NearForm

Azure DevOps and K8s Workshop

4th of December, 2019

Introduction

Who am I?

- David Gonzalez

- **DevOps Consultant at NearForm**

- Author of "Implementing Modern DevOps"

What are we going to do today

Deploy an application to Azure Kubernetes Service

- Existing application
- Node.js but technology agnostic
- Hosted in Github

Setup a CI/CD pipeline

- Build the required pipelines
- Separate release from deployment
- Deploy on changes in GitHub

Expected outcomes

Better understanding of Azure

- Particularly Kubernetes Service and DevOps
- Improve CI/CR/CD knowledge on DevOps

Showcase Capabilities on AKS

- Smooth releases
- Understand replication for HA
- Learn how load spreading works

Azure DevOps Pipelines

Technology Components

- **GitHub** - Source Code

- **Docker** - Application Runtime

- **Helm** - Application Metadata Delivery Package

- **Kubernetes** - Orchestration

Previous knowledge and tools required

Some coding

- No need to be an expert but able to read some code
- Some JavaScript
- Hosted in Github

Containerization

- Basic Docker knowledge
- How to Dockerize an app

Azure subscription

- Trial is more than enough.

Let's start working

Code

- https://www.github.com/nearform/azure-workshop
- README.md contains instructions but we will follow them step by step

Questions afterwards

- david.gonzalez@nearform.com
- Video calls can be scheduled if necessary