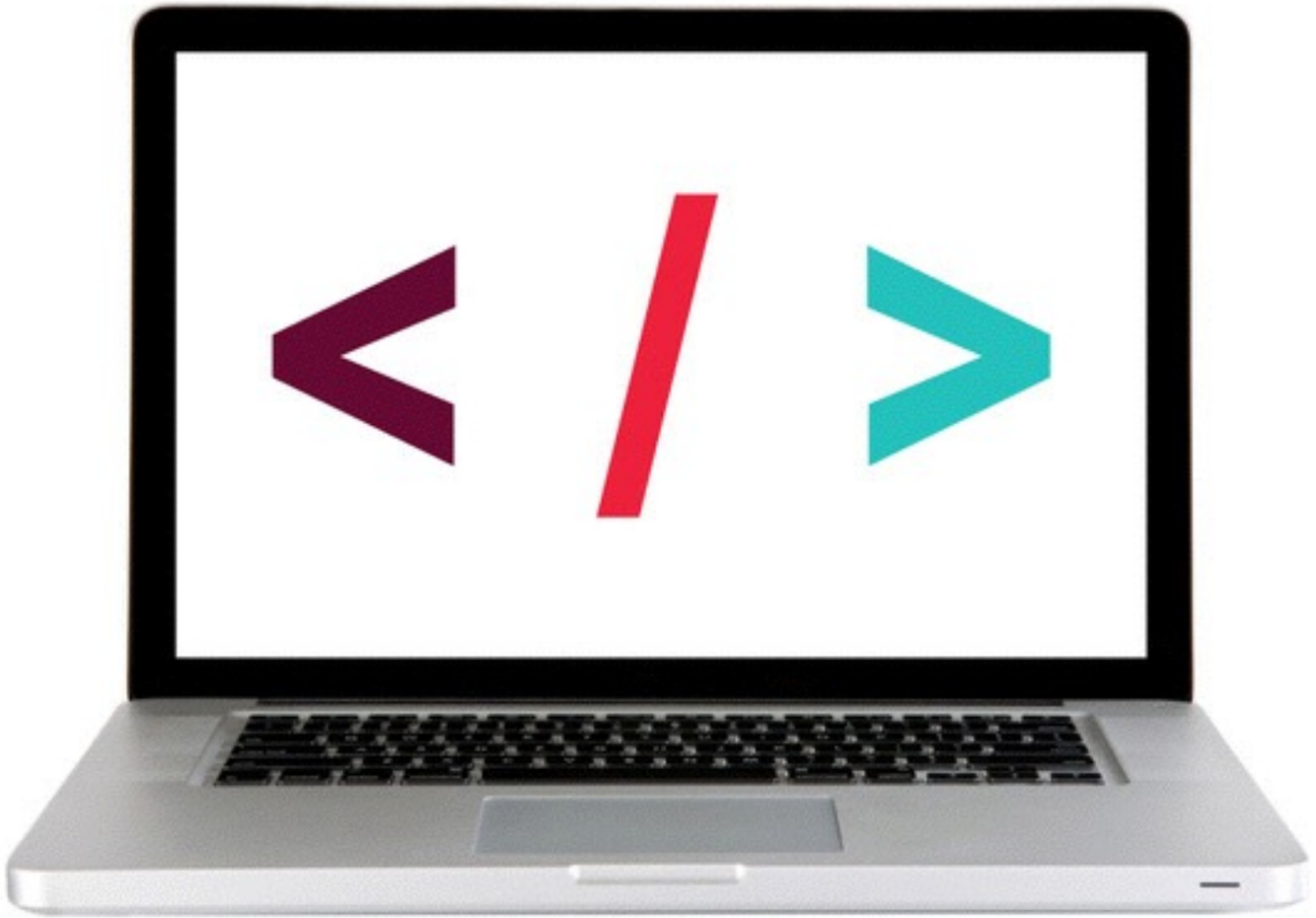
HTML describes the organization and structure of pages

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

WHAT IS 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>
```

LET'S TAKE A CLOSER LOOK

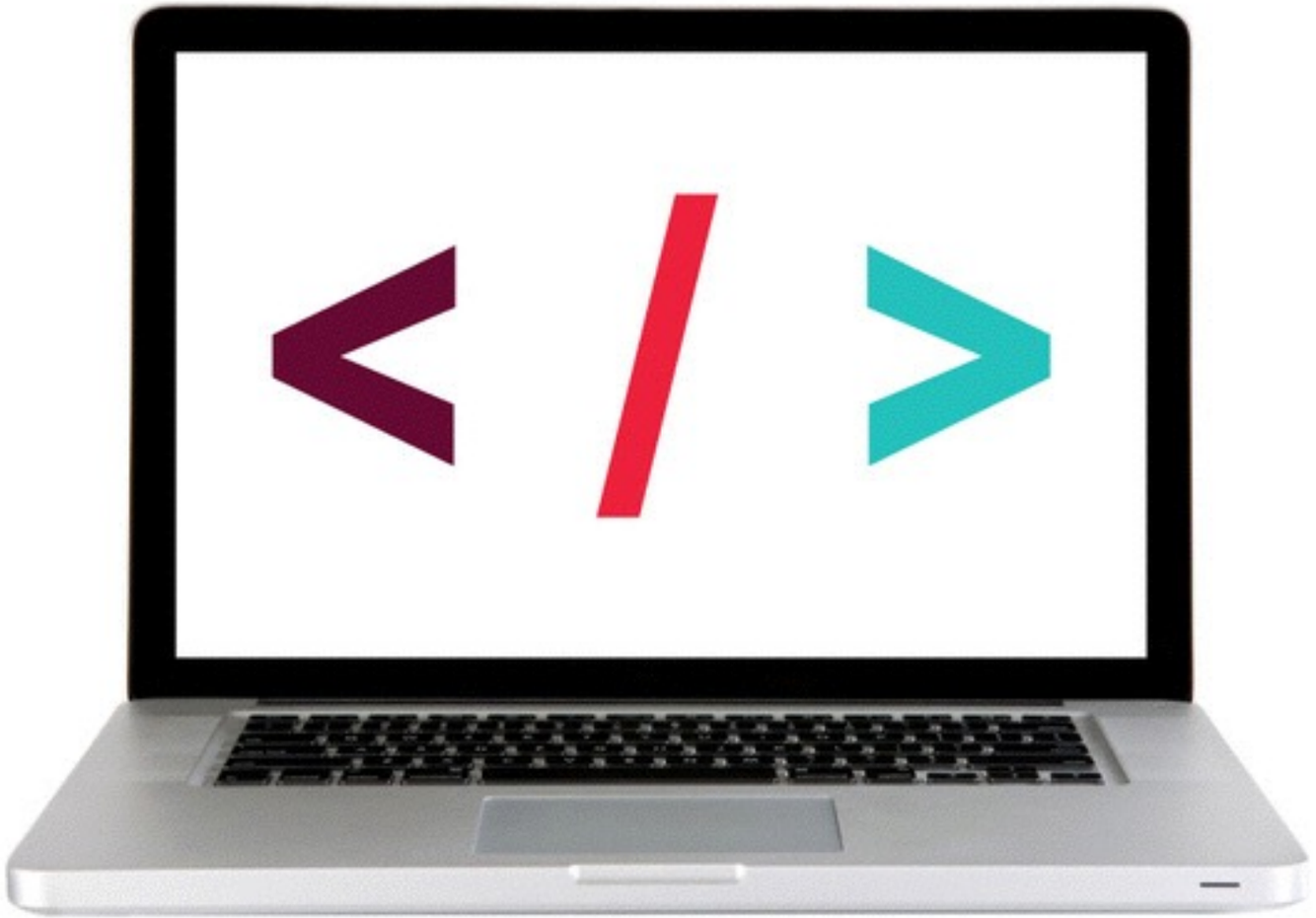


WHAT IS CSS?

