



## Presentation of My Project

Recently our team was assigned a project called Espresso. The goal of the project was to deploy an E-commerce application for a new customer our company is working with using Kubernetes. This application was needed to service millions of customers and to be able to handle reviews for the various coffee flavors offered by our client.

The project consisted being made up of the following elements

- (1) Front End Service
- (3) API Services
- (1) Postgres Database for storage
- (1) Postgres Database for data replication from the main Postgres Database
- (1) Redis Database for session caching

After analyzing the task, Our team divided this project into four core areas including Development, Testing, Pre-Production, and Production.

## Accomplishments as a Team

We worked together to ensure that a manifest was written for each deployment and service, after every set was written they were tested for accuracy. After successful testing those manifests had been templated into a helm chart for deployment on our kubernetes cluster. As a team we ensured the value file was easy to follow for an individual who may have not been involved in the creation process to ensure it's neatness and ease of updating in the future. In the end the client was very pleased with what we had put together and expressed that their expectations were beat.

## Accomplishments as an Individual

As in everything I participate in I paid close attention to details as these types of projects require diligence. I tried to keep the team on track to try and beat all of our deadlines. I believe I was very effective in catching any issues in the values file as that is where I have found my strengths to be.

## Issues encountered while working on project

Although there were a few challenges we faced we were able to overcome them. Here are a few of the issues we had experienced. After launching a certain deployment we came to realize there was an issue with an image being utilized. We combed thru the manifest and learned the image included an extra space which caused it not to be pulled. Once this was found it was rectified. Another issue we had was that "hyphens" were not suitable to be used in the value file so we substituted them with "underscores", and this was sufficient for our needs. This way when the value file was being cited the template had no issues with it since the parent portion of the values file did not include hyphens in it anymore.

## Personal Notes

We came to understand that the development team did not include certain objects such as the liveness or readiness probe, so it would be ideal to inform them to please be weary of this in developing the application.