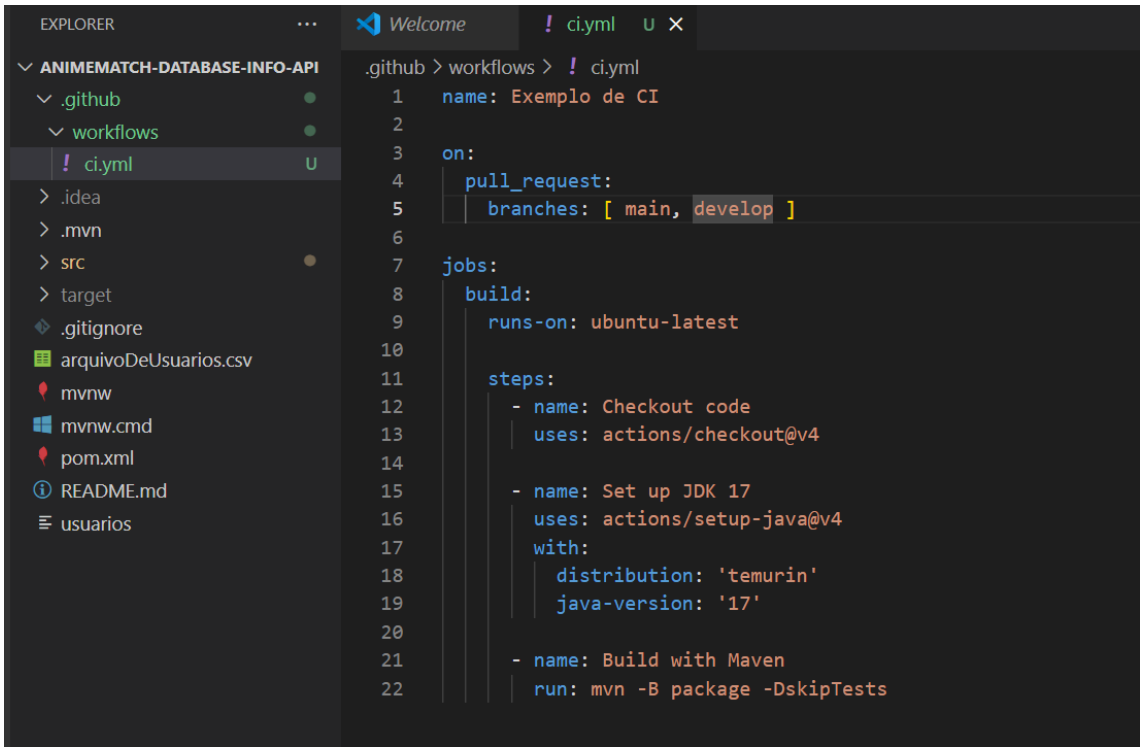
Grupo 8

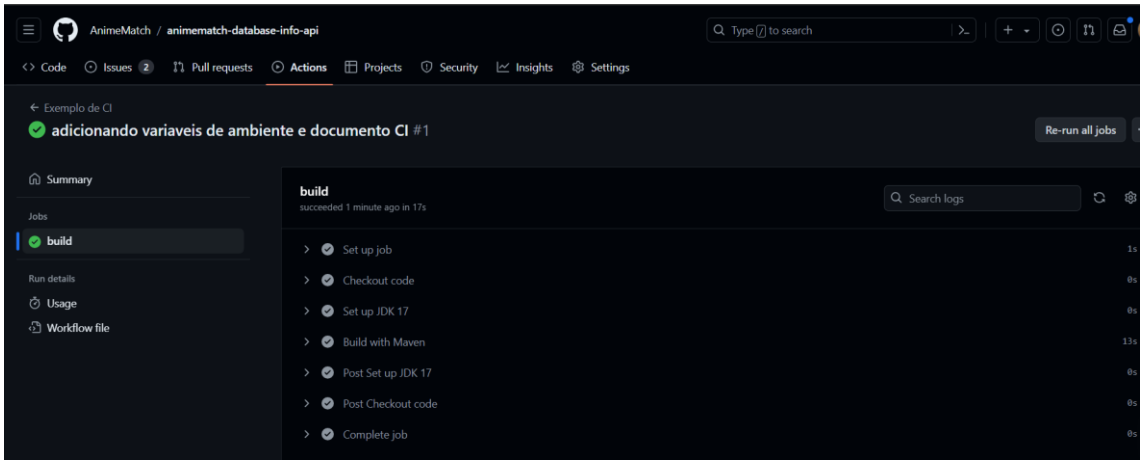
4° ads-B

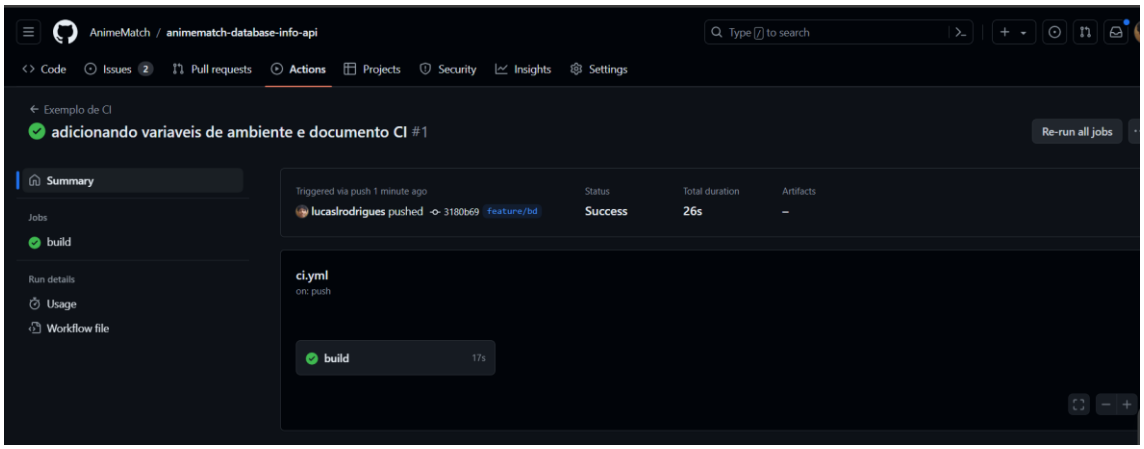
Criando o arquivo ci.yml na pasta do projeto da sprint:



Actions após o envio via push:

```
PS C:\Users\lukas\OneDrive\Documentos\faculdade\sprint\animematch-database-info-api> git add .
PS C:\Users\lukas\OneDrive\Documentos\faculdade\sprint\animematch-database-info-api> git commit -m "adicionando variaveis de ambiente e documento CI"
[feature/bd 3180b69] adicionando variaveis de ambiente e documento CI
 3 files changed, 31 insertions(+), 2 deletions(-)
 create mode 100644 .github/workflows/ci.yml
PS C:\Users\lukas\OneDrive\Documentos\faculdade\sprint\animematch-database-info-api> git push
Enumerating objects: 26, done.
Counting objects: 100% (26/26), done.
Delta compression using up to 8 threads
Compressing objects: 100% (11/11), done.
Writing objects: 100% (15/15), 1.33 KiB | 683.00 KiB/s, done.
Total 15 (delta 5), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (5/5), completed with 5 local objects.
To https://github.com/AnimeMatch/animematch-database-info-api.git
   d503d45..3180b69  feature/bd -> feature/bd
```





Adicionando job de teste ao arquivo de CI:

