Tugas:

1. Buat 1 aplikasi sederhana
- Contoh: aplikasi Node.js / Python / Go yang hanya menampilkan `Hello World`.
- Aplikasi harus bisa dijalankan menggunakan Dockerfile.
- Push kode aplikasi ke Git repository GitLab

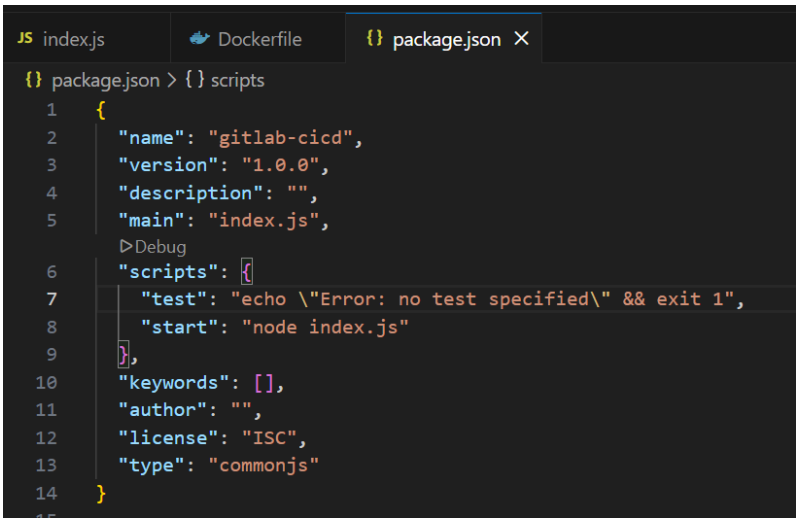
2. Buat satu proses CI/CD di GitLab: build hingga push image. Push image ke **staging** dilakukan otomatis, sedangkan push ke **production** dilakukan secara manual.

1. Buat aplikasi node.js simple
   index.js
   console.log("Hello World");

   Test : node index.js

2. Buat package.json
   Supaya rapi & profesional (CI/CD biasanya expect ini):
   npm init -y

   Nanti akan muncul kek gini:



   Notes : aku tambahin sendiri : "start": "node index.js"