- 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

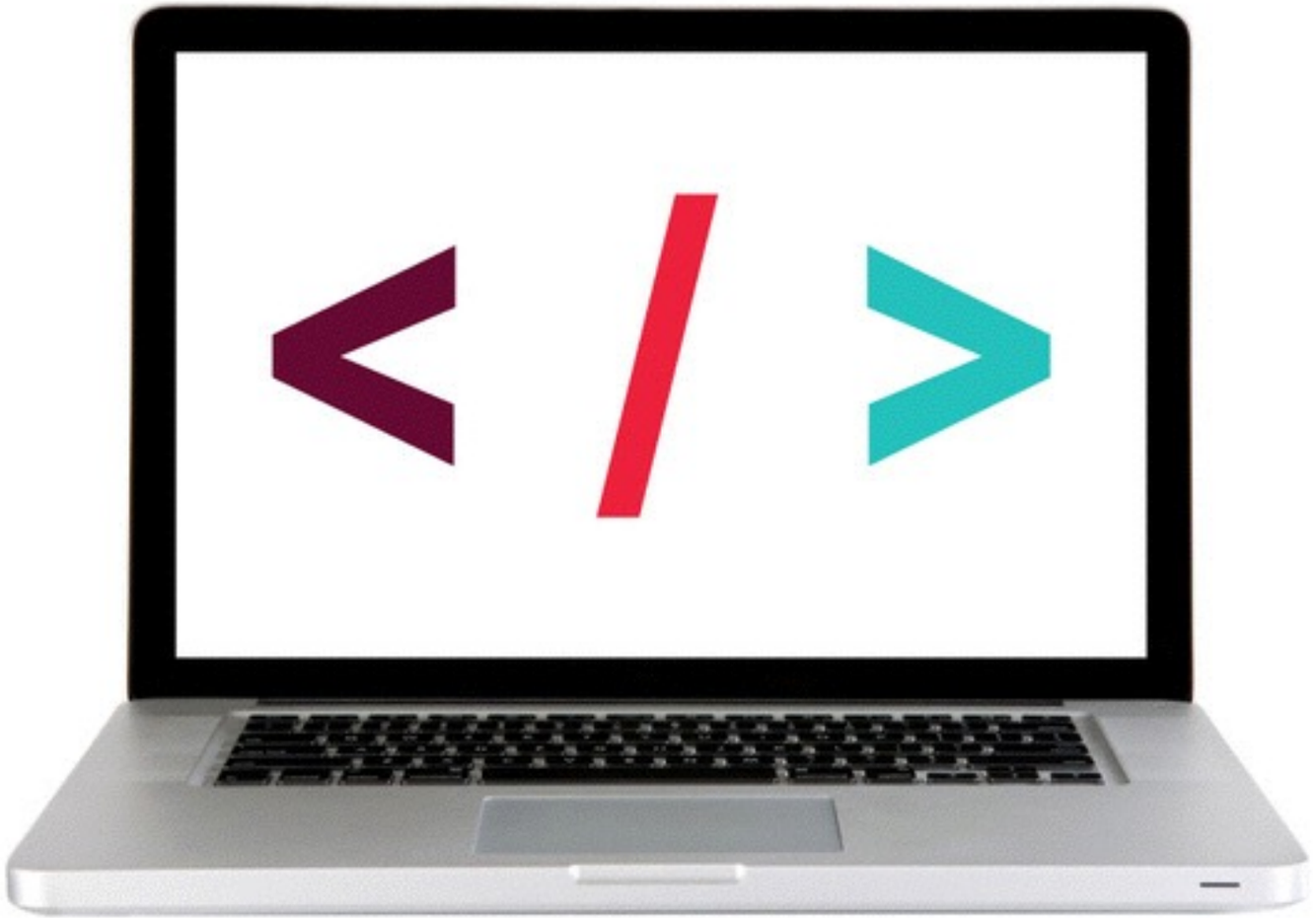
Javascript

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

jQuery

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

LET'S TAKE A CLOSER LOOK



LET'S GET EVERYTHING SET UP!