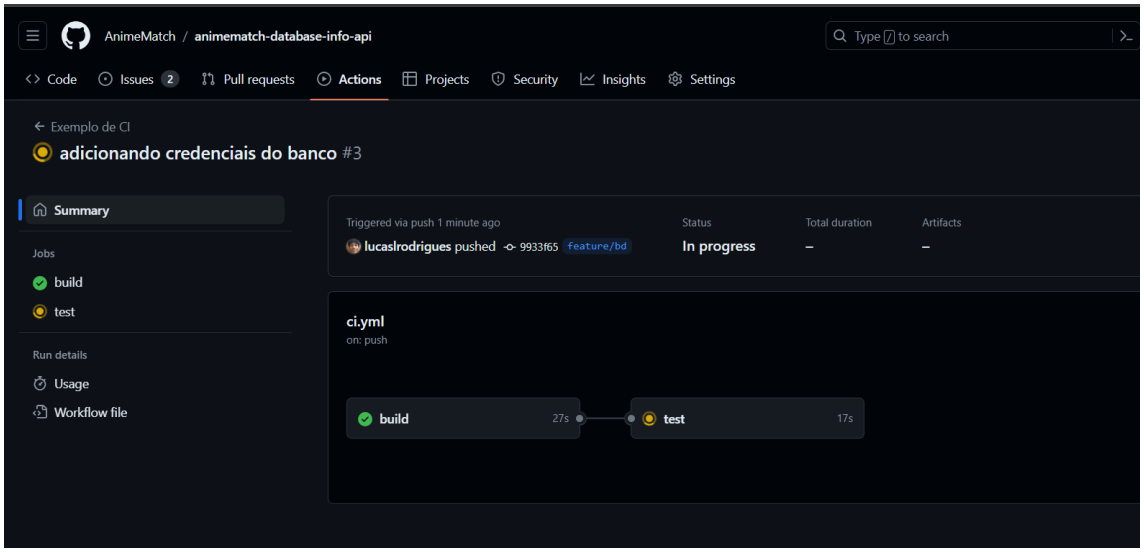
ci.yml M | MidiaService.java (Working Tree) | application.properties (Working Tree)

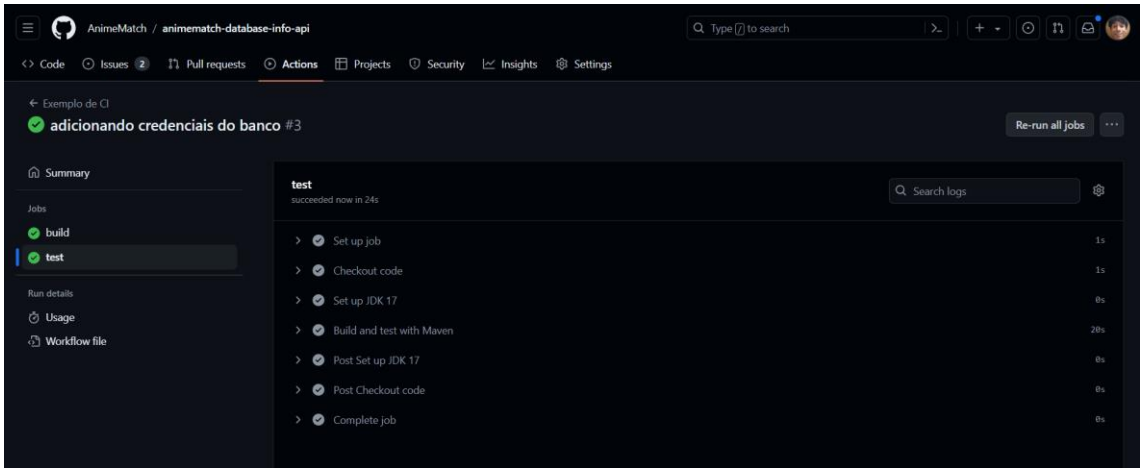
.github > workflows > ci.yml

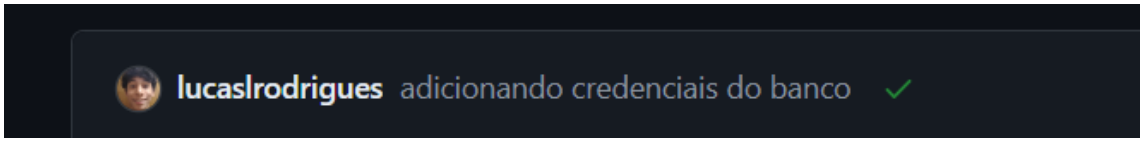
```yaml
on:
  push:

jobs:
  build:
    runs-on: ubuntu-latest

    steps:
      - name: Checkout code
        uses: actions/checkout@v4

      - name: Set up JDK 17
        uses: actions/setup-java@v4
        with:
          distribution: 'temurin'
          java-version: '17'

      - name: Build with Maven
        run: mvn -B package -DskipTests

  test:
    runs-on: ubuntu-latest
    needs: build
    steps:
      - name: Checkout code
        uses: actions/checkout@v4

      - name: Set up JDK 17
        uses: actions/setup-java@v4
        with:
          distribution: 'temurin'
          java-version: '17'

      - name: Build and test with Maven
        run: mvn test
```

```
PS C:\Users\lukas\OneDrive\Documentos\faculdade\sprint\animematch-database-info-api> git add .
PS C:\Users\lukas\OneDrive\Documentos\faculdade\sprint\animematch-database-info-api> git commit -m "adicionando testes ao CI"
[feature/bd 9e1b892] adicionando testes ao CI
 1 file changed, 23 insertions(+), 1 deletion(-)
PS C:\Users\lukas\OneDrive\Documentos\faculdade\sprint\animematch-database-info-api> git push
Enumerating objects: 9, done.
Counting objects: 100% (9/9), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (5/5), 701 bytes | 701.00 KiB/s, done.
Total 5 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/AnimeMatch/animematch-database-info-api.git
   3180b69..9e1b892  feature/bd -> feature/bd
```

Testes rodando no git actions:





