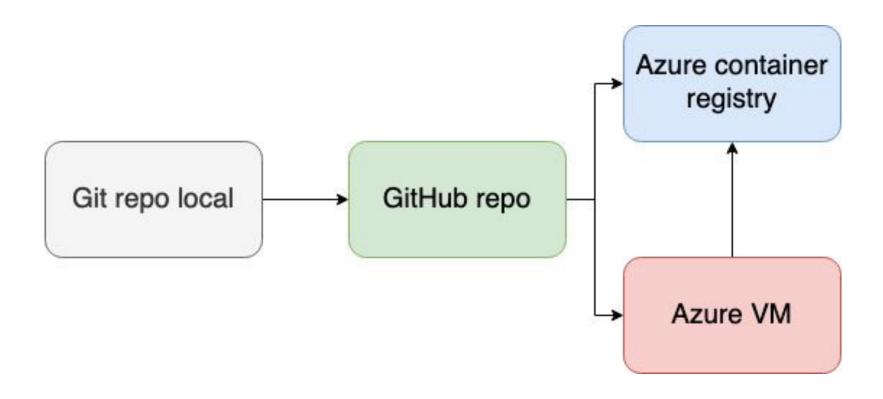# Badge 3.3

Serafí Nebot Ginard

Badge 3.3

Genera una infraestructura de unit testing para tu servicio o implementa una característica de CI/CD a tu elección (jenkins, travis, bamboo, teamcity)

Projecte base: DBNerd-1 (RDB)

GitHub Actions
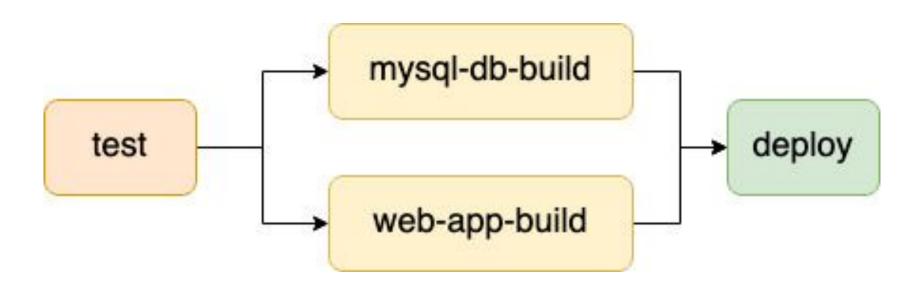
Estructura CI/CD

GitHub Actions

Es configura amb un arxiu YAML a dins de la carpeta .github/workflows.

GitHub ofereix diferents Actions per a diferents casos d'ús.

GitHub Actions: https://github.com/features/actions

GitHub Actions

Git Hooks

Permeten executar un script bash quan diferents accions ocorren.

post-receive: Quan un client fa un *push* al repo.

Git Hooks: *Examples include emailing a list, notifying a continuous integration server, or updating a ticket-tracking system.*

Git hooks: https://git-scm.com/book/en/v2/Customizing-Git-Git-Hooks

post-receive

```bash
#!/usr/bin/bash
TARGET=$HOME/dbnerd-1-deploy
GIT_DIR=$HOME/dbnerd-1.git
docker-compose --env-file $HOME/.dbnerd-1.env -f $TARGET/docker-compose.prod.yml down
docker-compose --env-file $HOME/.dbnerd-1.env -f $TARGET/docker-compose.prod.yml rm -f
docker-compose --env-file $HOME/.dbnerd-1.env -f $TARGET/docker-compose.prod.yml pull
git --work-tree=$TARGET --git-dir=$GIT_DIR checkout -f master
docker-compose --env-file $HOME/.dbnerd-1.env -f $TARGET/docker-compose.prod.yml up -d
```

post-receive: https://gist.github.com/noelboss/3fe13927025b89757f8fb12e9066f2fa

docker-compose.prod.yml

```yaml
version: "3.7"
services:
  mysql-db:
    image: ${DBNERD_CONTAINER_REGISTRY}/mysql-db:latest
    restart: always
    container_name: dbnerd-1_mysql
    environment:
      MYSQL_DATABASE: ${DBNERD_DB_NAME}
      MYSQL_USER: ${DBNERD_MYSQL_USER}
      MYSQL_PASSWORD: ${DBNERD_MYSQL_PASSWORD}
      MYSQL_ROOT_PASSWORD: ${DBNERD_MYSQL_PASSWORD}
    networks:
      - dbnerd-net
    volumes:
      - ~/dbnerd-1-data:/var/lib/mysql

  dbnerd-1:
    image: ${DBNERD_CONTAINER_REGISTRY}/dbnerd-1:latest
    container_name: dbnerd-1_webapp
    restart: always
    depends_on:
      mysql-db:
        condition: service_healthy
    networks:
      - dbnerd-net
    environment:
      DBNERD_MYSQL_USER: ${DBNERD_MYSQL_USER}
      DBNERD_MYSQL_PASSWORD: ${DBNERD_MYSQL_PASSWORD}
      DBNERD_MYSQL_URL: ${DBNERD_MYSQL_URL}
    ports:
      - "80:80"
networks:
  dbnerd-net:
```

Webgrafia

GitHub Actions: https://github.com/features/actions

GitHub Actions Maven:
https://docs.github.com/en/actions/guides/building-and-testing-java-with-maven

Git hooks: https://git-scm.com/book/en/v2/Customizing-Git-Git-Hooks

post-receive:
https://gist.github.com/noelboss/3fe13927025b89757f8fb12e9066f2fa

Docker mvn build:
https://stackoverflow.com/questions/47969389/how-can-i-cache-maven-dependencies-and-plugins-in-a-docker-multi-stage-build-lay