You have a request from a development team to create the AWS infrastructure for a new application called ‘test’ that they have developed project using java and maven.

**1. Jenkins pipeline**

Please create Jenkins pipeline script to build the above project and push the image into docker repo and use shared library wherever possible.

The application will be hosted on AWS ECS service. Please use the below information while create dockerfile for build.

1. The application code is stored in a github repository
2. It runs on port 8080
3. The application is creating a jar file called test.jar

# 2. AWS infrastructure using Terraform (ECS)

Please create AWS infrastructure to run the test application in ECS service. The requirements that they have set are:

1. It needs to be secure
2. It needs be accessible only within the VPC
3. There is a healthcheck in the application and can be found in ‘/healthcheck’

Please use terraform to create the resources needed to run the application in ECS in a development environment.

Assume that you already have a VPC called ‘test-vpc’ and it has 2 private (10.20.30.0/24, 10.20.31.0/24) and 2 public subnets(10.20.32.0/24, 10.20.33.0/24), a SSL certificate called ’test-cert’ and a domain that is called test.wowcher.co.uk.

Optionally, setup autoscaling based on CPU and memory metrics for the ECS service.

Also, optionally, parameterize the username and password that the application uses to connect to the database. Their names are db\_username and db\_password respectively and you can choose the values for them.

That application will eventually need to be deployed to UAT, pre-production and production. Please explain what steps you should take to make sure that the application is successfully deployed to production.

**Note:** the code doesn’t have to be executable but it should include all the infrastructure resources required

**Please store all your script and code into any of the public repo and share link to evaluate.**