## Winter 2019 Developer Intern Challenge

First and foremost, thank you for opening my eyes to the new set of technologies housed within this challenge. Simply put I am amazed by how quickly and efficiently one can create, deploy home brewed application and scale it for larger utilization. The challenge at hand was rather tough for me as I hadn't learned these technologies before and limited time.

For phase 1 of the challenge, I found <u>Getting Started with Rails guide</u> published on Ruby on Rails site to be the best route. With the resource at hand, I was quickly able to understand rails, create a simple blogging application that follows MVC pattern with crud functionality and basic authentication. It surprising as how quickly a simple application can be made with rails compared to other languages & frameworks.

Project Link: https://github.com/bhat0066/demo\_app

Technologies infused within the next phase of the challenge proved to be much harder to understand then implement. After going through a considerable amount of official documentation and many more youtube tutorials I had a stronger grasp on Docker. Next, I was able to utilize official Dockerfile documentation and rather quickly was able to make a docker image which housed a simple blogging application. With the limited time at hand, I wasn't able to adequately test image and configure the image properly.

Dockerfile Link: https://github.com/bhat0066/demo app/blob/master/Dockerfile

As I was going through <u>Kubernetes</u> documentation, most of my questions and confusion around the topic started clearing away. With semi-solid knowledge on Kubernetes, I opted to house my project with GKE. Quickly enough, I encountered new challenges as I was navigating through Google cloud documentation to find out the best way to deploy the image. Soon enough, I was able to find a set of correct resources which helped in creating a gcloud project, cloning & building my docker image from Dockerfile, uploading it to gcloud registry, creating a container clusters(3x), deploy the application as Pods with a service that expose its external address at a port and scale it up(3x).

Link: http://35.193.201.213/

Ps. I wasn't able to utilize the google cloud free tier service so please let me know as soon as you are done with my application...so I can bring down the project without it costing more. =(