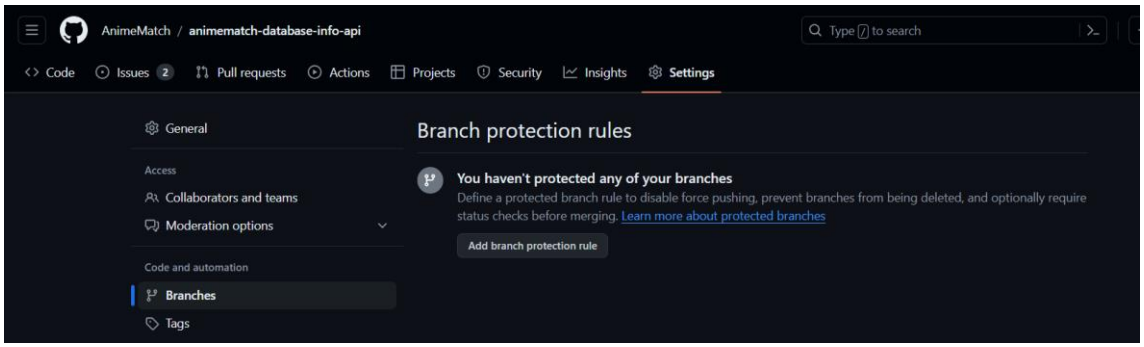


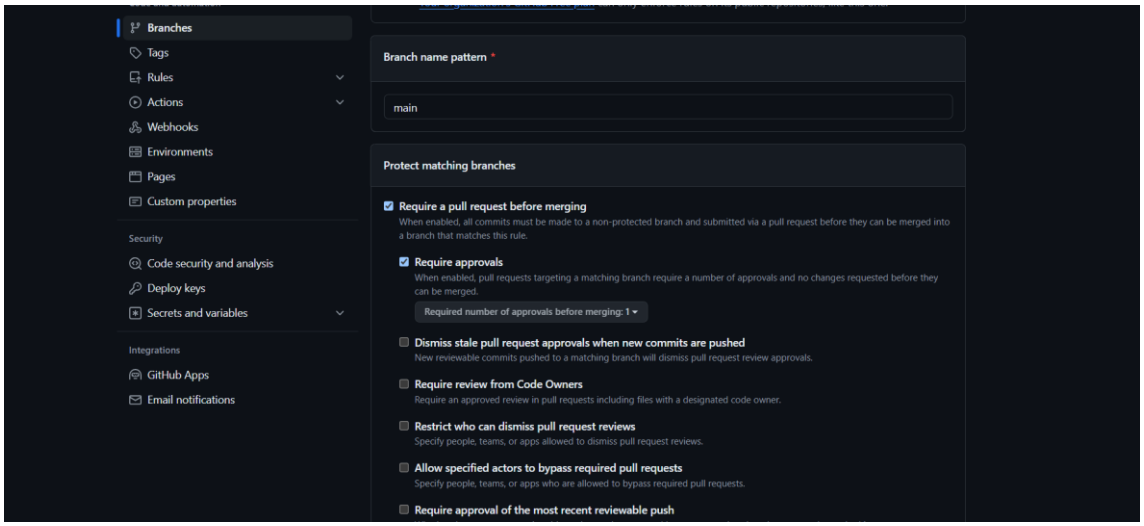
Adicionando regra de pull request ao arquivo CI:

```yaml
on:
  pull_request:
    branches: [ main, develop, feature/bd ]
    types: [opened, reopened]
```

Bloqueando o acesso direto a main

Adicionando regra de acesso:





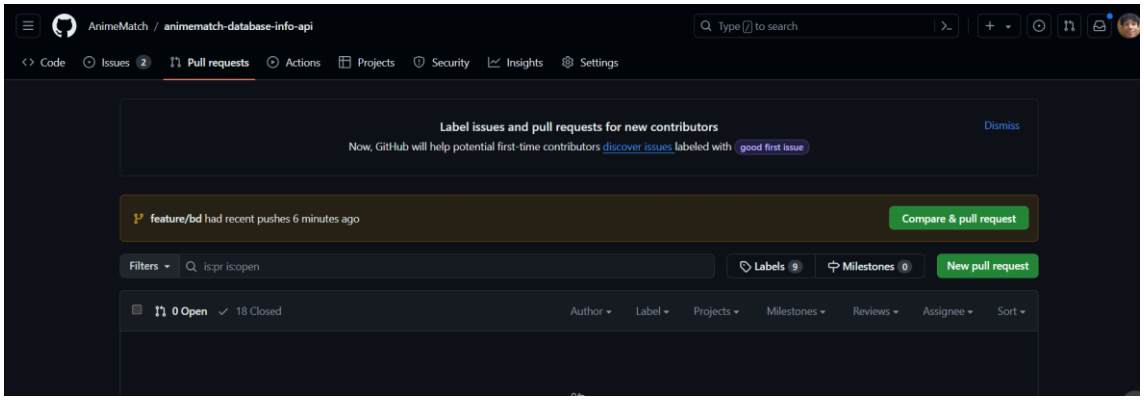
Tentando realizar um commit para testar a segurança:

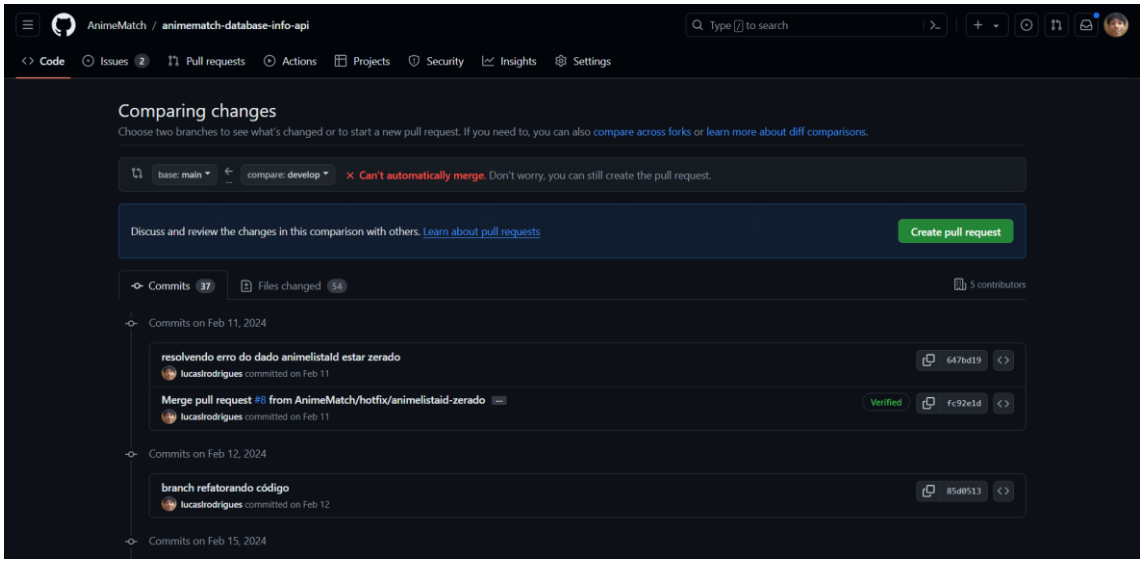
```
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   usuarios

no changes added to commit (use "git add" and/or "git commit -a")
PS C:\Users\lukas\OneDrive\Documentos\faculdade\sprint\animematch-database-info-api> git add .
PS C:\Users\lukas\OneDrive\Documentos\faculdade\sprint\animematch-database-info-api> git commit -m "tentando segurança"
[main 1d17cfc] tentando segurança
 1 file changed, 1 insertion(+)
PS C:\Users\lukas\OneDrive\Documentos\faculdade\sprint\animematch-database-info-api> git push
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 294 bytes | 294.00 KiB/s, done.
Total 3 (delta 2), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
remote: error: GH006: Protected branch update failed for refs/heads/main.
remote: error: Changes must be made through a pull request.
To https://github.com/AnimeMatch/animematch-database-info-api.git
 ! [remote rejected] main -> main (protected branch hook declined)
error: failed to push some refs to 'https://github.com/AnimeMatch/animematch-database-info-api.git'
PS C:\Users\lukas\OneDrive\Documentos\faculdade\sprint\animematch-database-info-api>
```

