Below is the GITLAB CI provisioning for the web app – Project-webapp

Action Items,

1. Provision: Create the Postgres database.  
2. Deploy: Deploy the web application to Minikube.  
3. Health-check: Verify if the application is running correctly using the health endpoint.

--------------------------------------------script starts here-------------------------------------------------------

stages:

- provision

- deploy

- health-check

variables:

DB\_HOST: "localhost"

DB\_PORT: 5432

DB\_USER: "Project-webapp\_user"

DB\_NAME: " Project-webapp \_db"

DB\_PASSWORD\_FILE: "/tmp/db\_password.txt"

before\_script:

- echo "Starting CI/CD pipeline"

provision\_db:

stage: provision

image: hashicorp/terraform:latest

script:

- terraform init

- terraform apply -auto-approve

- export DB\_PASSWORD=$(terraform output -raw db\_password)

- export DB\_USER=$(terraform output -raw db\_username)

- kubectl create secret generic db-credentials \

--from-literal=password=$DB\_PASSWORD \

--from-literal=username=$DB\_USER

secrets:

DATABASE\_PASSWORD: $DB\_PASSWORD

deploy\_app:

stage: deploy

image: kubernetes/kubectl:latest

script:

- kubectl apply -f deployment.yaml

- kubectl rollout status deployment/myapp

health\_check:

stage: health-check

image: curlimages/curl:latest

script:

- curl --fail http://localhost:8080/health

- curl --fail http://localhost:8080/db-health

--------------------------------------------script ends here-------------------------------------------------------

stages:

- provision

- deploy

- health-check

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DB\_NAME: "myapp\_db"

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