Docker and Kubernetes: Web Service for GYM

Project Group 12

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Overview

The purpose of this project is to make a website to keep track of memberships, the members who access the GYM on a daily basis, as well as keep checking gear in and out. Gathering this data will let us know the foot traffic and can curtail necessary services to the members.

Goals

1. Understand and learn the functionality of Docker and Kubernetes and build a website using Python.
2. Set up Kubernetes that will manage docker containers on a cluster of VMs, develop a web application, and deploy it on the Kubernetes cluster.

Testbed and Software Tools

1. Google Kubernetes Engine (GKE) - https://cloud.google.com/kubernetes-engine/docs/tutorials/hello-app
2. Kubernetes tutorial - https://kubernetes.io/docs/tutorials/