**Capstone Project**

In this Capstone project, I will apply the skills learned throughout the Cloud DevOps Nanodegree program which included:

* Working in AWS
* Using Circle CI to implement Continuous Integration and Continuous Deployment
* Building pipelines (A pipeline of 14 jobs crazy!!!!!!!!)
* Working with Ansible and Cloud Formation to deploy clusters, Infrastructure as Code (IaC)
* Building Kubernetes Clusters
* Building Docker images and pushing images to the Docker hub

In the next steps, I am going to elaborate on the scope and strategy to build and deploy a robofriends application that I built one day while learning React framework, deployed using GitHub static pages (<https://arnoldrx.github.io/robofriends/>)

**STEP I - Propose and Scope the Project**

* My pipeline will consist of 5 jobs enumerated as follows:

Build (Install Dependencies) -> Linting -> scan -> build docker -> deploy

* I used Circleci for Continuous integration
* For the deployment type, I used a Rolling deployment

#### STEP II - Use CircleCI and implement rolling deployment

* Setting up the environment in which I will deploy code

#### STEP III - Building a Kubernetes cluster

* This infrastructure deployment will create an EC2 instance, set up the network, and deploy the software to these instances.
* The Kubernetes cluster will be initialized manually

#### STEP IV: Build your pipeline

#### Constructing the pipeline in the GitHub repository for the project

#### Adding the steps to be included in the pipeline

#### Include the source code in the Git repository

#### Include a linting step both a failed linting screenshot and a successful linting screenshot to show the linter is working properly

#### STEP V: Test your pipeline

#### Performs build on the pipeline

#### Verification of pipeline working as designed

#### Take a screenshot of the Jenkins showing deployment and a screenshot of my AWS EC2 page showing the newly created instance.

#### Thanks, Udacity !!!!!!!!