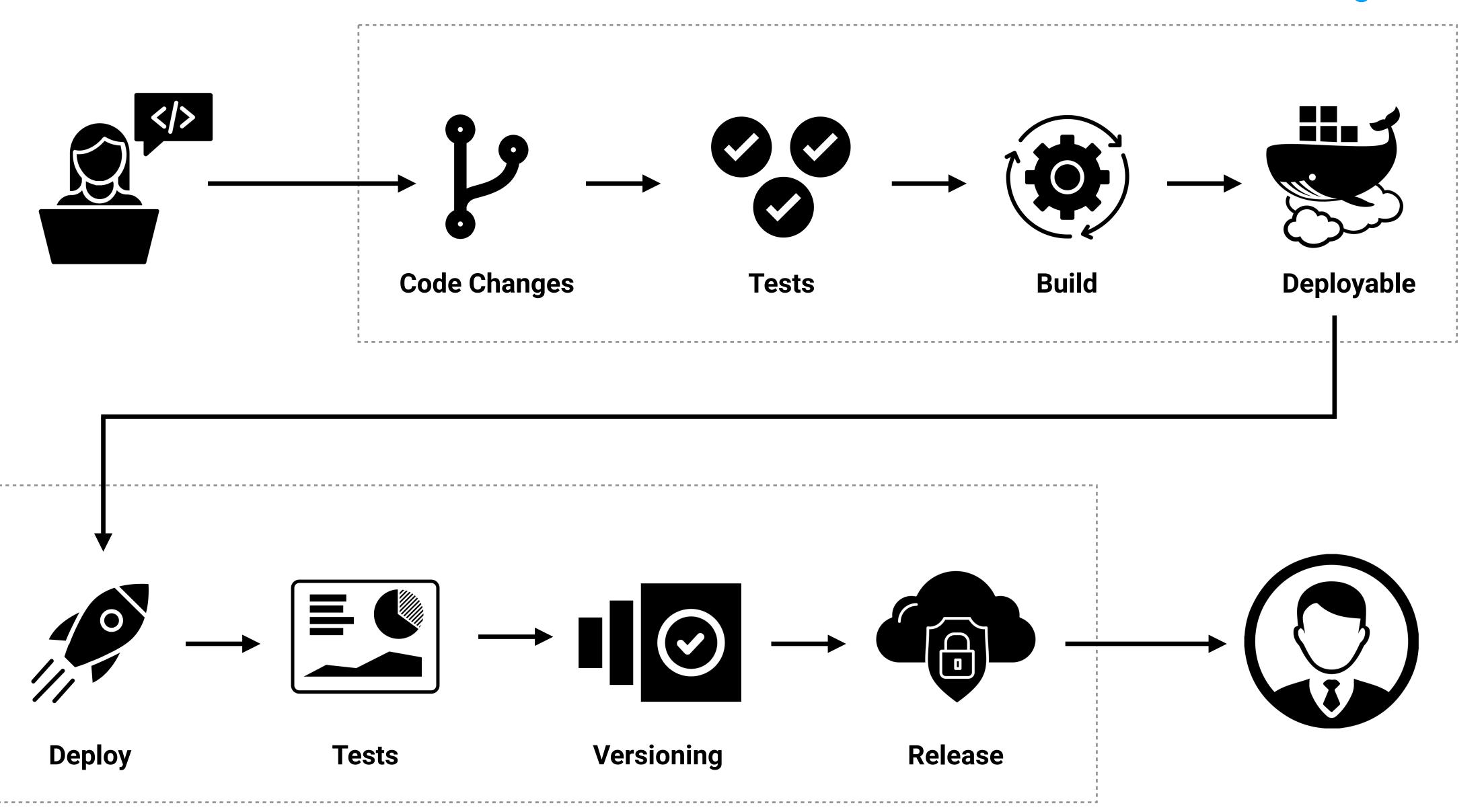
### AUTOMATING YOUR ANDROID WORKFLOWS WITH

## GITHUB ACTIONS

**Ubiratan Soares** 

August / 2020

#### **Continuous Integration**



**Continuous Delivery** 

## GitHub Actions now supports CI/CD, free for public repositories



Nat Friedman

GitHub Actions is an API for cause and effect on GitHub: orchestrate any workflow, based on any event, while GitHub manages the execution, provides rich feedback, and secures every step along the way. With GitHub Actions, workflows and steps are just code in a repository, so you can create, share, reuse, and fork your software development practices.