FIRST THINGS FIRST — TOOLS

SUBLIME TEXT 3

Download here

CHROME

Download here

PACKAGE CONTROL

Install here

To open package control:
command + shift + p

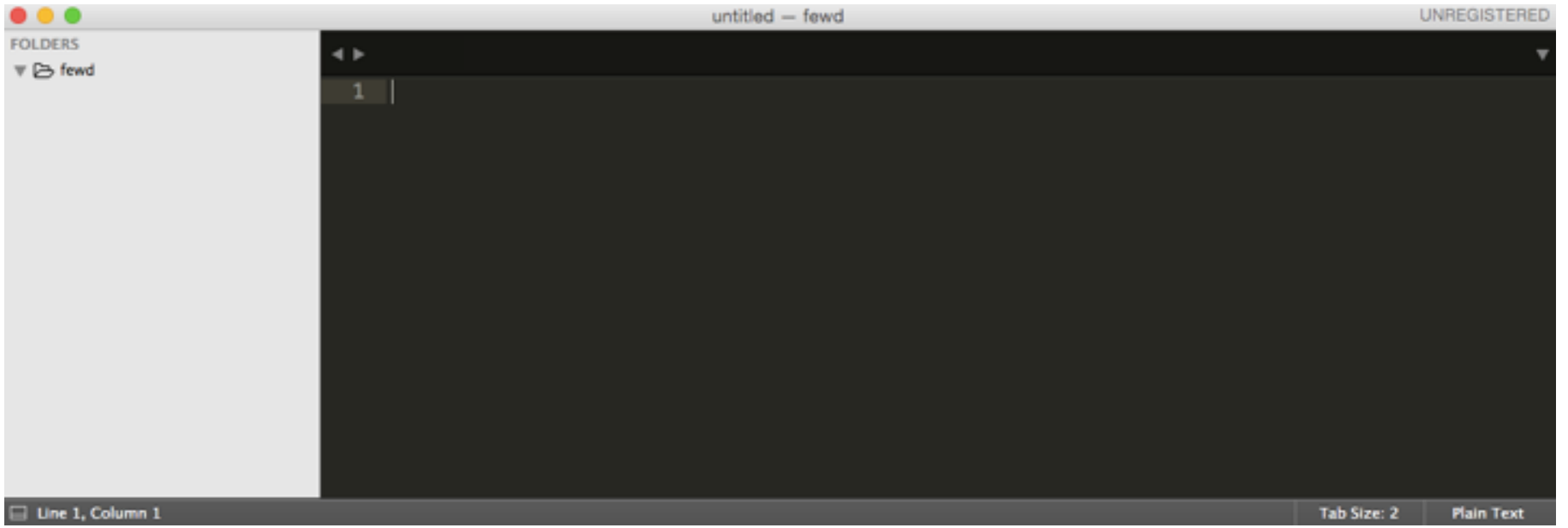
FIRST THINGS FIRST

SETTING UP A PROJECT WITH SUBLIME TEXT

If you haven't already, download Sublime Text

- Create a folder on your Desktop, and call it **fewd**.
- Drag the folder and drop it over the Sublime icon on your doc.

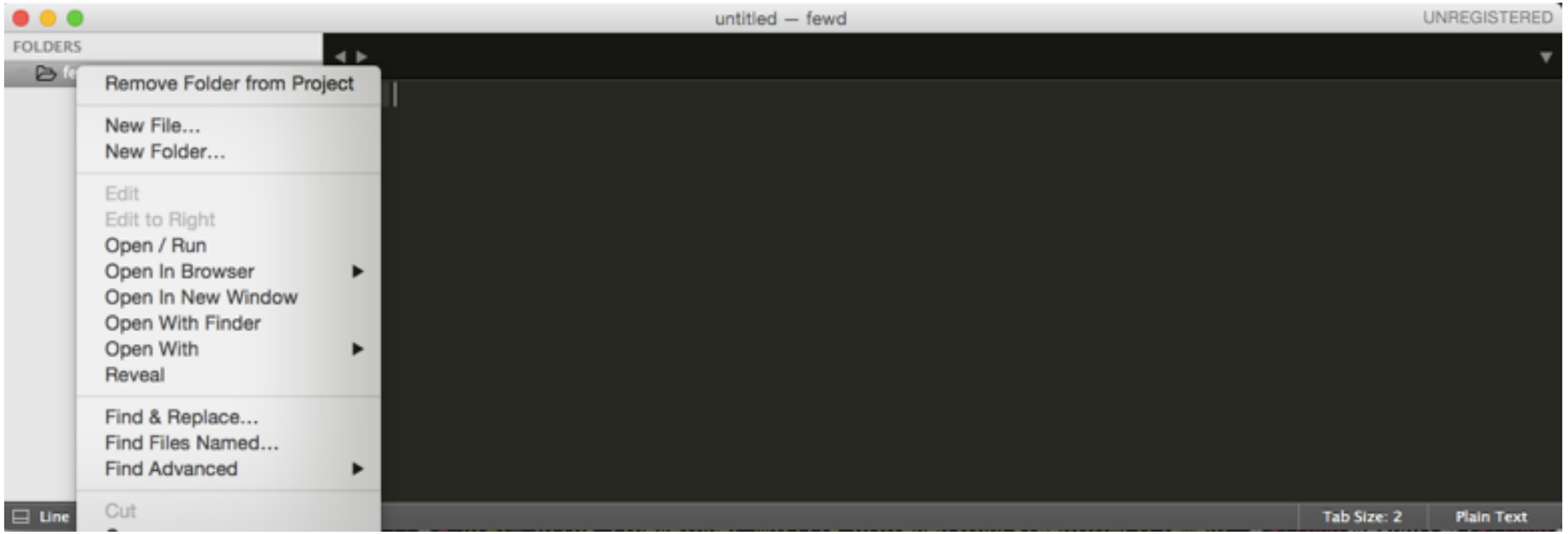
You should see the following:



USING SUBLIME TEXT

