Link github

<https://github.com/BartDewancker/MLOps-examen>

# Vraag 1

Aanpassing in docker-compose file

services:

api:

image: api-exam:bartdewa\_mlops-exam-backend

build:

context: api

dockerfile: dockerfile

environment:

file\_format: json

frontend:

image: frontend-exam:bartdewa\_mlops-exam-frontend

build:

context: frontend

dockerfile: frontend-dockerfile

environment:

API\_HOST: api

API\_PORT: 8080

# Vraag 2

Git Actions workflow. De flow wordt manueel gestart

name: MLOps examen

# Controls when the workflow will run

on:

workflow\_dispatch:

env:

GIT\_SHA: ${{ github.sha }}

WORKDIR: version-1-src

jobs:

build-images:

runs-on: ubuntu-latest

steps:

- name: Create namespace

run: |

cd version-1-src

docker compose --build

docker tag api-exam:bartdewa\_mlops-exam-backend api-exam:bartdewa\_mlops-exam-backend\_${{ env.GIT\_SHA }}

docker tag frontend-exam:bartdewa\_mlops-exam-frontend frontend-exam:bartdewa\_mlops-exam-frontend\_${{ env.GIT\_SHA }}

working-directory: ${{ env.WORKDIR }}

# Vraag 3

A screen shot of a computer program

Description automatically generated with medium confidence

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Description automatically generated with medium confidence

* kubectl create namespace bartdewa-examen
* kubectl create configmap app-config --from-literal=NAME=bart --from-literal=DATA=2023/06/24 --from-literal=API\_PORT=8080
* kubectl apply -f .\kubernetes-deployment.yaml
* kubectl apply -f .\kubernetes-service.yaml

A screenshot of a computer program

Description automatically generated with medium confidence

A screenshot of a computer program

Description automatically generated with medium confidence

Images in docker-desktop

A picture containing text, screenshot, font, line

Description automatically generated

Containers in docker-desktop

A picture containing text, font, line, screenshot

Description automatically generated

A screenshot of a computer

Description automatically generated with low confidence

# Vraag 4

A screen shot of a computer program

Description automatically generated with medium confidence

* kubectl create namespace examen-nginx
* kubectl apply -f nginx-bart-dewa.yml
* kubectl scale --replicas=3 deployment/nginx-deployment
* kubectl set image deployment/nginx-deployment nginx-container=nathansegers/vue-docker:v2.0.0

A screenshot of a computer

Description automatically generated

* kubectl apply -f nginx-bart-dewa-service.yml

A screenshot of a computer program

Description automatically generated with medium confidence

* kubectl delete deployment nginx-deployment
* kubectl delete service exam-nginx-service