3. Buat Dockerfile
   Buat file **Dockerfile**

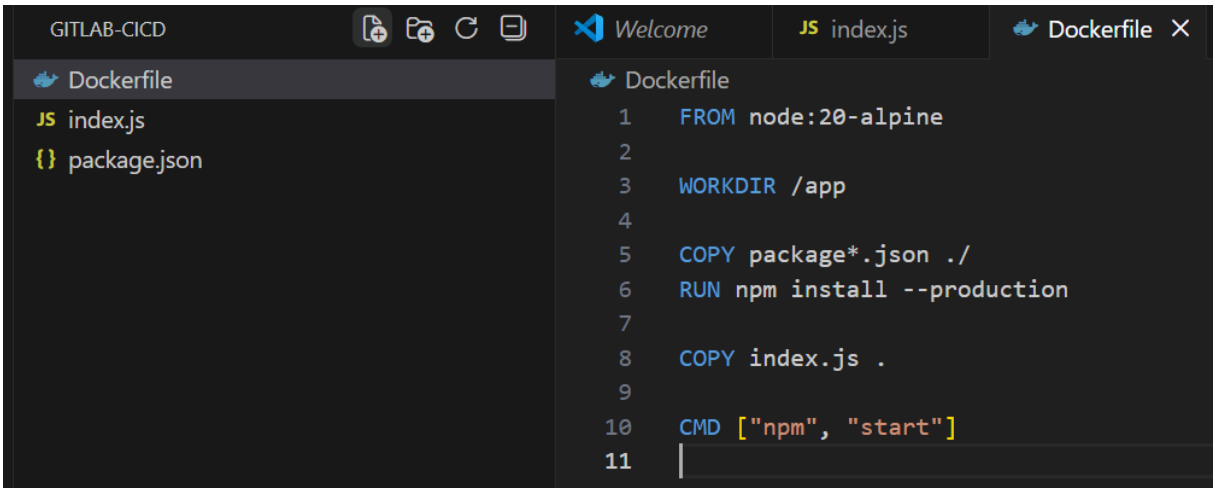
   FROM node:20-alpine

   WORKDIR /app

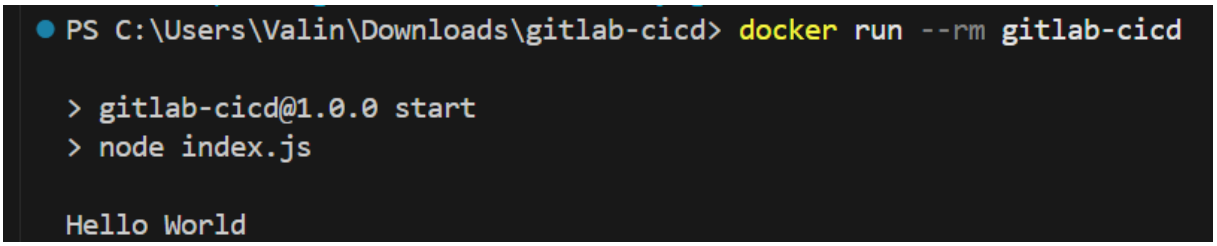
   COPY package*.json ./
   RUN npm install --production

   COPY index.js .

   CMD ["npm", "start"]



4. Tes docker local
   docker build -t gitlab-cicd .
   docker run --rm gitlab-cicd



5. Push ke gitlab
   Pake SSH atau HTTPS

6. Gitlab CI/CD
   Buat file **.gitlab-ci.yml**

   stages:
    - build

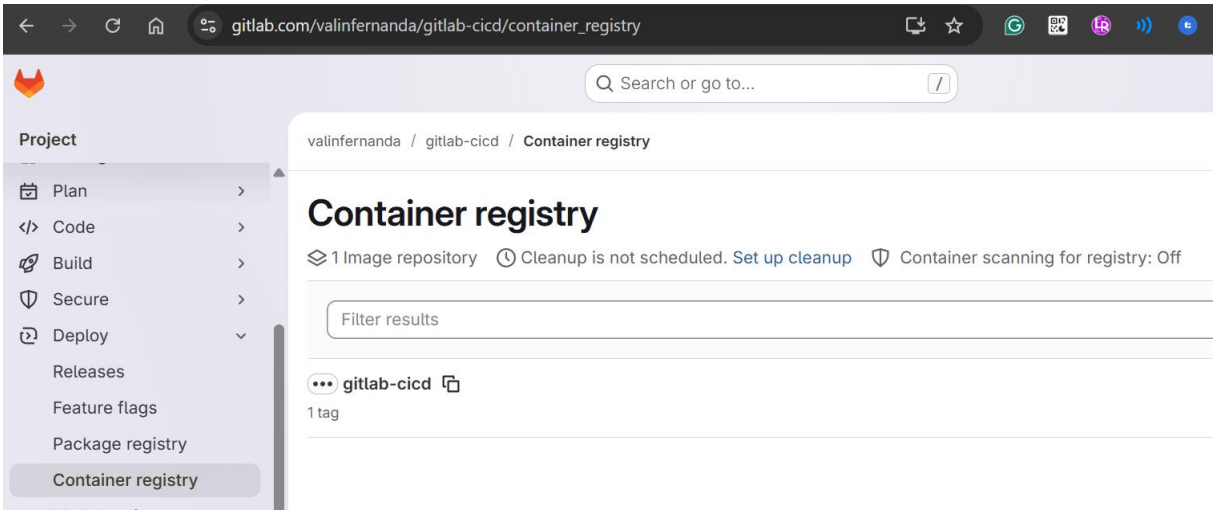
```
  - test
  - deploy

# --- Build stage ---
build:
  stage: build
  script:
    - echo "Building project..."
  artifacts:
    paths:
      - build/
  when: on_success

# --- Test stage ---
test:
  stage: test
  script:
    - echo "Running tests..."
  when: on_success

# --- Deploy to staging (otomatis) ---
deploy-staging:
  stage: deploy
  script:
    - echo "Deploy to STAGING success"
  environment:
    name: staging
  when: on_success
  only:
    - main
    - develop     # Bisa diubah sesuai branch staging kamu

# --- Deploy to production (manual) ---
deploy-production:
  stage: deploy
  script:
    - echo "Deploy to PRODUCTION success"
  environment:
    name: production
  when: manual
  only:
    - main        # Hanya muncul di main branch
```

