Imagine that, you are part of Development team. And your management asked you to develop containerized app

Unfortunately, the budget and duration given for this project is very limited

So, now, how can you develop and host that containerized app with all that load balancing, scalability and fault tolerance features within that short duration and budget

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Google Kubernetes Engine

Concept

Udemy

Objectives

Concept

a. Overview of GKE

Review Demo

a. Creating Kubernetes cluster on GKE

b. Test

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GKE

Provides managed environment

GKE takes care of:

- Creating VMs
- Managing Kubernetes master
- ETCD
- Container Networking
- OS Built for Containers
- Auto Scale
- Auto upgrade
- Auto Repair
- Integrated Logging & Monitoring
- Fully Managed

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Review

Demo

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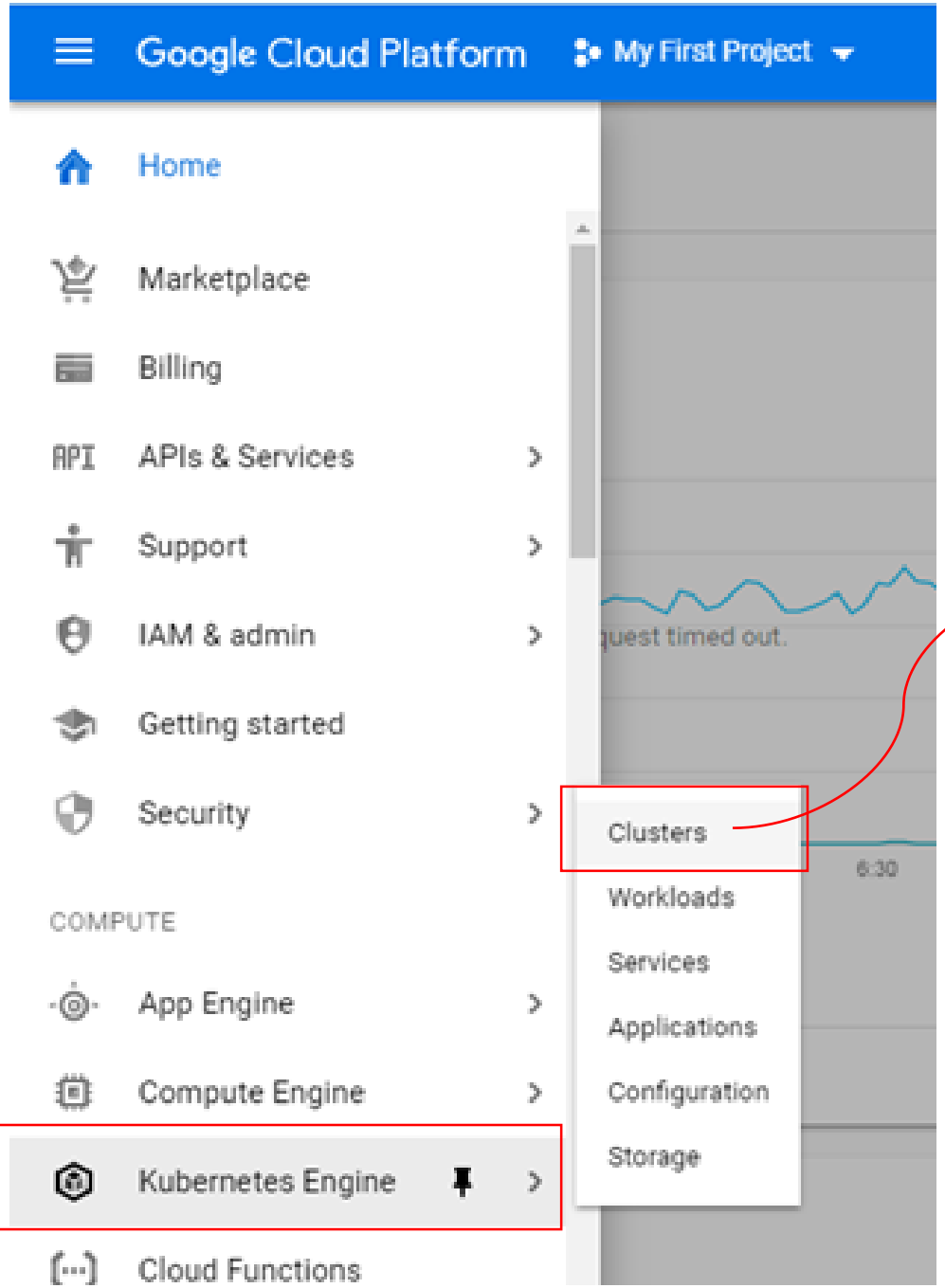

