

# JAVASCRIPT DEVELOPMENT

Sasha Vodnik, Instructor

# HELLO!

Pull changes from the `svodnik/jsd5` repo to your computer

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**JAVASCRIPT DEVELOPMENT**

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# **SLACK BOT LAB**

# **LEARNING OBJECTIVES**

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

- Install and configure all utilities needed to run a Hubot
- Write scripts that allow your Hubot to interact with users of the class Slack organization

# **AGENDA**

- Install and configure utilities and accounts
- Explore sample code for bots
- Plan what you'd like your bot to do
- Create a basic bot to verify that your setup works
- Expand on your basic code to add your planned functionality

# Checkin and questions

- The **most significant thing I learned** about Scope and Closures is \_\_\_\_\_.
- My **biggest outstanding question** about Scope and Closures is \_\_\_\_\_.

# **SLACK BOTS**

# SLACK AND BOTS

- **Bot:** A script programmed to interact with users as if it's a person
  - Slackbot
  - PlusPlus
- We will use a framework to create our own bots with interactive behaviors that we specify with our code
- These bots will be members of our class Slack organization



# HUBOT

- **Hubot:** A framework meant to speed the process of developing bots for a variety of platforms, including Slack
- Includes built-in functionality for performing common bot tasks, such as posting images.
- We will use the Hubot framework to create our bots

# **HUBOT VS SLACK BOT VS SLACKBOT**

- Hubot is the framework we're using
- Each of us will be building a bot for Slack === a Slack bot
- Slackbot is the name of a specific bot already installed in our Slack organization; it answers questions about how to use Slack

# HEROKU

- **Heroku:** A platform for hosting and running apps in the cloud.
- We will create our code on our computers, then push it to Heroku so it can run even when our computers are sleeping or shut down

# YEOMAN

- **Yeoman:** A set of tools that provides a scaffolding (basic structure) for getting web apps up and running quickly
- We'll use a Yeoman tool called `yo`, which automates a lot of behind-the-scenes work

# COFFEESCRIPT

- **CoffeeScript:** A variant of JavaScript, intended to be more readable and faster to type.
- Only JavaScript can run in browsers
  - Before being used, CoffeeScript code must be compiled, which is a process that translates it into JavaScript
- Many Hubot examples are written in CoffeeScript, but you can write Hubot code in vanilla JavaScript without any problem

# UNDERSTANDING THE HUBOT FRAMEWORK

- As a framework, Hubot has its own way of doing things
- The code for your bot behaviors is structured as follows:

```
module.exports = function(robot) {  
  robot.verb(parameter1, function(res) {  
    return res.command();  
  });  
};
```

# **BASIC HUBOT VERBS**

- **hear**: called anytime a message's text matches
- **respond**: called for messages immediately preceded by the robot's name or alias

# **LEARNING OBJECTIVES – REVIEW**

- Install and configure all utilities needed to run a Hubot
- Write scripts that allow your Hubot to interact with users of the class Slack organization



# **NEXT CLASS PREVIEW**

## **Objects and JSON**

- Identify likely objects, attributes, and methods in real-world scenarios
- Write a constructor for a JavaScript object
- Implement and interface with JSON data

**Exit Tickets!**

# Q&A