allow_failure: false

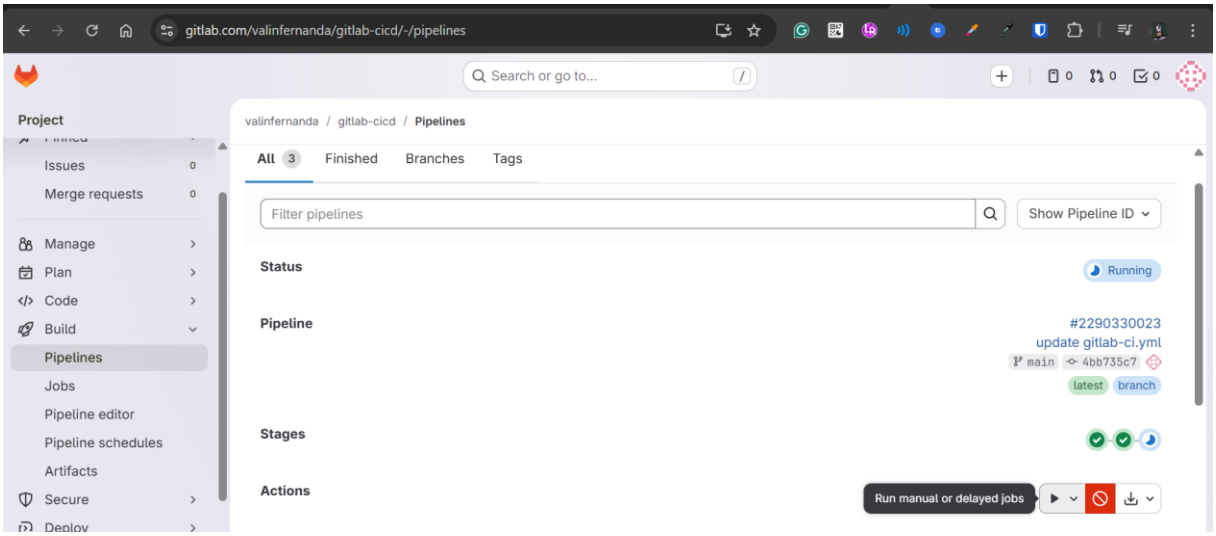
dan... push ke Gitlab

Hasil Akhir
- App Node.js (done)
- Dockerfile (done)
- Image ke GitLab Container Registry (done)
- Staging auto deploy (done)
- Production manual deploy (done)

1. Bukti Image ke GitLab Container Registry (done)

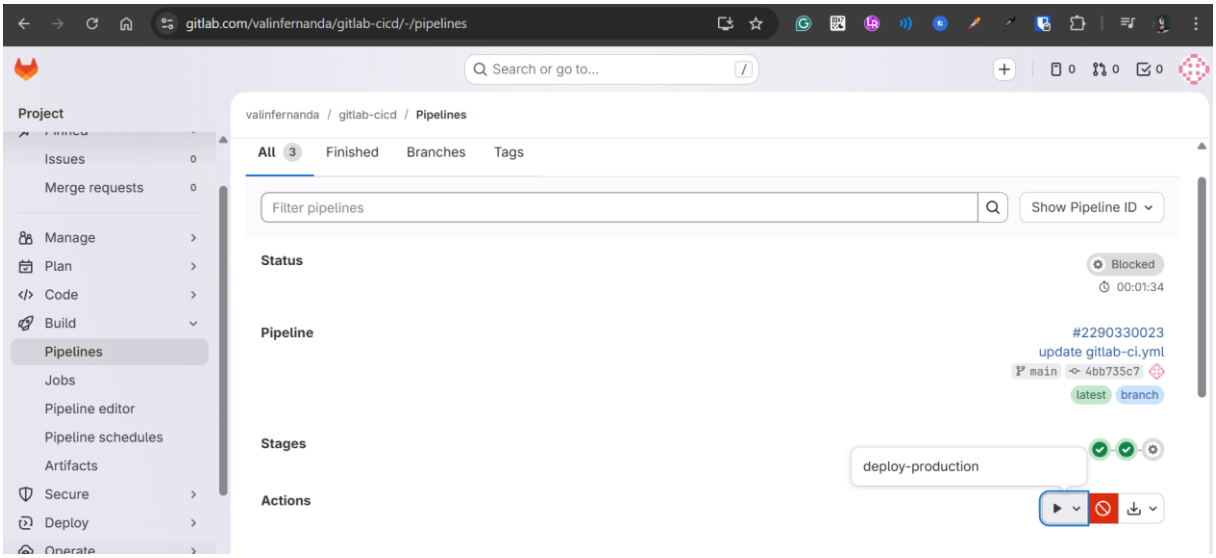


2. Bukti **Staging Auto Deploy**



Lihat job:
build-image → ✅
deploy-staging → ✅ (**jalan otomatis**)
deploy-production → ⏸ (belum jalan)

3. Bukti **Production Manual Deploy**



Klik deploy-production :