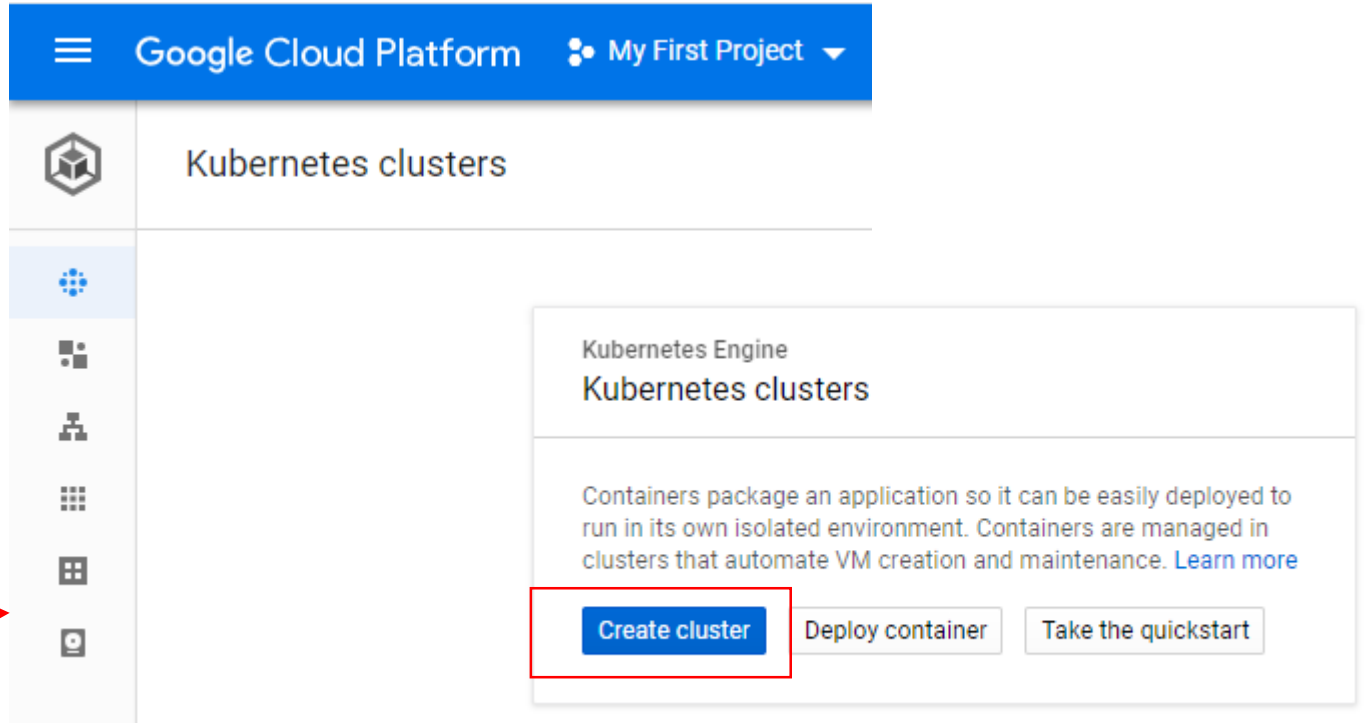

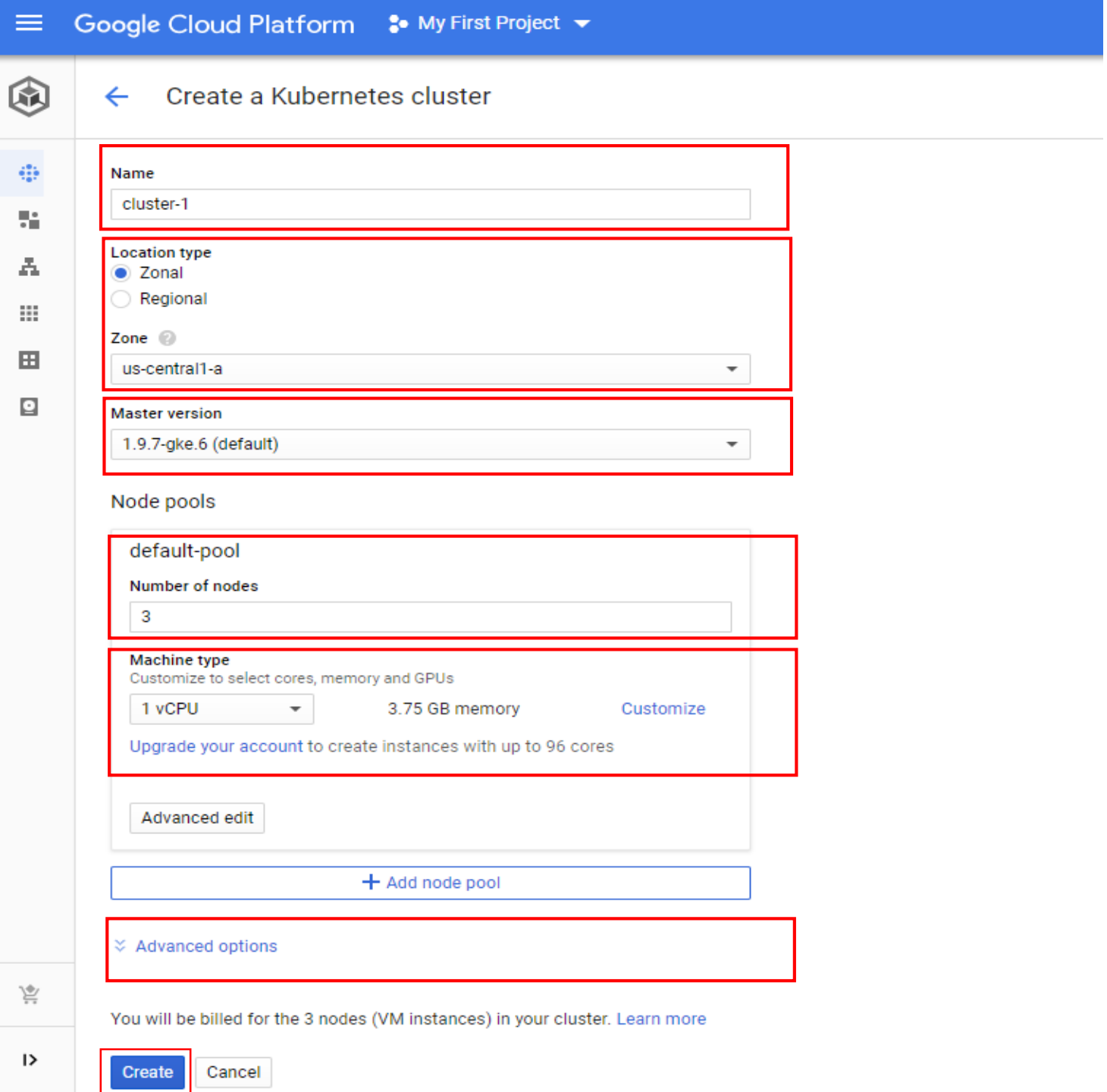

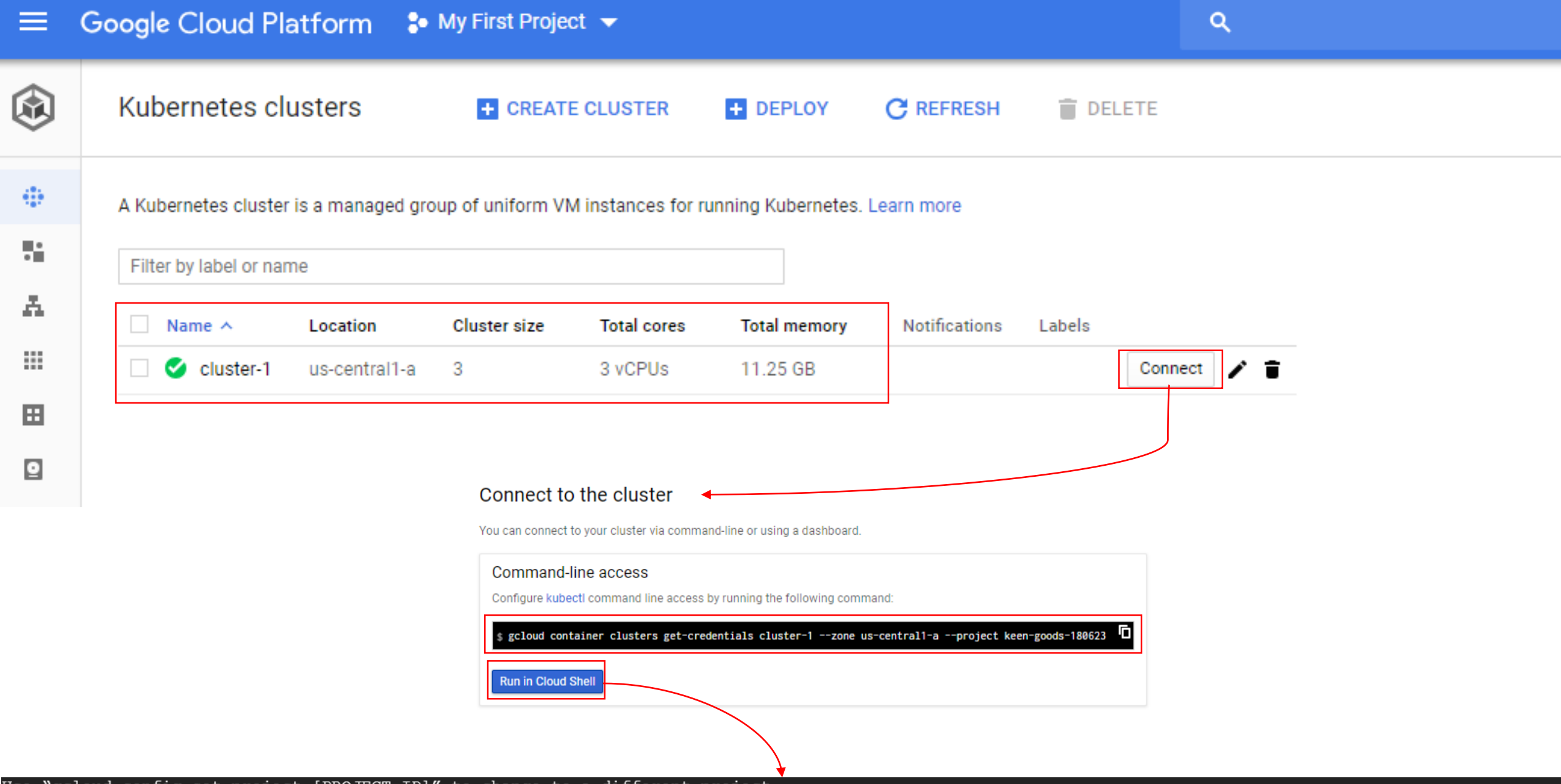


```
Use “gcloud config set project [PROJECT_ID]” to change to a different project.
challa_jobs@cloudshell:~ (keen-goods-180623)$ gcloud container clusters get-credentials cluster-1 --zone us-central1-a --project keen-goods-180623
Fetching cluster endpoint and auth data.
kubeconfig entry generated for cluster-1.
```

Testing

```
srinath@master:~ $ kubectl get nodes
NAME                                        STATUS    ROLES     AGE       VERSION
gke-cluster-1-default-pool-cdfb523f-7hhz    Ready     <none>    8m        v1.9.7-gke.6
gke-cluster-1-default-pool-cdfb523f-dsfv    Ready     <none>    8m        v1.9.7-gke.6
gke-cluster-1-default-pool-cdfb523f-wjtv    Ready     <none>    8m        v1.9.7-gke.6
```

```
srinath@master:~ $ kubectl run kubernetes-bootcamp --image=gcr.io/google-samples/kubernetes-bootcamp:v1
--port=8080
deployment "kubernetes-bootcamp" created
```

```
srinath@master:~ $ kubectl get po
NAME                                   READY     STATUS    RESTARTS   AGE
kubernetes-bootcamp-5dbf48f7d4-qzppc   1/1       Running   0          23s
```

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Summary

Concept

a. GKE is the Kubernetes Service on Google Cloud Platform

b. Advantages of GKE

Review Demo

a. Creating Kubernetes cluster on GKE

b. Test

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GKE
Demo

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