

Week 7

Learning

Load Testing

I want to load test my application so that I can complete my second milestone.

K6

This is some load testing software I saw being used out in the wild to help determine the amount of transactions per second a service was able to produce. I want to get more familiar with K6, so I will be figuring out how to use it in order to find out more about Kubernetes load.

Horizontal Pod Autoscaler

Problems

K6 GET Requests are Failing

To query a React front end, you need to perform an HTTP request from a browser where JavaScript is enabled. K6 provides a “browser” module to test front ends using HTTP requests.

Pods are not Scaling During Load Test

Pods do end up scaling, but very slowly.

Extra

Helm | Charts

Explains the chart format, and provides basic guidance for building charts with Helm.



<https://helm.sh/docs/topics/charts/>



This is something interesting I saw while looking at some documentation for minikube. It looks like you can define your entire architecture using something like a Helm chart.

Domain Names

To make it easier for the k6 script to work, I briefly did some research on adding domain names for a Kubernetes service. There was lots to do with internal DNS within the cluster, but I couldn't figure out a way to turn my external IP into a domain name. It might be possible to map a domain name using an "Ingress" object, but I didn't want to spend too much time on this since my goal is just to load test.