If you haven't already, download Sublime Text

- Right click the **fewd** folder, and select New File



USING SUBLIME TEXT

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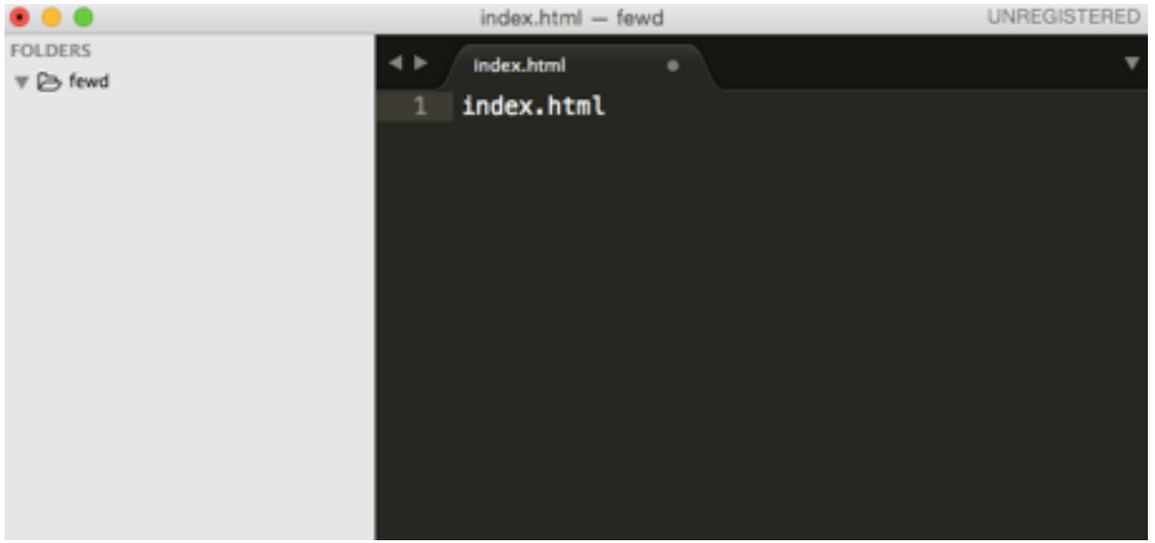
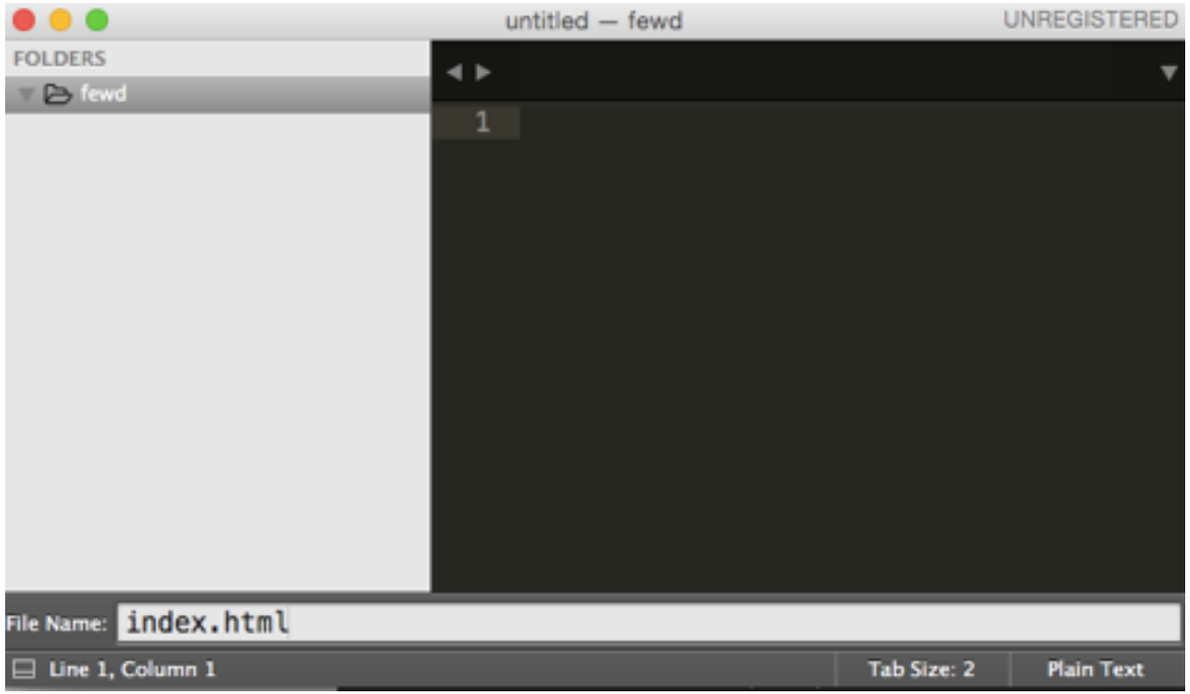
- If a new file opens, type index.html into that file



- If you see an input at the bottom of Sublime, type index.html into that field and hit enter.



USING SUBLIME TEXT

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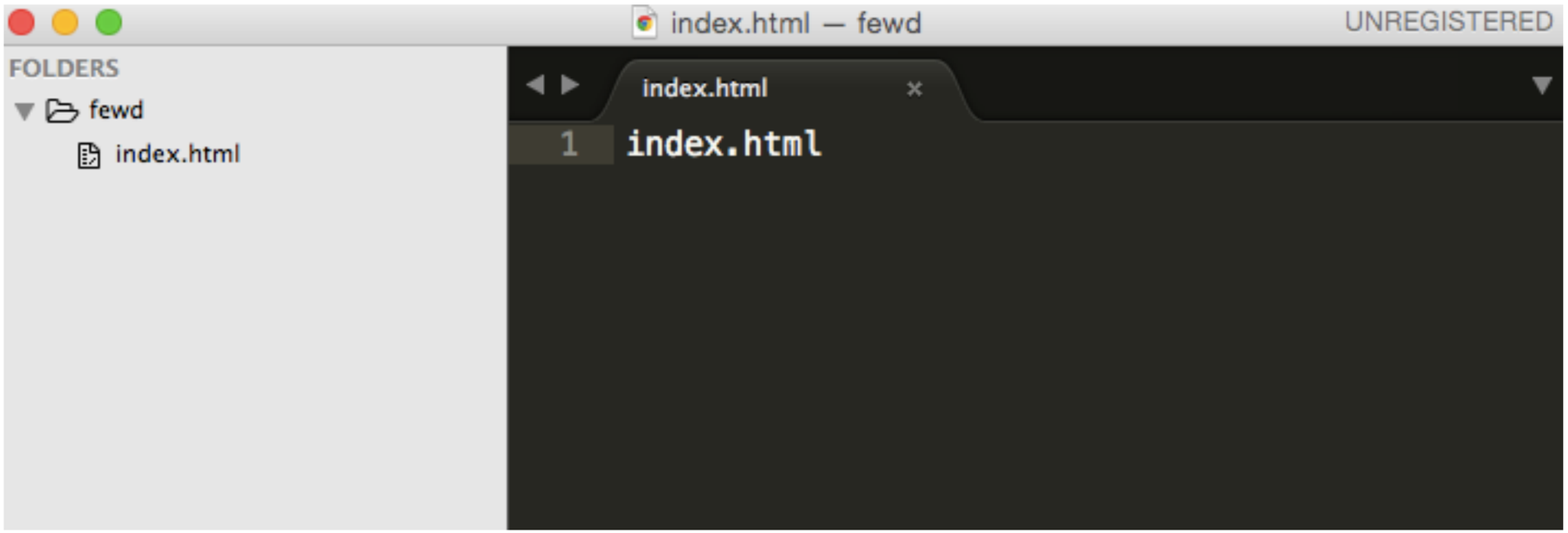
