**PE08: Programming Exercise**

**Instruction**

**Resource:**

* Kubernetes, (n.d), Production-Grade Container Orchestration <https://kubernetes.io/>
* minikube, (n.d), minikube start, <https://minikube.sigs.k8s.io/docs/start/>
* Kubernetes, (n.d), Set up Ingress on Minikube with the NGINX Ingress Controller <https://kubernetes.io/docs/tasks/access-application-cluster/ingress-minikube/>

Your task for this Programming Exercise is to achieve a similar behavior as HOS08A but deploy a newly built container with a minor modification to the configuration YAML file.

1. Create duplicate of the “hos\_config.yaml” file and change file name to “pe\_config.yaml”
2. From the copied “hos\_config.yaml” file, follow around “!!!! Edit this for PE” comment to review where the edits are required.
3. For the image, use your own docker image with a new name and server content instead of the image used in HOS08A.

**Note**: You can delete/clean up the minikube cluster by running the minikube delete command after the PE.

**Submit the items below to the PE submission page:**

1. The GitHub link of your image contents, and “pe\_config.yaml” config script commits.
2. Provide a 20 to 50 words analysis or thoughts for setting up a local web application backend with the screenshot after completing task step 3.
3. Make sure the PE module number and your name are written on the file name (e.g., "*PE01\_YourName.docx").*