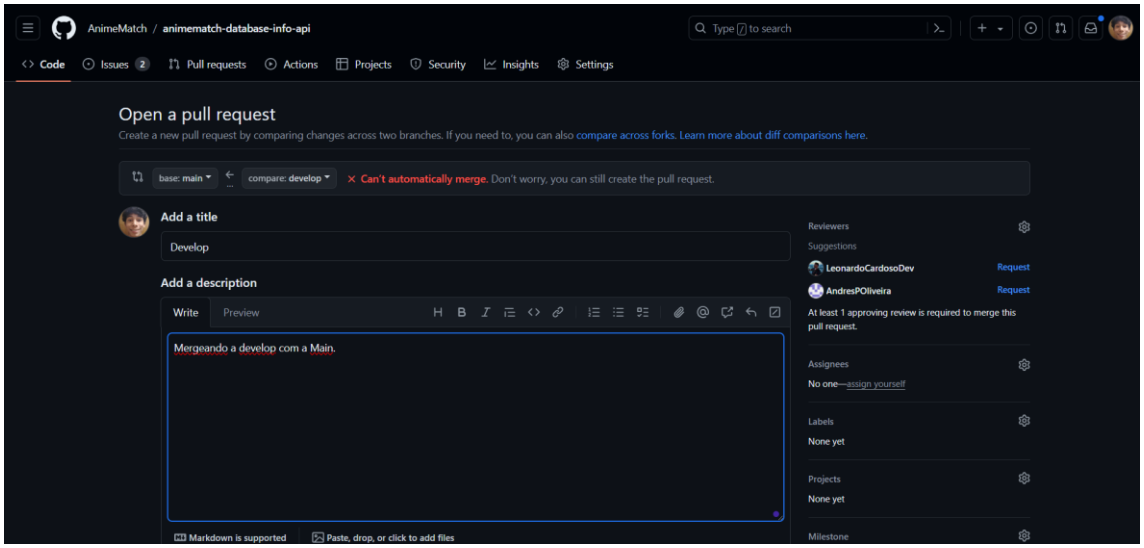
Pull request da develop para a main

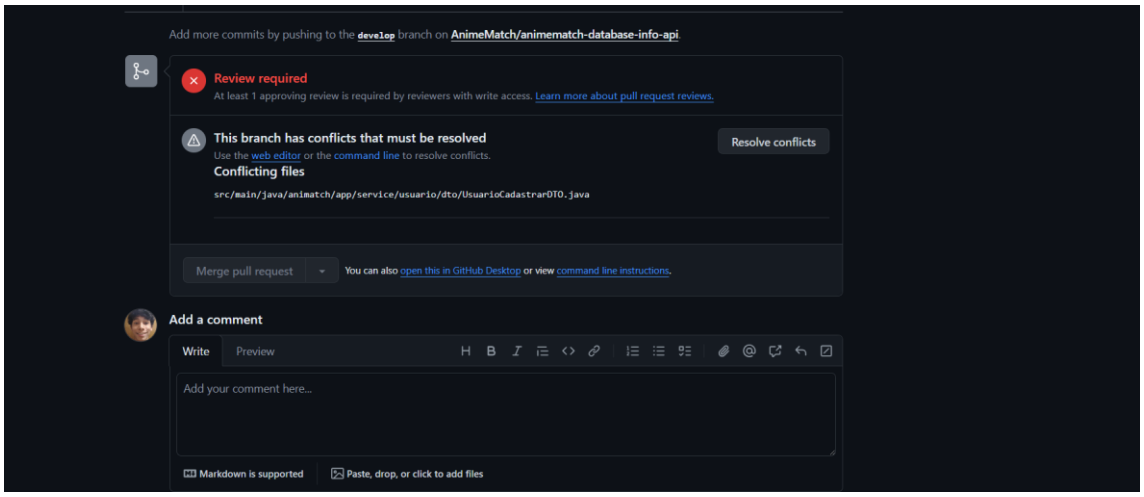
```
PS C:\Users\lukas\OneDrive\Documentos\faculdade\sprint\animematch-database-info-api> git switch develop
Switched to branch 'develop'
Your branch is up to date with 'origin/develop'.
PS C:\Users\lukas\OneDrive\Documentos\faculdade\sprint\animematch-database-info-api>
```

Criando pull request pela plataforma (selecionando “new pull request”):

