What is Ruby on Rails?

- Web Framework released in 2004
- Open-source, current version is 6.1.3
- Makes use of the Ruby programming language
 - o Knowing Ruby syntax helps, but is not required to start using Rails

Why Rails?

• Popular applications built with Ruby on Rails:

o Twitter

Basecamp

HEY

o GitHub

Groupon

Shopify

Airbnb

o Twitch

SoundCloud

o Hulu

o Zendesk

Square

Cookpad

o 1000s more!!!

High-demand by employers for developers with Ruby on Rails knowledge

Lots of online support/help

Python & Ruby

Both

- Make heavy use of white-space
- Relatively easy to learn
- No upfront costs
- Dynamically interpreted

Rails Principles

- Model-View-Controller (MVC) Architecture
 - Models
 - Ruby classes
 - Handle business logic/heavy-lifting
 - Talk with Database
 - Validate Data
 - Etc.
 - Views
 - Templates that render data from the models
 - Handles logic of presentation that end user sees/interacts with
 - Controllers
 - Sit between model and view
 - Controls flow of application

- Handles requests
- Initiate changes to the model
- Etc.
- Convention Over Configuration (aka "The Rails Way")
 - Set of assumptions/defaults as the best way to do things
 - Rails encourages specific ways to achieve tasks and sometimes even discourages alternatives
 - When getting started, Rails makes assumptions about what you need so you can accomplish more with less code
 - Allows you to spend more time coding and less time setting up configuration files
- DRY (Don't Repeat Yourself)
 - Software principle to reduce repetition in your code
 - Code becomes more maintainable, extendable, and less buggy

Demonstration - Build a Blog!

- 1. Create the project
- Generate a scaffold of models and views
- 3. CRUD demonstration
- 4. Add requirements to the post model
- 5. Debugging demos
- 6. Add ability to comment
- 7. Send emails with Rails
- 8. Add an action cable
- 9. Testing