

Learn to code a
Node JS web-app
& deploy it on **AWS** using
auto-scaling **containers**



AWS Fargate

Introduction

Why JavaScript (Node)?

- Javascript is the most used programming language in the world
- Community support & job availability
- Easy to learn

Why AWS Fargate (containers)?

- Developing an app is simple
- Runs on docker containers
- Cost effective (won't incur in any costs for the course)

Goals

What will you learn & achieve?

- Learn the basics of JavaScript (*if you've never programmed in JavaScript before*)
- Build a back-end web-app from scratch using Express (*a Node web framework*)
- Make external API calls from your app
- Host your app on AWS Fargate
- Make your app accessible through your own domain name

Prerequisites

- Open up your own AWS account here: <https://aws.amazon.com/>
- Download and install a code editor. A great free one is VS Code which can be downloaded here: <https://code.visualstudio.com/download>
- Install Node (see next slides)

Installing Node on Windows

Summary:

- Make sure you have Administrator privileges on your computer
- Download and install Node from <https://nodejs.org/en/download/>
- Open your Command Prompt or PowerShell
- Type in the following command to check if it has been installed
 - `node -v`

Full instructions can be found here:

<https://phoenixnap.com/kb/install-node-js-npm-on-windows>

Installing Node on Linux

Summary:

- Open your Terminal
- Type in the following command:
 - `sudo apt install nodejs npm`
- Type in the following command to check if it has been installed
 - `node -v`

Full instructions can be found here:

<https://www.geeksforgeeks.org/installation-of-node-js-on-linux/>

Installing Node on Mac

Summary:

- Install homebrew by running the following command
 - `ruby -e "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/master/install)"`
- Next, use homebrew to install node by running the following command
 - `brew install node`
- Type in the following command to check if it has been installed
 - `node -v`

Full instructions can be found here:

<https://treehouse.github.io/installation-guides/mac/node-mac.html>

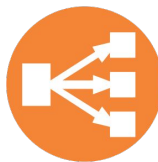
Technology stack



Users accessing your app over the Internet



AWS Product that enables you to map your domain name to other the AWS Load Balancer



AWS Load balancer will direct inbound traffic to the different instances of your application created by Fargate



AWS Fargate will spin up instances of your application in containers according to traffic load



Your application coded in Express using Node JS