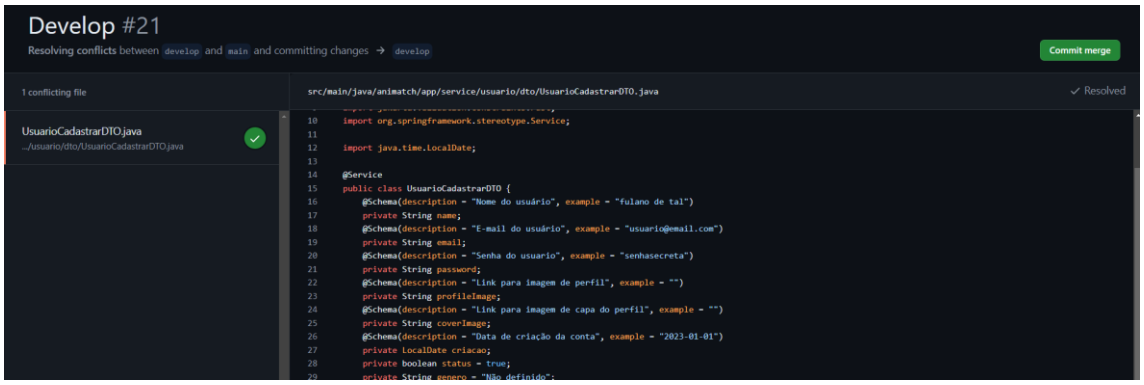


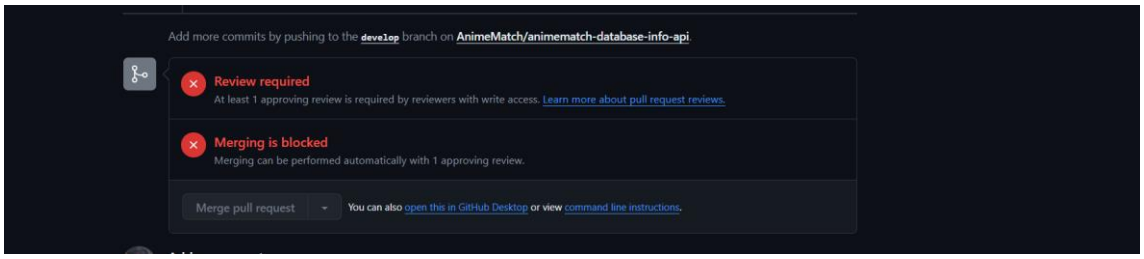




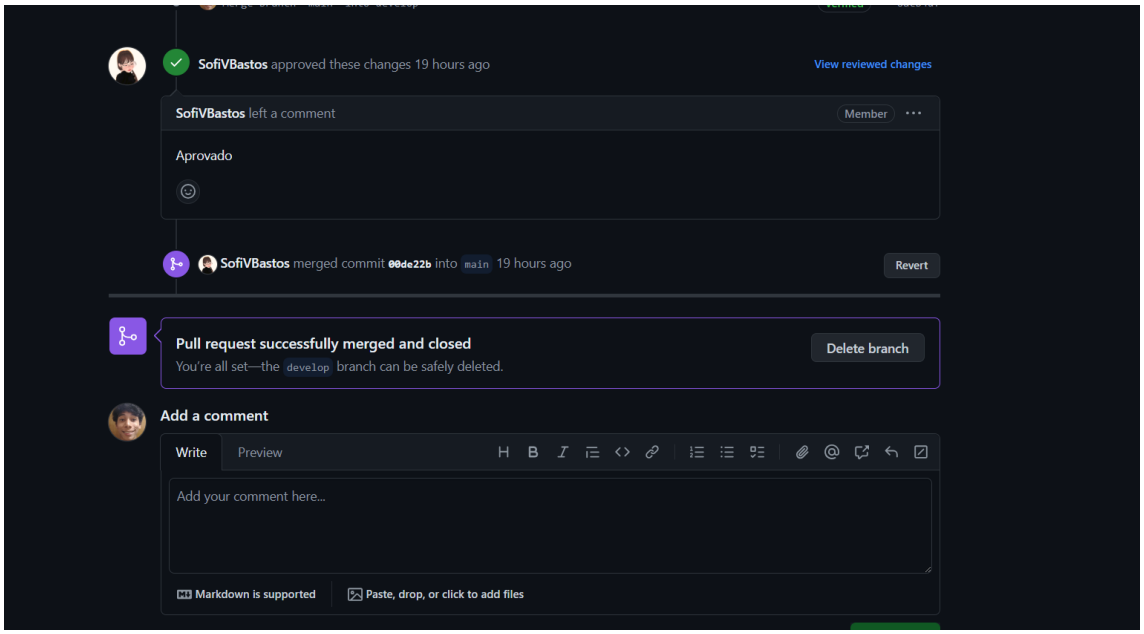


Resolvendo conflitos

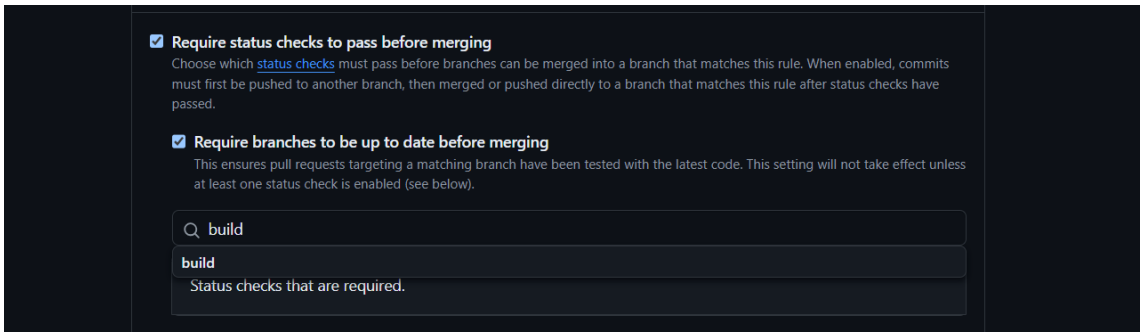




Pull request aprovado por uma integrante do grupo:



Adicionando mais um passo de segurança:



Adicionando job para o docker:

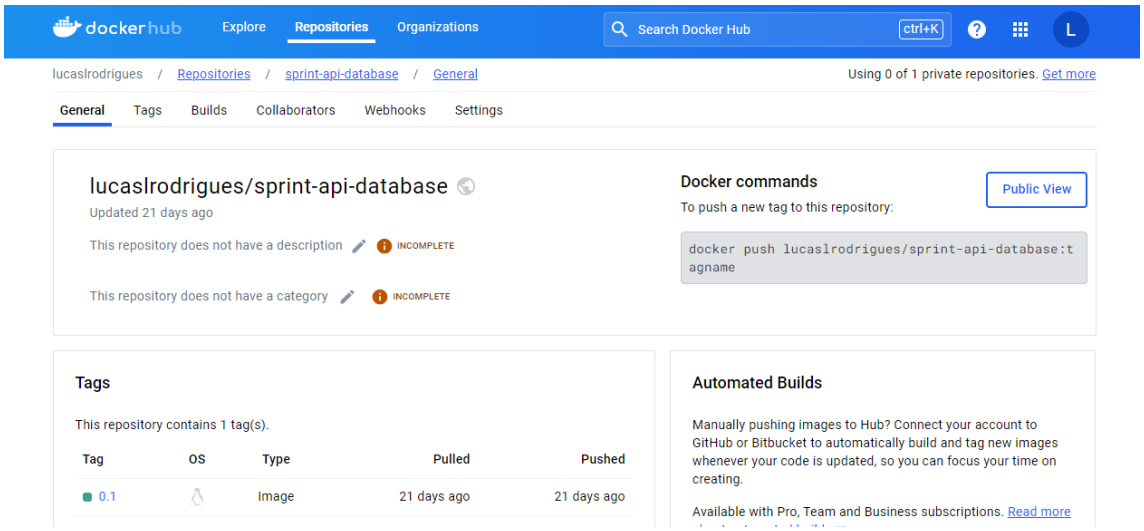
```yaml
docker:
  runs-on: ubuntu-latest
  needs:
    - build
    - test
  steps:
    - name: Set up QEMU
      uses: docker/setup-qemu-action@v3

    - name: Set up Docker Buildx
      uses: docker/setup-buildx-action@v3

    - name: Login to Docker Hub
      uses: docker/login-action@v3
      with:
        username: ${{ secrets.DOCKERHUB_USER }}
        password: ${{ secrets.DOCKERHUB_TOKEN }}

    - name: Build and push
      uses: docker/build-push-action@v5
      with:
        push: true
        tags: lucaslrodrigues/sprint-api-database:0.1
```

Adicionando Dockerfile a raiz do projeto:

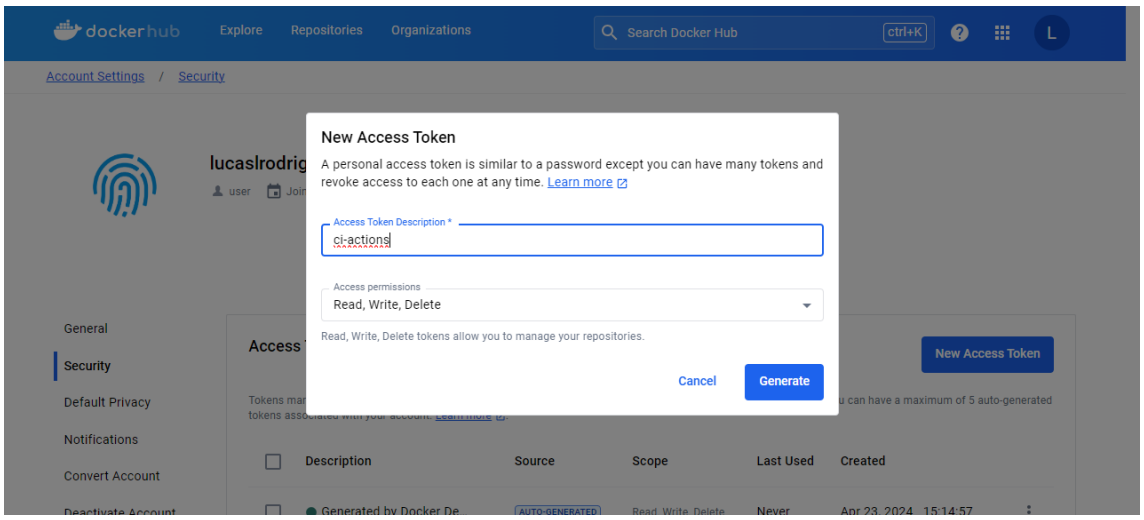
Dockerfile > ...

```dockerfile
FROM maven:3-openjdk-17 as builder

LABEL authors="lucas"

WORKDIR /build

COPY . .

RUN mvn clean package -DskipTests -Dcheckstyle.skip=true

FROM openjdk:17-slim

WORKDIR /app

COPY --from=builder /build/target/*.jar /app/app.jar

CMD ["java", "-jar", "app.jar"]
```

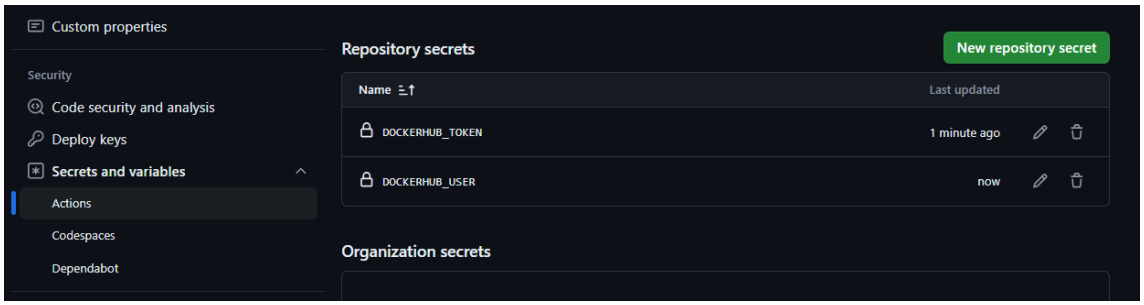
Utilizando imagem da API utilizada na Sprint:



