JAVASCRIPT DEVELOPMENT

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HELLO!

1. Pull changes from the `svodnik/jsd5` repo to your computer (If necessary, first use the command `git stash` to set aside any changes you've made locally)

2. Navigate to the `starter-code` folder

Intro to the DOM and jQuery

LEARNING OBJECTIVES

At the end of this class, you will be able to

‣ Identify differences between the DOM and HTML.

‣ Explain and use JavaScript methods for DOM manipulation.

‣ Manipulate the DOM by using jQuery selectors and functions.

‣ Register and trigger event handlers for jQuery events.

AGENDA

‣ DOM
‣ DOM manipulation lab
‣ jQuery
‣ jQuery lab

Checkin and questions

‣ The **most significant thing I've learned** about objects and JSON is

_____.

‣ My **biggest outstanding question** about objects and JSON is

_____.

Brainstorm 5 ways to describe the location of the string "orange" within this HTML code.

```html
<html>
  <head>
    <title>Foods</title>
  </head>
  <body>
    <h1><img src="images/apples.png" alt="a wood bowl of red apples"></h1>
    <ul class="foodsList">
      <li class="red" id="mainitem">apple</li>
      <li class="orange">orange</li>
      <li class="yellow">banana</li>
    </ul>
  </body>
</html>
```
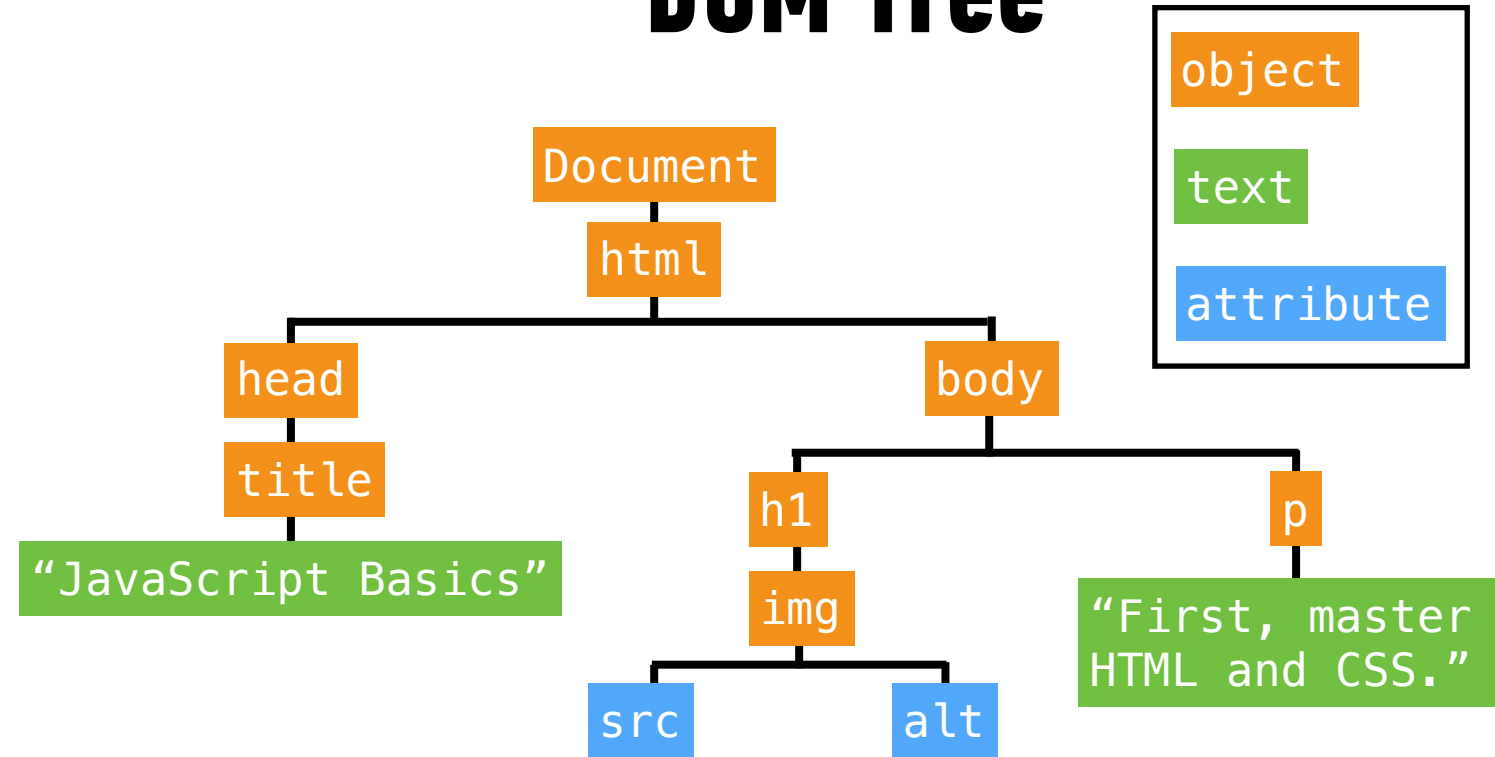
THE DOCUMENT OBJECT MODEL (DOM)