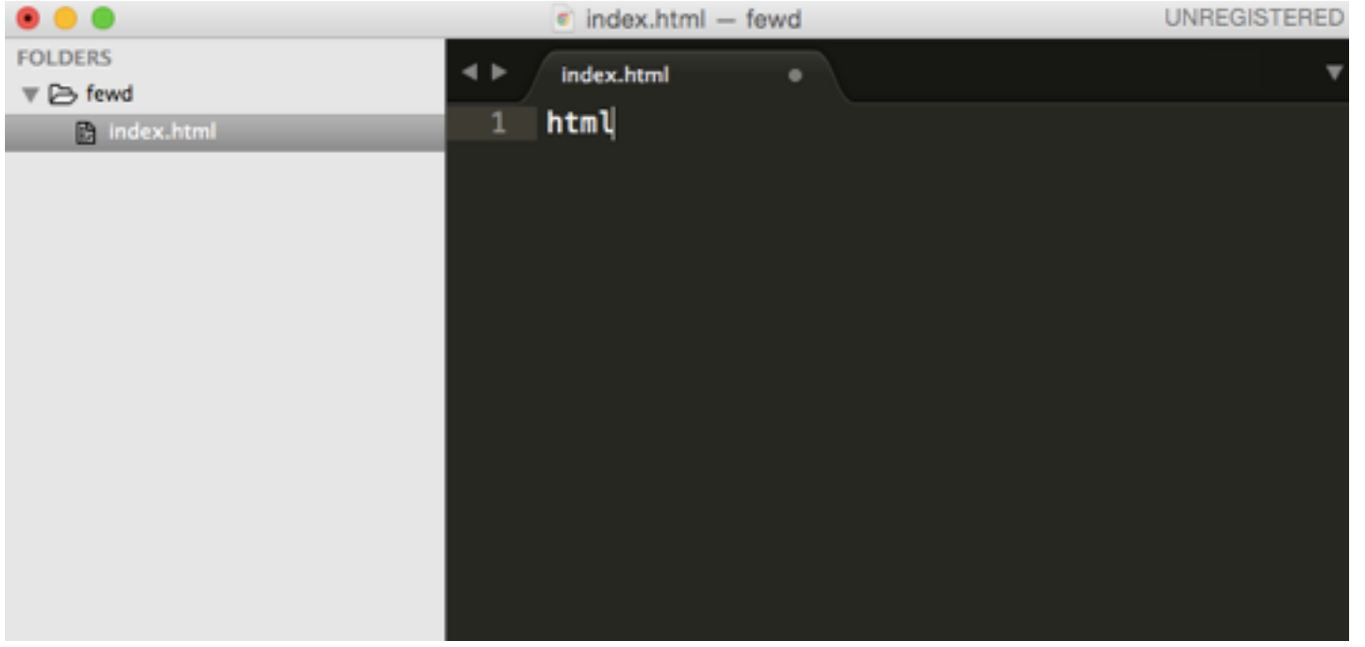
- Then hit CMD + s (Control + S on Windows) to save the file to your project, and afterward you should see it in the project directory on the left.



USING SUBLIME TEXT

If you haven't already, download Sublime Text

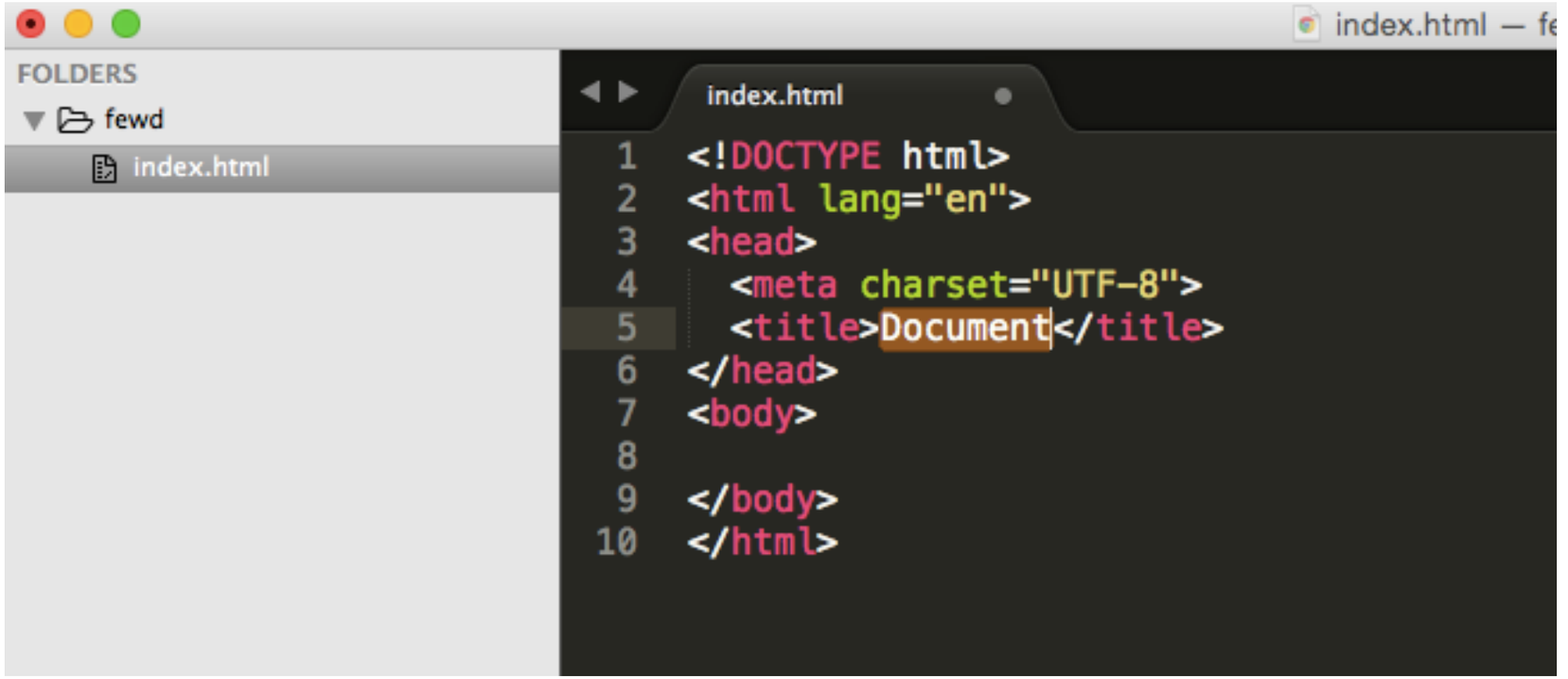
- Delete the text in the file and type html



USING SUBLIME TEXT

If you haven't already, download Sublime Text

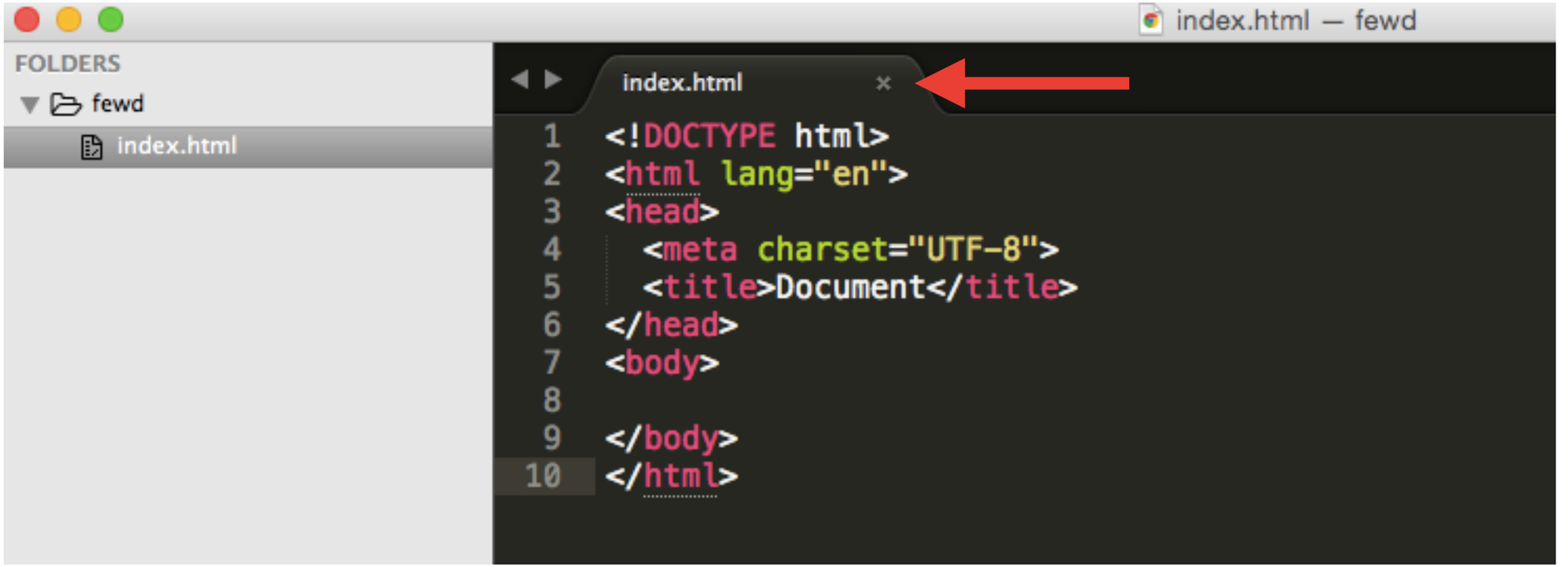
- Then hit tab to see an autogenerated set of boilerplate html.



USING SUBLIME TEXT