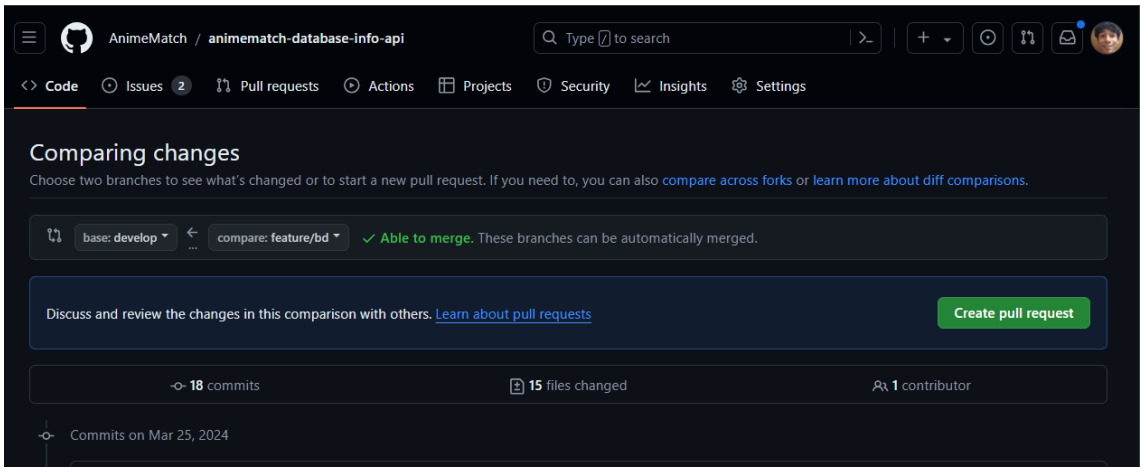
Criando um token para acessar a imagem.



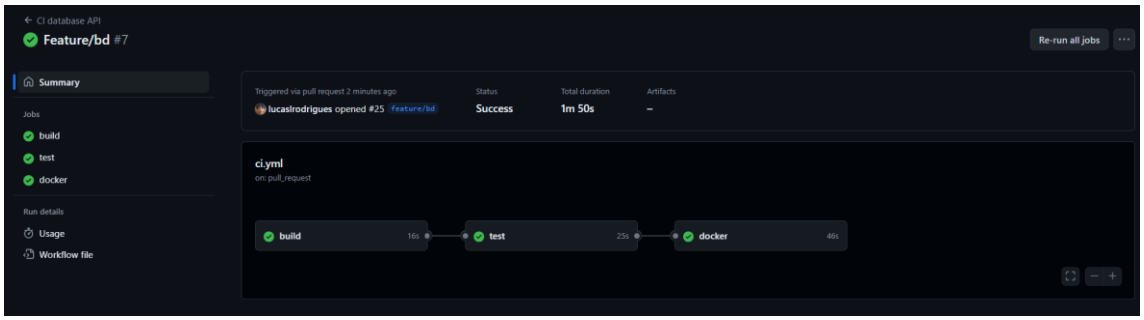
Adicionando variáveis de ambiente ao repositório do GitHub:



Criando um pull request para testar o progresso:

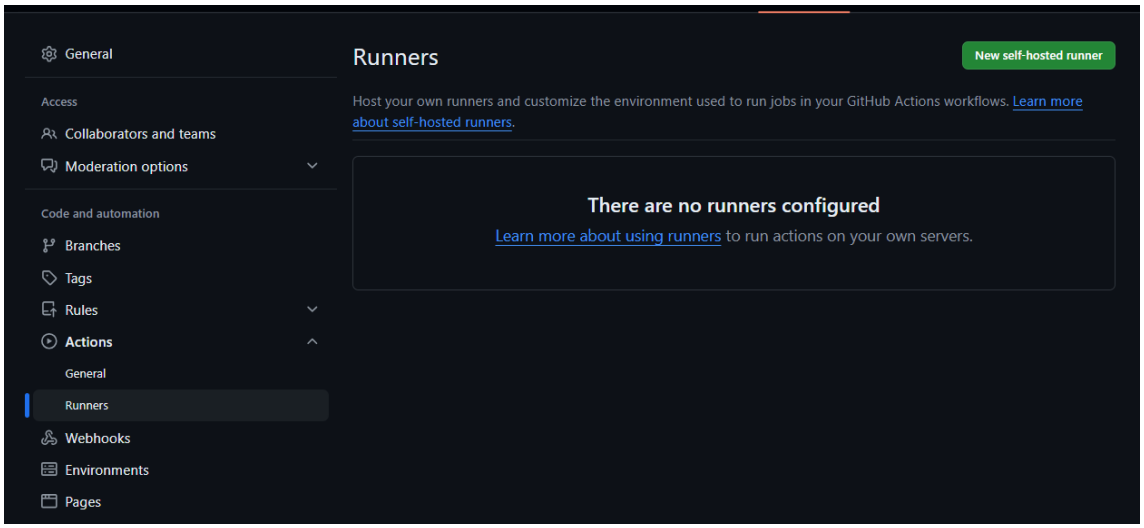


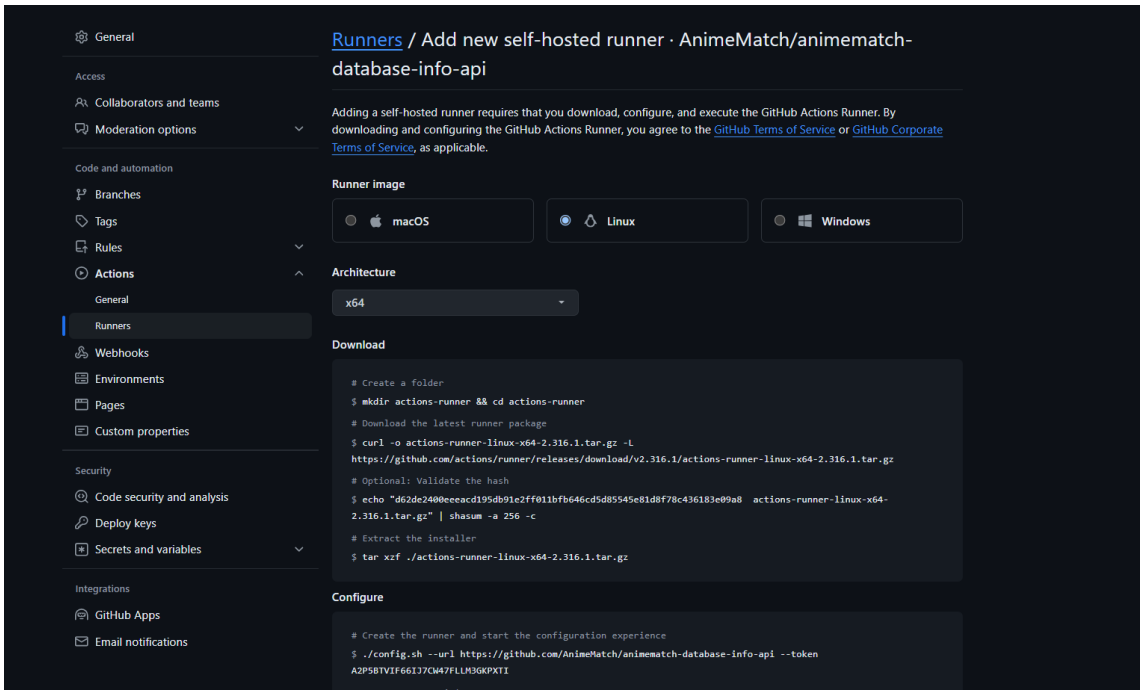
CI rorando:



CD: Deploy na ec2

Criando um runner:





Executando em uma EC2 privada da sprint:

