Eurso: Despliegue de Aplicaciones con Docker

Información del Curso

• **Curso:** Despliegue de Aplicaciones con Docker

• **Proyecto:** Práctica de Docker Compose

• Profesor: Ing. Edison Naranjo (CEC-EPN)

• **Fecha:** 19 de Septiembre de 2025

■ Proyecto – Análisis de Vulnerabilidades y Despliegue Automático con Docker Hub - Grupo 1 – Tarea 3

Descripción del Proyecto

Este proyecto implementa una aplicación **FastAPI** en GitHub y un archivo **.yml** en GitHub Actions para:

- 1. Realizar análisis de vulnerabilidades de la aplicación.
- 2. Construir la imagen Docker.
- 3. Publicar la imagen automáticamente en **Docker Hub**.

integrantes - Grupo 1 (Municipio de Quito)

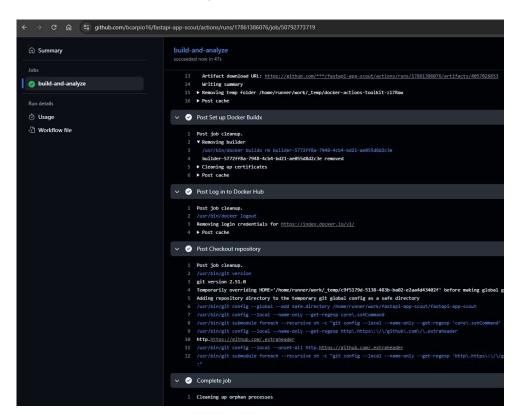
Integrante	Repositorio GitHub
Carpio Zaquinaula Byron Orlando	https://github.com/bcarpio16/fastapi-app-scout.git
Villarroel Vera Milton Orlando	https://github.com/movillarroel/fastapi-app- scout.git

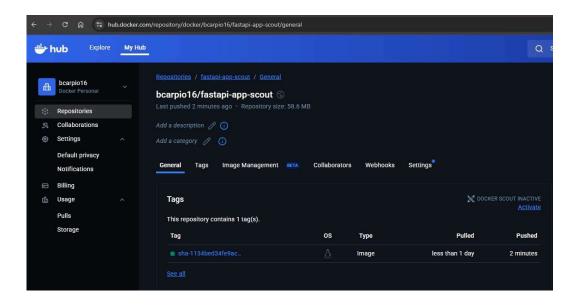
Integrante	Repositorio GitHub
Mena Segura Edison	https://github.com/Bulls1168-C/fastapi-app-
Fabián	scout.git
Benavides Freire Alex	https://github.com/abenavides86/fastapi-app-
Vicente	scout.git
Gallardo Nicolalde Marcelo Iván	https://github.com/panivinux/fastapi-app-scout.git

```
Archivo workflow YAML de GitHub Actions 29
name: Build and Analyze Docker Image
on: push: branches: [ "main" ]
env: IMAGE_NAME: panivinux/fastapi-app-scout
SHA: ${{ github.sha }}
jobs: build-and-analyze: runs-on: ubuntu-latest
steps:
  - name: Checkout repository
   uses: actions/checkout@v4
  - name: Log in to Docker Hub
    uses: docker/login-action@v3
    with:
      username: ${{ secrets.DOCKERHUB_USERNAME }}
      password: ${{ secrets.DOCKERHUB_TOKEN }}
  - name: Set up Docker Buildx
    uses: docker/setup-buildx-action@v3
  - name: Build image and load to runner
    uses: docker/build-push-action@v6
    with:
      context: .
      file: ./Dockerfile-single
      push: true
      load: true
      tags: ${{ env.IMAGE_NAME }}:sha-${{ env.SHA }}
  - name: Install Docker Scout
```

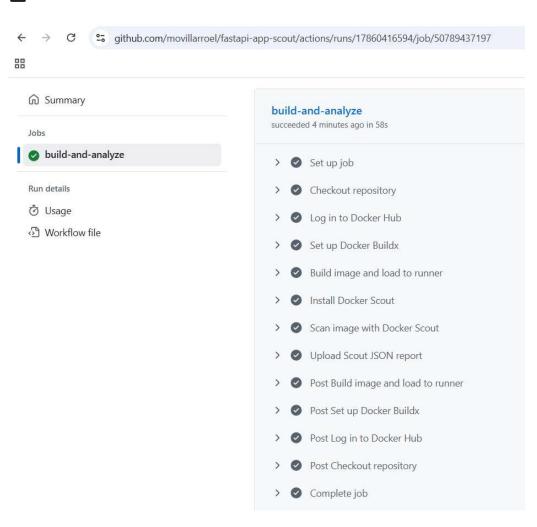
```
run: |
      mkdir -p ~/.docker/cli-plugins
      curl -sSfL https://raw.githubusercontent.com/docker/scout-
cli/main/install.sh | sh
      sudo cp ~/.docker/cli-plugins/docker-scout /usr/local/bin/
      docker-scout version
 # 6. Escanear la imagen con Docker Scout
  - name: Scan image with Docker Scout
   run:
      echo "Q Ejecutando análisis de vulnerabilidades con Docker Scout..."
      docker scout cves ${{ env.IMAGE_NAME }}:sha-${{ github.sha }} --output json
2>&1 | tee scout-report.json
      echo "==== Resumen de vulnerabilidades detectadas ===="
      cat scout-report.json
 # 7. Subir reporte como artefacto en GitHub Actions
  - name: Upload Scout JSON report
   uses: actions/upload-artifact@v4
   with:
     name: docker-scout-report
     path: scout-report.json
```