If you haven't already, download Sublime Text

- Then save it by hitting CMD+s. NOTE THAT IT SHOULD NOT BE A CIRCLE WHEN IT SAVED. If you see the X on the file tab then that means it's been saved.



HTML BASICS

WHAT IS HTML?

WHAT IS HTML?

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The New York Times
Monday, January 5, 2015 | Today's Paper | Video | 36°F | Dow -1.80% ↓
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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
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
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Milwaukee Journal Sentinel ↗
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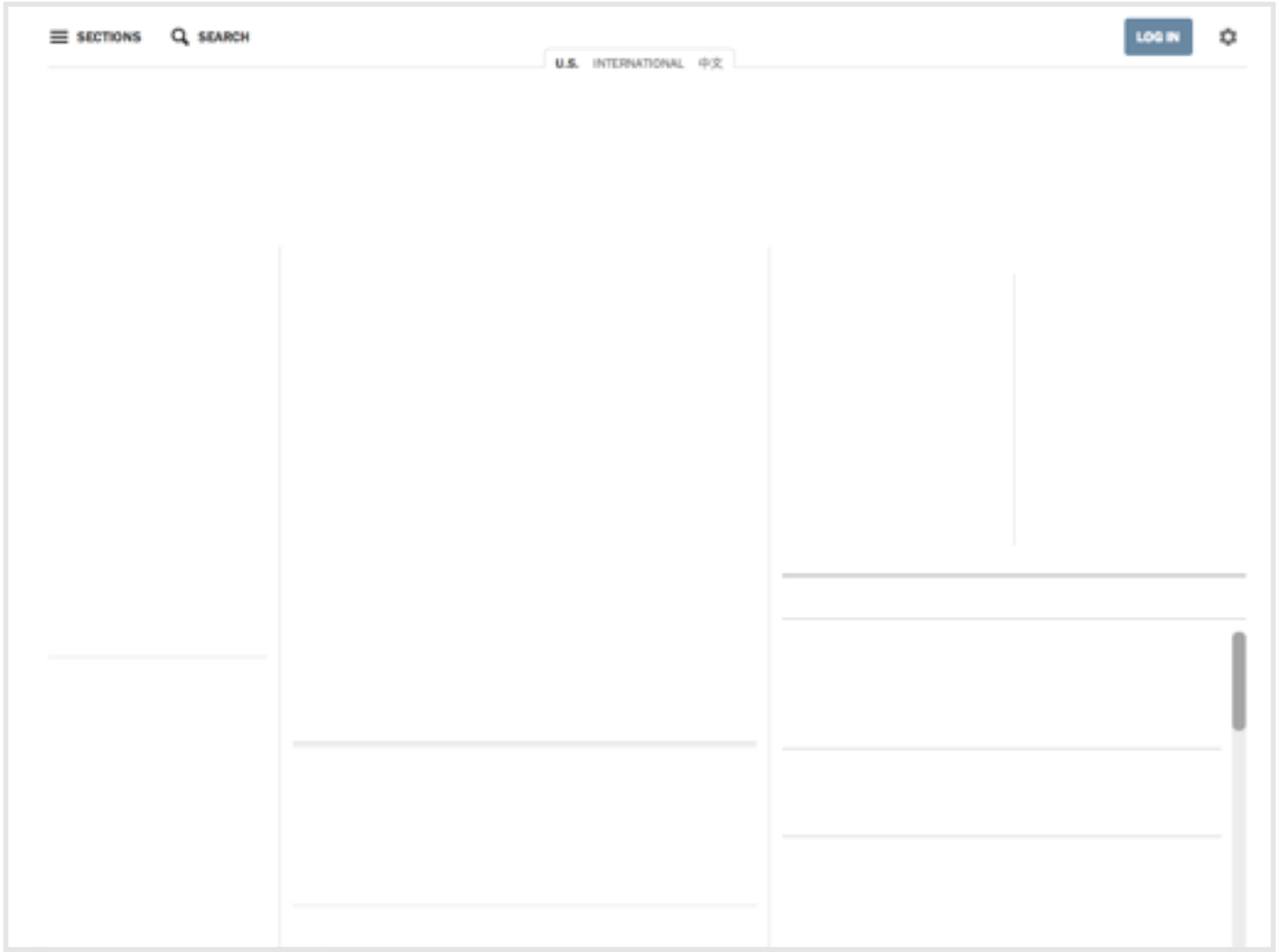

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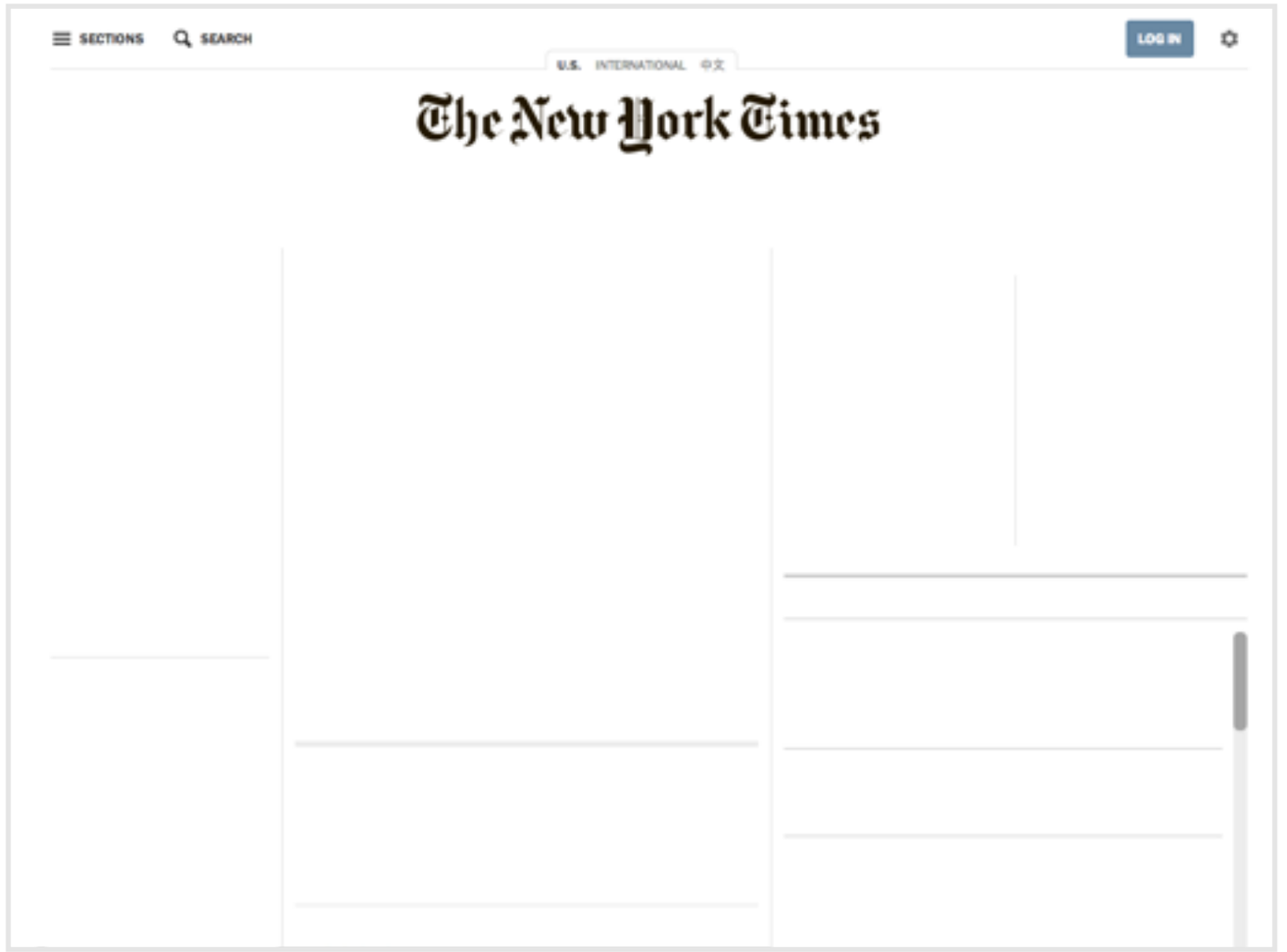

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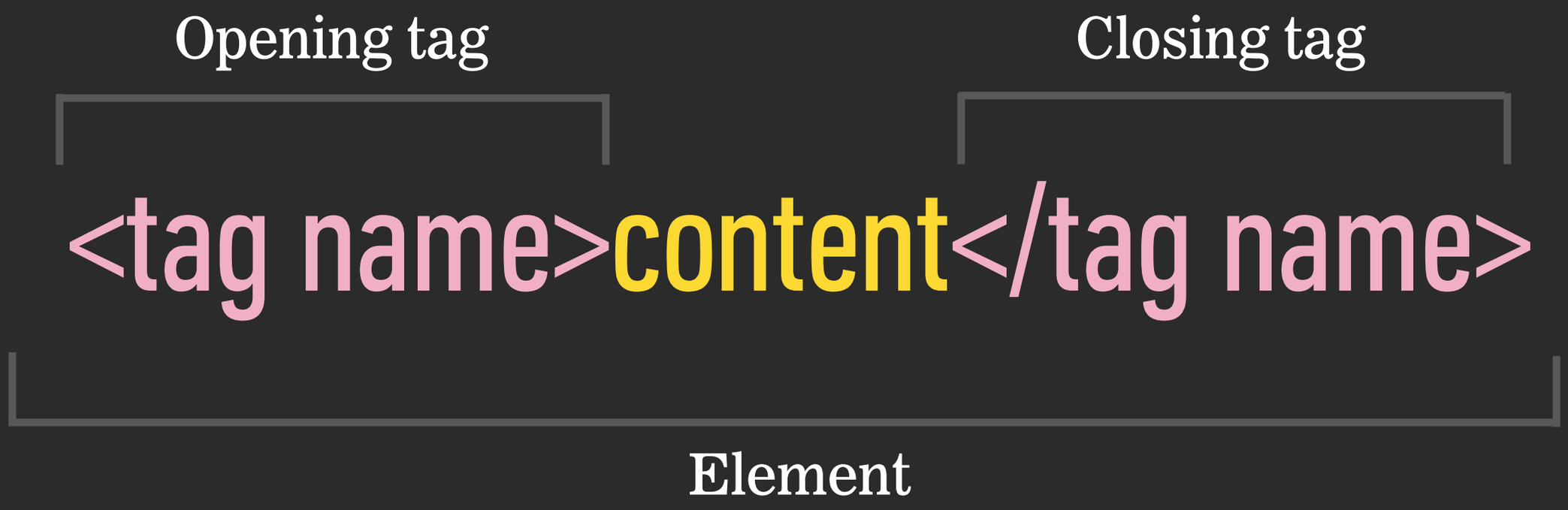
now A judge in Wisconsin ordered a trial for Dustin Diamond, best known as Screech from "Saved by the Bell," on charges stemming from a bar fight on Christmas night.