Instalando docker:

```
ubuntu@ip-10-0-0-107:~$ sudo apt update
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble InRelease
Hit:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease
Hit:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease
Hit:4 http://security.ubuntu.com/ubuntu noble-security InRelease
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
All packages are up to date.
ubuntu@ip-10-0-0-107:~$ sudo apt install docker.io
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
```

```
ubuntu@ip-10-0-0-107:~$ sudo usermod -a -G docker $(whoami)
ubuntu@ip-10-0-0-107:~$ newgrp docker
ubuntu@ip-10-0-0-107:~$ docker run hello-world
Unable to find image 'hello-world:latest' locally
latest: Pulling from library/hello-world
c1ec31eb5944: Pull complete
Digest: sha256:266b191e926f65542fa8daaec01a192c4d292bff79426f47300a046e1bc576fd
Status: Downloaded newer image for hello-world:latest

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
 1. The Docker client contacted the Docker daemon.
 2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
    (amd64)
 3. The Docker daemon created a new container from that image which runs the
    executable that produces the output you are currently reading.
 4. The Docker daemon streamed that output to the Docker client, which sent it
    to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
 $ docker run -it ubuntu bash

Share images, automate workflows, and more with a free Docker ID:
 https://hub.docker.com/

For more examples and ideas, visit:
 https://docs.docker.com/get-started/

ubuntu@ip-10-0-0-107:~$
```

Executando comandos de configuração do runner:

Download

```
# Create a folder
$ mkdir actions-runner && cd actions-runner

# Download the latest runner package
$ curl -o actions-runner-linux-x64-2.316.1.tar.gz -L
https://github.com/actions/runner/releases/download/v2.316.1/actions-runner-linux-x64-2.316.1.tar.gz

# Optional: Validate the hash
$ echo "d62de2400eeeacd195db91e2ff011bfb646cd5d85545e81d8f78c436183e09a8  actions-runner-linux-x64-
2.316.1.tar.gz" | shasum -a 256 -c

# Extract the installer
$ tar xzf ./actions-runner-linux-x64-2.316.1.tar.gz
```

Configure

```
# Create the runner and start the configuration experience
$ ./config.sh --url https://github.com/AnimeMatch/animematch-database-info-api --token
A2P5BTVIF66IJ7CW47FLLM3GKPXTI

# Last step, run it!
$ ./run.sh
```

Using your self-hosted runner

```
# Use this YAML in your workflow file for each job
runs-on: self-hosted
```

For additional details about configuring, running, or shutting down the runner, please check out our product docs.

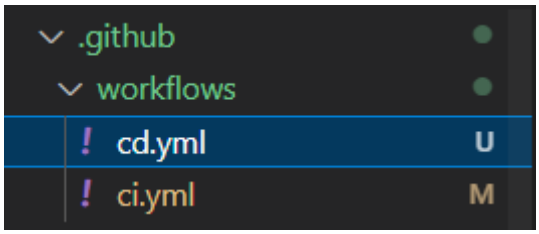
```
ubuntu@ip-10-0-0-107: $ mkdir actions-runner && cd actions-runner
ubuntu@ip-10-0-0-107:~/actions-runner$ curl -o actions-runner-linux-x64-2.316.1.tar.gz -L https://github.com/actions/runner/releases/download/v2.316.1/actions-runner-linux-x64-2.316.1.tar.gz
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
  0     0    0     0    0     0      0      0 --:--:-- --:--:-- --:--:--     0
100  179M  100  179M    0     0   115M      0  0:00:01  0:00:01 --:--:--  116M
ubuntu@ip-10-0-0-107:~/actions-runner$ echo "d62de2400eeeacd195db91e2ff011bfb646cd5d85545e81d8f78c436183e09a8  actions-runner-linux-x64-2.316.1.tar.gz" | shasum -a 256 -c
actions-runner-linux-x64-2.316.1.tar.gz: OK
ubuntu@ip-10-0-0-107:~/actions-runner$ tar xzf ./actions-runner-linux-x64-2.316.1.tar.gz
ubuntu@ip-10-0-0-107:~/actions-runner$
```

```
ubuntu@ip-10-0-0-107:~/actions-runner$ ./config.sh --url https://github.com/AnimeMatch/animematch-database-info-api --token A2P5BTWMECRKZK5FHRSG3WDGKQH5C

--------------------------------------------------------------------------------
|        ____ _ _   _   _       _          _        _   _                      |
|       / ___(_) |_| | | |_   _| |__      / \   ___| |_(_) ___  _ __  ___      |
|      | |  _| | __| |_| | | | | '_ \    / _ \ / __| __| |/ _ \| '_ \/ __|     |
|      | |_| | | |_|  _  | |_| | |_) |  / ___ \ (__| |_| | (_) | | | \__ \     |
|       \____|_|\__|_| |_|\__,_|_.__/  /_/   \_\___|\__|_|\___/|_| |_|___/     |
|                                                                              |
|                       Self-hosted runner registration                        |
|                                                                              |
--------------------------------------------------------------------------------

# Authentication


√ Connected to GitHub

# Runner Registration

Enter the name of the runner group to add this runner to: [press Enter for Default]

Enter the name of runner: [press Enter for ip-10-0-0-107]

This runner will have the following labels: 'self-hosted', 'Linux', 'X64'
Enter any additional labels (ex. label-1,label-2): [press Enter to skip]

√ Runner successfully added
√ Runner connection is good

# Runner settings

Enter name of work folder: [press Enter for _work]

√ Settings Saved.

ubuntu@ip-10-0-0-107:~/actions-runner$
```

```
ubuntu@ip-10-0-0-107:~/actions-runner$ nohup ./run.sh > output.log 2>&1 &
[1] 8098
ubuntu@ip-10-0-0-107:~/actions-runner$ PS
PS: command not found
ubuntu@ip-10-0-0-107:~/actions-runner$ PS
PS: command not found
ubuntu@ip-10-0-0-107:~/actions-runner$ ps
    PID TTY          TIME CMD
   1165 pts/0    00:00:00 bash
   7850 pts/0    00:00:00 bash
   8098 pts/0    00:00:00 run.sh
   8102 pts/0    00:00:00 run-helper.sh
   8106 pts/0    00:00:02 Runner.Listener
   8136 pts/0    00:00:00 ps
ubuntu@ip-10-0-0-107:~/actions-runner$
```

Runner adicionado com sucesso:

Criando arquivo cd.yml:



