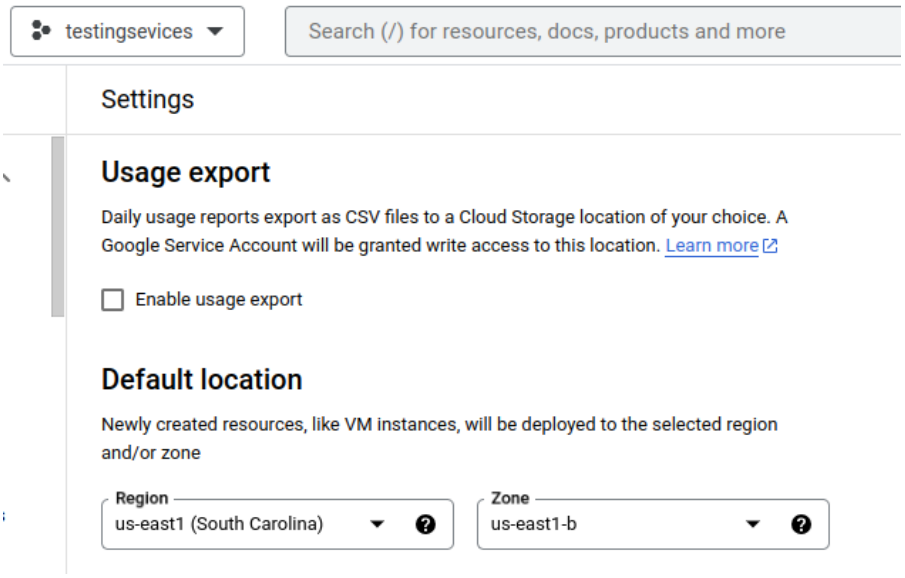
My Steps:

1. Github creating repo.
2. Creating separated modules
3. terraform code development
    a. Add Credentials (key and gcloud auth)
        i. gcloud config set project PROJECT_ID
        ii. gcloud auth application-default login

    b. Enabling the necessary APIs: Google Compute Engine API, Kubernetes Engine API, ArtifactRegistry API and Cloud Resource Manager API.

    c. Adding new SA " master" with a key added to the provider
    gcloud iam service-accounts create master --description="Terraform Service account For Developers Final Project" --display-name="Terraform Service Account"

    d. Setting project's default location



    e. You will also need to enable some APIs in order to use terraform:

    f. gcloud services enable cloudresourcemanager.googleapis.com

g. gcloud services enable container.googleapis.com
h. gcloud services enable artifactregistry.googleapis.com
i. gcloud services enable compute.googleapis.com

j. Creating VM
    i. To ssh:
        - gcloud auth activate-service-account --key-file=master-terraform-project-iti.json

        - gcloud compute ssh management-vm --zone=us-east1-b --project=terraform-project-iti --tunnel-through-iap

        - Installing prerequisites in the VM like docker, kubectl. And authenticating Artifact Registry. (Could be found in Compute/scripts.sh)

            - gcloud auth configure-docker us-east1-docker.pkg.dev

Workload Subnet

1. Creating the network using terraform.
2. Writing the yaml files for nodeJS and mongoDB