Milwaukee Journal Sentinel
22m Markets tumbled in Europe and the U.S. as the declining price of oil sent ripples around the world.
The 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

STRUCTURAL MARKUP

HTML SYNTAX — TAGS



STRUCTURAL TAGS — HEADINGS

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

<h1>

<h2>

<h3>

<h4>

<h5>

<h6>

STRUCTURAL TAGS — PARAGRAPHS

- 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>

STRUCTURAL TAGS — UNORDERED LISTS

- An unordered list is created with the <ul> element.
- Each item in the list is placed between an opening <li> and closing </li> tag.
- ‘li’ stands for list item

<ul>

<li>

STRUCTURAL TAGS — WHITE SPACE

- 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.

ACTIVITY

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.

SEMANTIC MARKUP

- Add extra information to web pages

SEMANTIC TAGS — STRONG, EM

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

- The 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

SEMANTIC TAGS — QUOTATIONS

- 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.

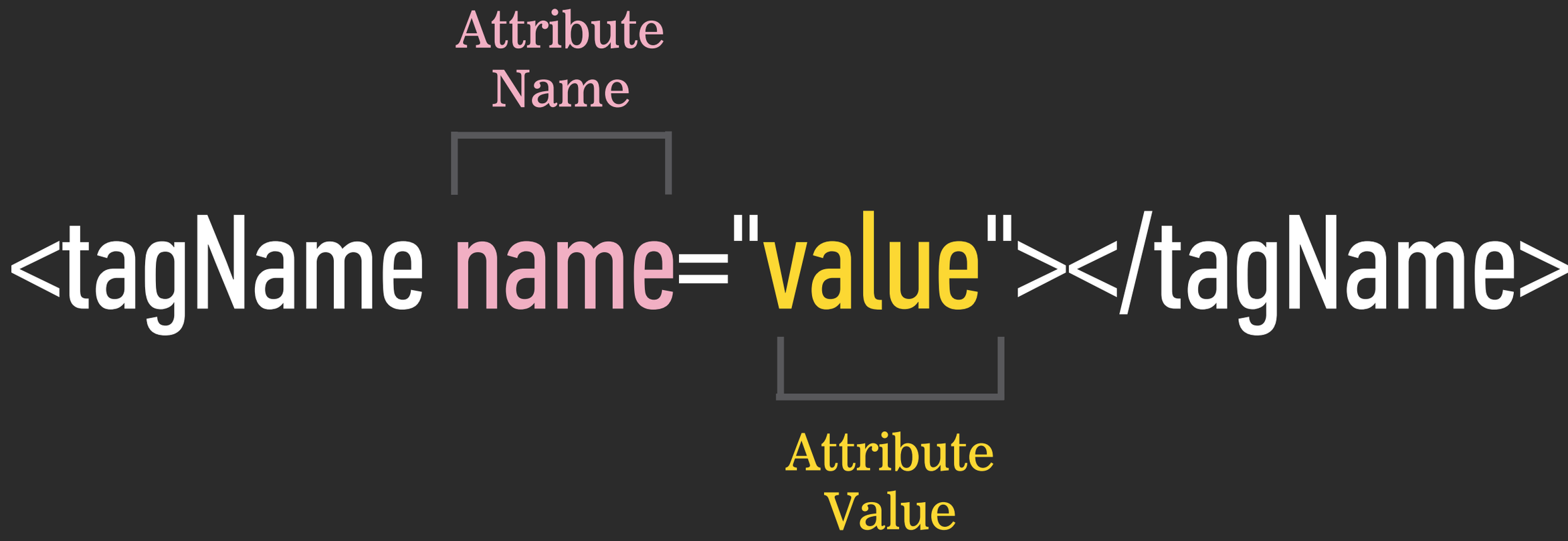
<q>

LINKS

ATTRIBUTES — EXAMPLE

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

HTML SYNTAX — ATTRIBUTES



SEMANTIC TAGS — LINKS

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

ACTIVITY

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.

ACTIVITY

EXERCISE

KEY OBJECTIVE

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

TIMING

2 min

15 min

1. Review copy in index.html and plan out structure with partner
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. O*ptional*: 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 after Wednesday

LEARNING OBJECTIVES

- Provide an overview of the world of web development
- 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.

HOMEWORK

HOMEWORK

- Fill out your profile on Schoology!!!
- Optional: Start on HTML portion of About Me Page (which will be HW)

HIGHLY RECOMMENDED COURSE MATERIALS:

- Jon Duckett - Web Design with HTML, CSS, JavaScript and jQuery Set

SNACK CALENDAR

SIGN UP HERE

EXIT TICKETS

Bookmark this link:
http://goo.gl/forms/vPhCOlfESf