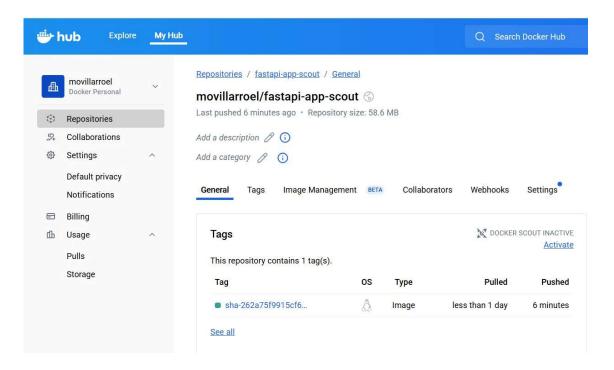
Carpio Zaquinaula Byron Orlando



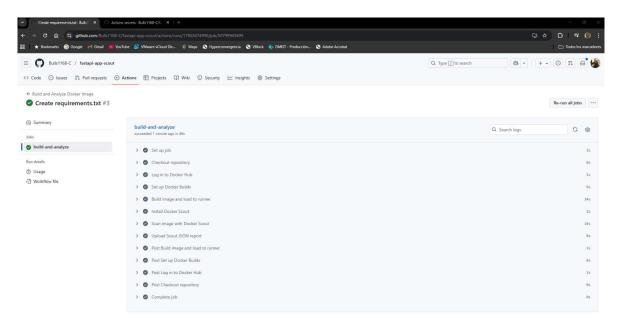


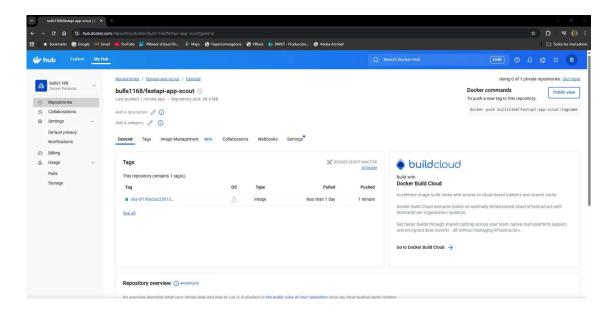
l Villarroel Vera Milton Orlando



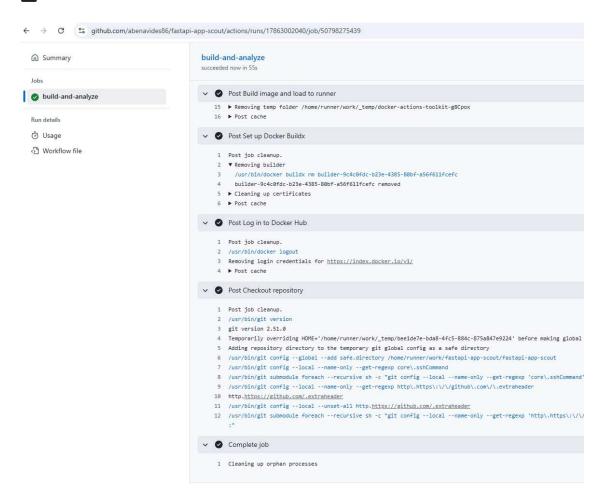


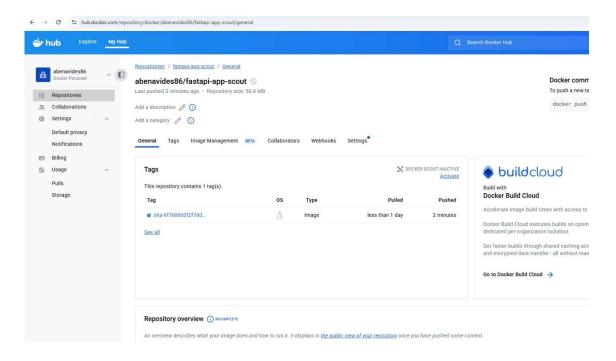
Mena Segura Edison Fabián





Benavides Freire Alex Vicente





Gallardo Nicolalde Marcelo Iván