DOCUMENT OBJECT MODEL (DOM)

‣ The **Document Object Model (DOM)** is a way of representing the contents of a web page.

‣ The DOM lets you access the structure of a web page, and change the structure, style, and content of the page.

‣ The DOM breaks up a page into objects and nodes, which have properties and methods.

‣ At its core, the DOM is a way of accessing web pages with scripts.

HTML code

DOM Tree

```html
<html>
  <head>
    <title>JavaScript Basics</title>
  </head>
  <body>
    <h1>
      <img src="logo.png" alt="JS Basics">
    </h1>
    <p>First, master HTML and CSS.</p>
  </body>
</html>
```

object

text

attribute

Document

html

head

title

"JavaScript Basics"

body

h1

img

src
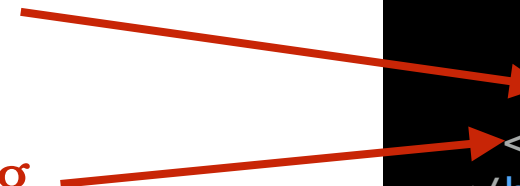
alt

p

"First, master HTML and CSS."

The Document object

‣ Created by the browser

‣ Contains properties and methods of the web page content

‣ Also contains all web page elements as descendant objects

REFERENCING A SCRIPT IN HTML

```html
<html>
  <head>
  </head>
  <body>
    <h1>JavaScript resources</h1>
    <script src="script.js"></script>
  </body>
</html>
```

script element at the bottom of the body element

just before the closing </body> tag

‣ For DOM manipulation, always place the `script` element at the bottom of the body element, just before the closing </body> tag

‣ This ensures that all the content has loaded before we start manipulating the DOM

‣ Otherwise, the content we're working with may not have loaded yet, resulting in errors

REFERENCING THE JQUERY LIBRARY

the jQuery file is loaded first, telling the browser how to interpret jQuery syntax

our JavaScript file uses jQuery syntax, so we load it after the jQuery JavaScript file

```html
<html>
  <head>
  </head>
  <body>
    <h1>JavaScript resources</h1>
    <script src="jquery-3.1.0.js"></script>
    <script src="script.js"></script>
  </body>
</html>
```

LEARNING OBJECTIVES – REVIEW

‣ Identify differences between the DOM and HTML.

‣ Explain and use JavaScript methods for DOM manipulation.

‣ Manipulate the DOM by using jQuery selectors and functions.

‣ Register and trigger event handlers for jQuery events.

NEXT CLASS PREVIEW

DOM and jQuery continued

‣ Implement advanced jQuery events.

‣ Use event delegation to manage dynamic content.

‣ Use implicit iteration to update elements of a jQuery selection and chaining to place methods on selectors.

‣ Add a templating language to our projects for better and more abstracted content manipulation.

Exit Tickets!

Q&A