Exercise 6 – Simple Application Example with Minikube

# Overview

In this exercise we’ll install a simple node.js application to Minikube

# Install node

choco install nodejs.install

# Create this file and save it to hellonode/server.js

var http = require(‘http’);

var handleRequest = function(request, response) {

console.log(‘Received request for URL: ‘ + request.url);

reponse.writeHead(200);

response.end(‘Hello World!’);

};

var www = http.createServer(handleRequest);

www.listen(8087);

# Run this application locally

node server.js

# Read about the node docker container

Hub.docker.com

# Create the Dockerfile

FROM node:9.9.0

EXPOSE 8087

COPY server.js .

CMD node server.js

# Push the Docker file to your repository

docker build -t hello-node:v1 hello-node:latest

docker push

# Create a Deployment

kubectl run hello-node –image=hello-node:v1 --port=8087

# Expose the Deployment to the Outside World

kubectl expose deployment hello-node –type=LoadBalancer

# View the pods and services

kubectl get pods

kubectl get services

# View the application

minikube service hello-node

# Update the Application

Response.end(‘something else’);

# Build the Application

docker build -t hello-node:v1 hello-node:latest

# Push the Application v2

docker push

# Update the Deployment

kubectl set image deployment/hello-node hello-node=hello-node:v2

# minikube addons

minikube addons list

minikube addons enable heapster

minikube addons open heapster

# A Note on Windows Server Containers

https://github.com/kubernetes/minikube/issues/2015