



FROM THE DESK OF REM

Background

As a startup company we run very fast while trying to code our infrastructure without repeating ourselves we need candidates that will make us better...

Challenge

The home assignment is comprised into 4 main parts , each part will be evaluated separately, the goal is to complete all 4.

Your code need to be clean with proper documentation(readme) and commentary.

1. Python server application

Write a simple Python echo server application.

- The application should echo back any given string and also return the local ip address, with the geo location of the user.
- The application should be able to load an index.html file from a dedicated local path and serve it from /index.html request.
- The string echo to user will be as a variable that you pass to the script.

2. Docker

Write a Dockerfile for your echo server application.

- The container need to receive 1 environment variable (as a string example: 'staging' or 'production')

3. Helm

Create helm deployment for your echo server application

- You can use most basic helm chart for your application deployment
- The deployment should pass Environment variable (prod, stage, int) to the container(as mention in #2 and #1).
- .index.html file should be loaded/included as a part of the deployment
- Once deployed, the application should be accessible from the public.

4. Terraform/Terragrunt

Create a module for a managed Kubernetes cluster with 1 node pool.

- Model should have also VPC and Public subnets
- The cluster can use ELB If you see fit to use one.
- The Terraform need to trigger the HELM deployment
- **Please use *Terragrunt* to deploy the terraform modules.**

Remarks

You can use the AWS playground account resources for ECR/SSM/EKS with Tags
Please add this Tags to all of your created resources

Tag Name	Value	Required	Comments
Name	(Your Name)	Yes	
Owner	Nati	Yes	
Department	DevOps	Yes	
Temp	True	Yes	

- If you have any Q about how to proceed with the test please send us an email!

The end result:

You should trigger the python application on your browser and get your local Geo location details and the environment var printed in the page.

*** we want to test your application so please provide us with a public link to your server and access to the k8s cluster (with kubectl).**