GENERAL ASSEMBLY

JAVASCRIPT DEVELOPMENT

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HELLO!

1. Pull changes from the `svodnik/jsd6` repo to your computer
2. Open the `starter-code` folder in your code editor

OBJECTS AND JSON

LEARNING OBJECTIVES

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

- Identify likely objects, properties, and methods in real-world scenarios
- Create JavaScript objects using object literal notation
- Implement and interface with JSON data

AGENDA

- Objects, properties, and methods
- Lab: Translate real world scenarios into objects
- Lab: Create objects
- JSON
- Lab: Work with JSON

Checkin and questions

- The **most unexpected thing I've learned** so far while working on my bot is _____.
- My **biggest outstanding question** about creating bots for Slack is _____.

Think about the item you've been assigned:

- List attributes (aspects that you can describe)
- List actions (things it can do)

OBJECTS

OBJECTS

- Objects are a separate data type from the ones we've learned
- An object stores key-value pairs
- An object is not ordered (unlike arrays)

PROPERTIES

- Object properties are variables attached to a specific object.

PROPERTIES, KEYS, AND VALUES

- At its simplest, an **object** is a collection of properties
- A **property** is an association between a key and a value
  - **key**: name (often descriptive) used to reference the data
  - **value**: the data stored in that property
- A property is sometimes referred to as a key-value pair

METHODS

- A **method** is a function that is specified as part of an object.
- You call a method the same way you call a property — using dot notation
- The main difference between calling properties and methods: when calling a method, you have to include ( ) after the method name.
- To define a method, you assign a function to a named property.

REAL WORLD SCENARIO

A user, browsing on a shopping website, searches for size 12 running shoes, and examines several pairs before purchasing one.

PRACTICE: REAL WORLD SCENARIOS & OBJECTS

PRACTICE: MONKEYS

JSON

- A data format that's based on JavaScript
- Both easy for humans to read and write AND easy for programs to parse and generate
- Language-independent (NOT JavaScript-specific)

JSON RULES

- Property names must be double-quoted strings.
- Trailing commas are forbidden.
- Leading zeroes are prohibited.
- In numbers, a decimal point must be followed by at least one digit.
- Most characters are allowed in strings; however, certain characters (such as ', ", \, and newline/tab) must be 'escaped' with a preceding backslash (\ ) in order to be read as characters (as opposed to JSON control code).
- All strings must be double-quoted.
- No comments!

PRACTICE: JSON

LEARNING OBJECTIVES - REVIEW

- Identify likely objects, attributes, and methods in real-world scenarios
- Create JavaScript objects using object literal notation
- Implement and interface with JSON data

NEXT CLASS PREVIEW

Intro to the DOM and jQuery

- Identify differences between the DOM and HTML.
- Explain the methods and use the DOM in JavaScript.
- Manipulate the DOM by using jQuery selectors and functions.
- Register and trigger event handlers for jQuery events.

Exit Tickets!

Q&A