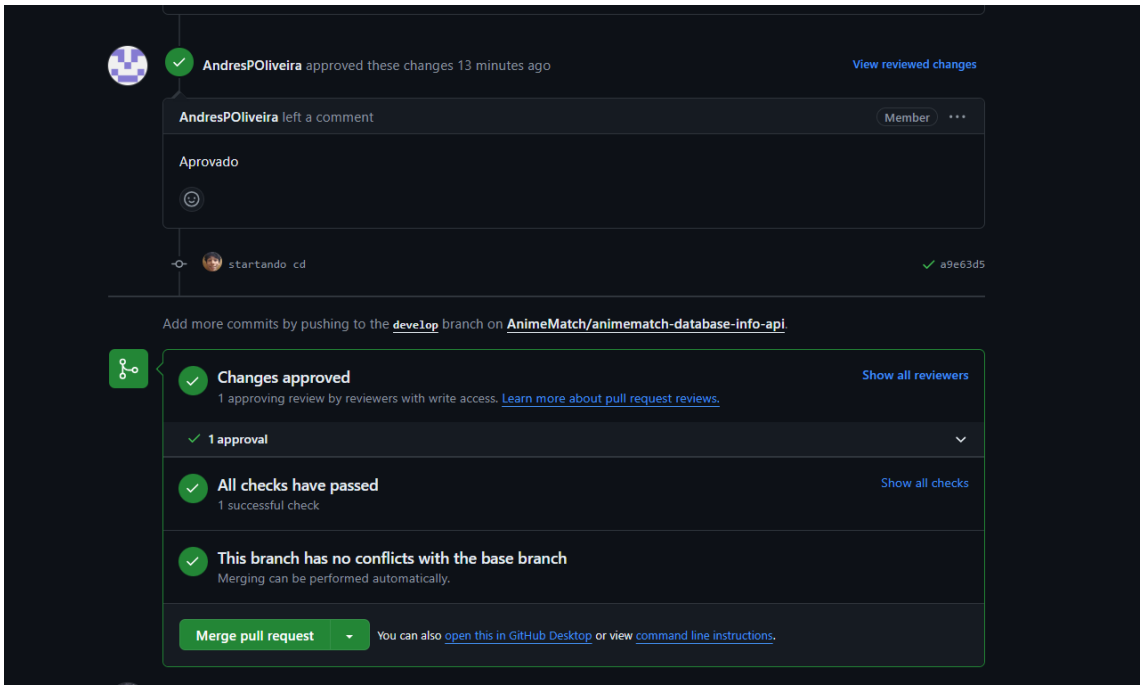
.github > workflows > ! cd.yml

```yaml
name: Deploy Anime Match
on:
  push:
    branches:
      - main

jobs:
  deploy:
    runs-on: self-hosted
    steps:
      - name: Pull Docker image
        run: docker pull lucaslrodrigues/sprint-api-database:latest

      - name: Stop Docker container
        run: docker stop api_database || true

      - name: Remove Docker container
        run: docker rm api_database || true

      - name: Run Docker container
        run: docker run --name api_database -d -p 8080:8080 lucaslrodrigues/sprint-api-database:latest

```

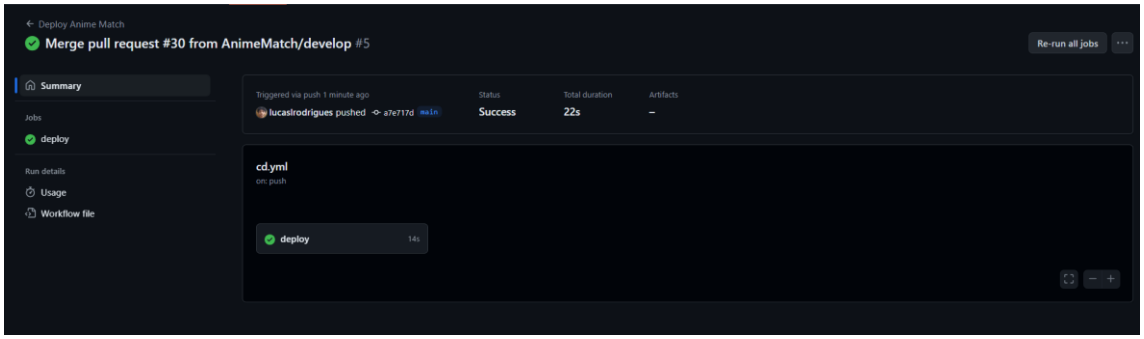
Criando nova branch para adicionar a develop:

```
PS C:\Users\lukas\OneDrive\Documentos\faculdade\sprint\animematch-database-info-api> git branch
  develop
  feature/bd
* feature/deploy
  feature/topico-refactor
  main
PS C:\Users\lukas\OneDrive\Documentos\faculdade\sprint\animematch-database-info-api> git add .
PS C:\Users\lukas\OneDrive\Documentos\faculdade\sprint\animematch-database-info-api> git commit -m "adicionando configurações de deploy ao actions"
[feature/deploy a8f2159] adicionando configurações de deploy ao actions
 2 files changed, 23 insertions(+), 7 deletions(-)
 create mode 100644 .github/workflows/cd.yml
PS C:\Users\lukas\OneDrive\Documentos\faculdade\sprint\animematch-database-info-api> git push
fatal: The current branch feature/deploy has no upstream branch.
To push the current branch and set the remote as upstream, use

    git push --set-upstream origin feature/deploy

To have this happen automatically for branches without a tracking
upstream, see 'push.autoSetupRemote' in 'git help config'.

PS C:\Users\lukas\OneDrive\Documentos\faculdade\sprint\animematch-database-info-api> git push --set-upstream origin feature/deploy
Enumerating objects: 10, done.
Counting objects: 100% (10/10), done.
Delta compression using up to 8 threads
Compressing objects: 100% (5/5), done.
Writing objects: 100% (6/6), 676 bytes | 676.00 KiB/s, done.
Total 6 (delta 2), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
remote:
remote: Create a pull request for 'feature/deploy' on GitHub by visiting:
remote:      https://github.com/AnimeMatch/animematch-database-info-api/pull/new/feature/deploy
remote:
To https://github.com/AnimeMatch/animematch-database-info-api.git
 * [new branch]      feature/deploy -> feature/deploy
branch 'feature/deploy' set up to track 'origin/feature/deploy'.
PS C:\Users\lukas\OneDrive\Documentos\faculdade\sprint\animematch-database-info-api>
```

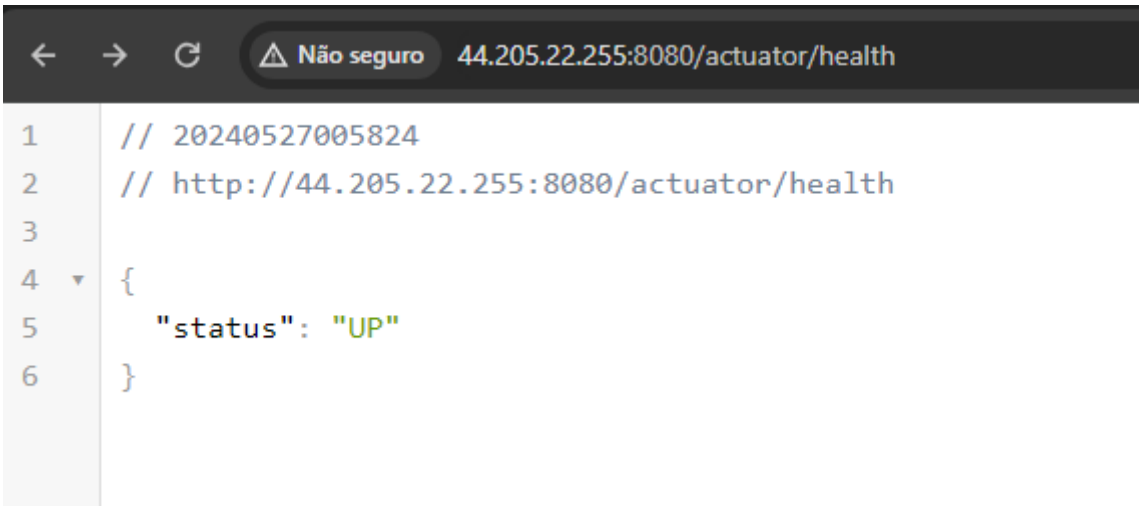
Criando merge para a main:



Deploy realizado com sucesso:




```
ubuntu@ip-10-0-0-107:~/actions-runner$ docker ps
CONTAINER ID   IMAGE                                          COMMAND               CREATED          STATUS          PORTS                                       NAMES
428be092f309   lucaslrodrigues/sprint-api-database:latest   "java -jar app.jar"   24 seconds ago   Up 22 seconds   0.0.0.0:8080->8080/tcp, :::8080->8080/tcp   api_database
ubuntu@ip-10-0-0-107:~/actions-runner$
```


Não seguro
44.205.22.255:8080/actuator/health
// 20240527005824
// http://44.205.22.255:8080/actuator/health
{
"status": "UP"
}