Since we introduced GitHub Actions last year, the response has been phenomenal, and developers have created thousands of inspired workflows. But we've also heard clear feedback from almost everyone: you want CI/CD! And that's what we're announcing today.

We hope you'll try out the beta before GitHub Actions is generally available on November 13. We can't wait to hear what you think!

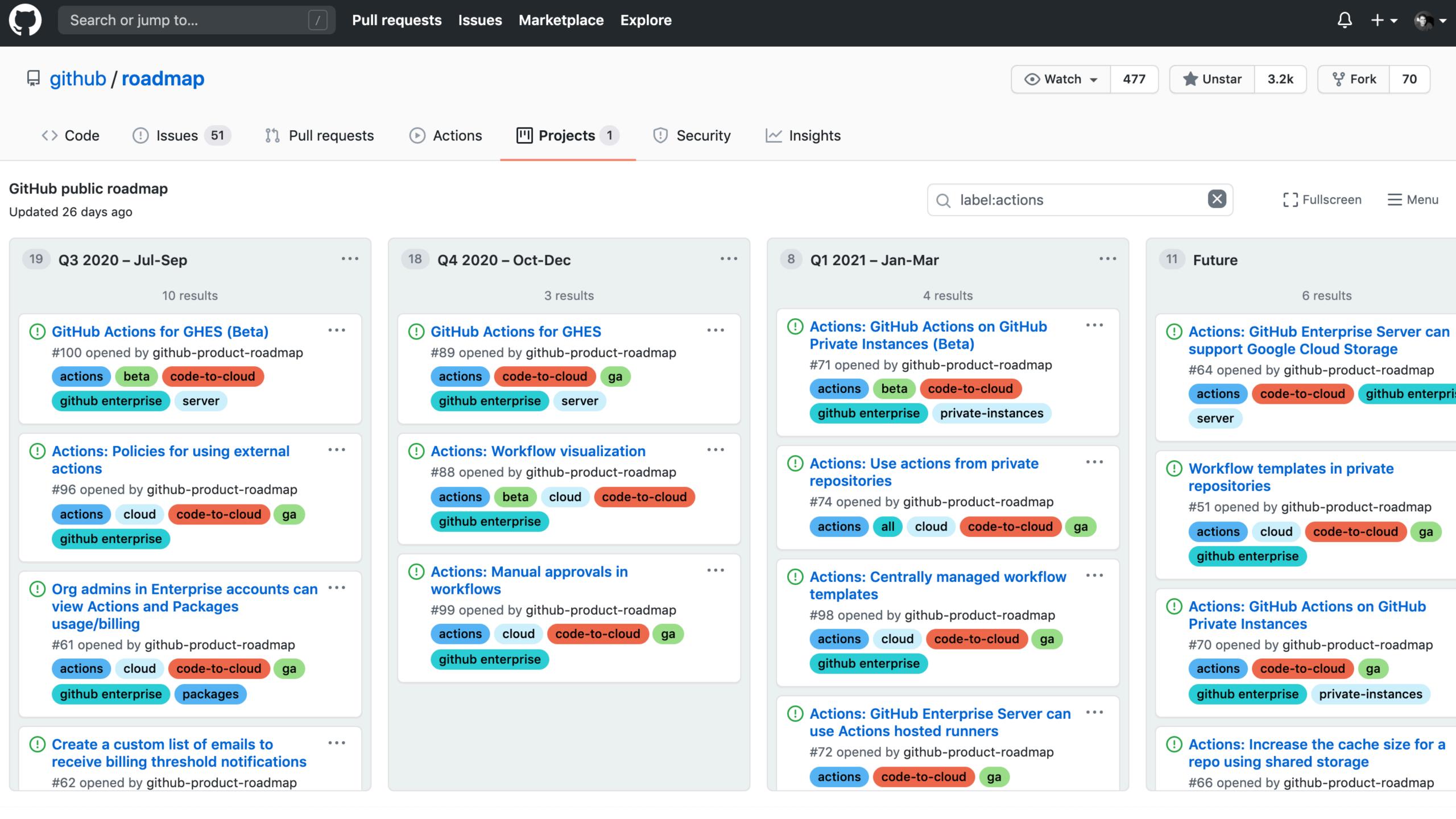
Share

Twitter

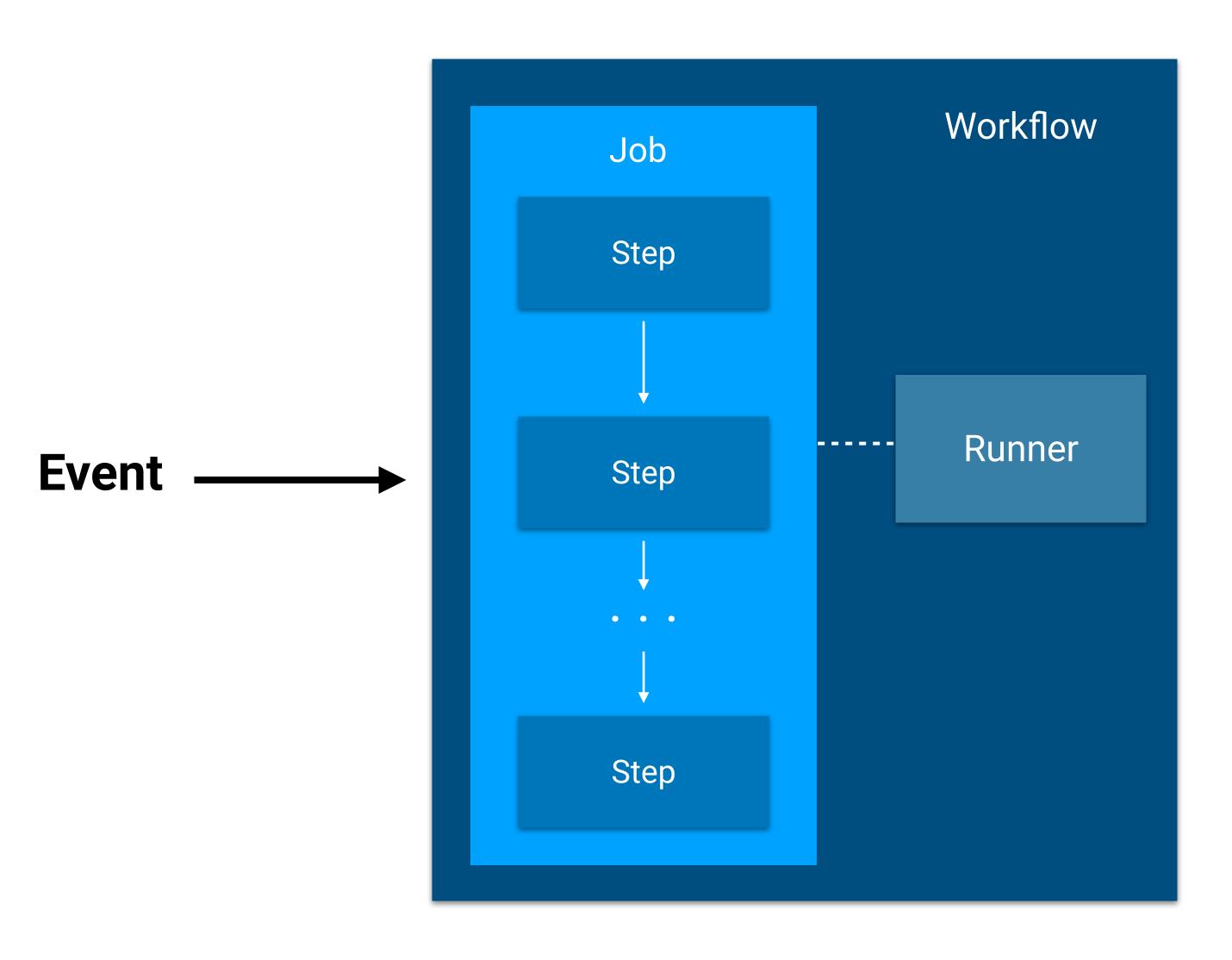
Facebook

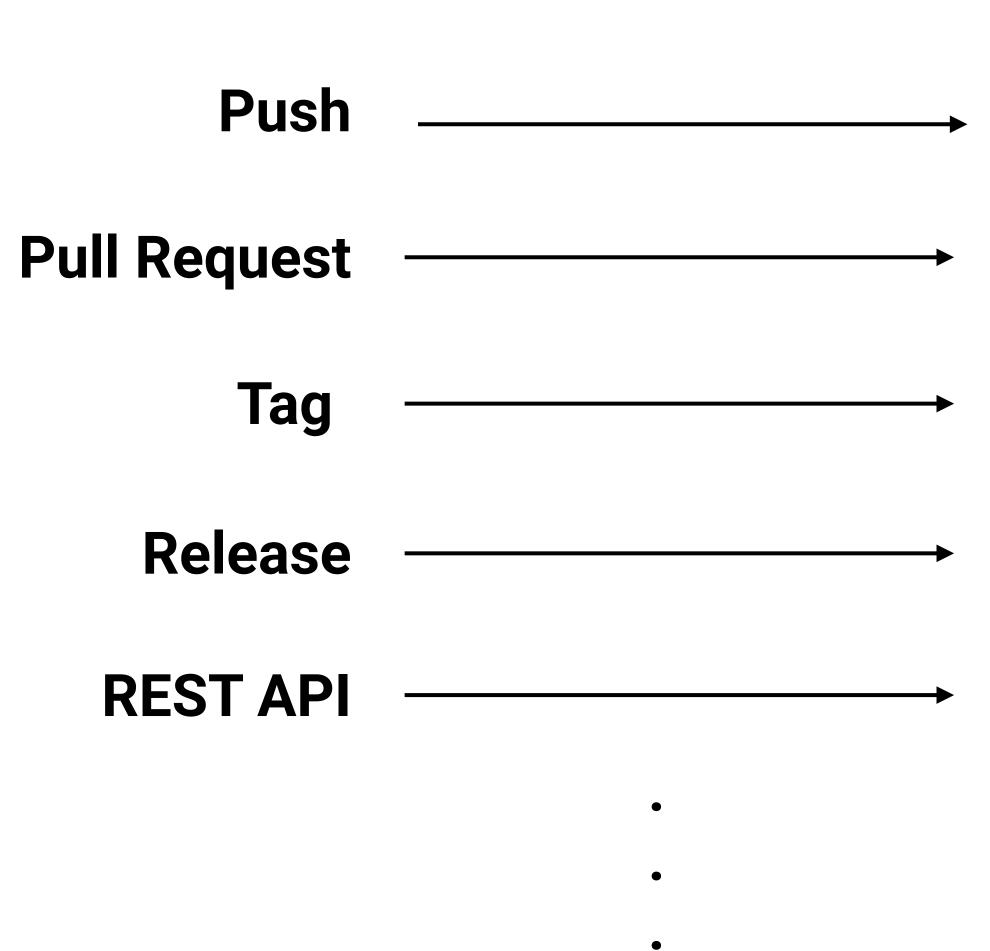
in LinkedIn

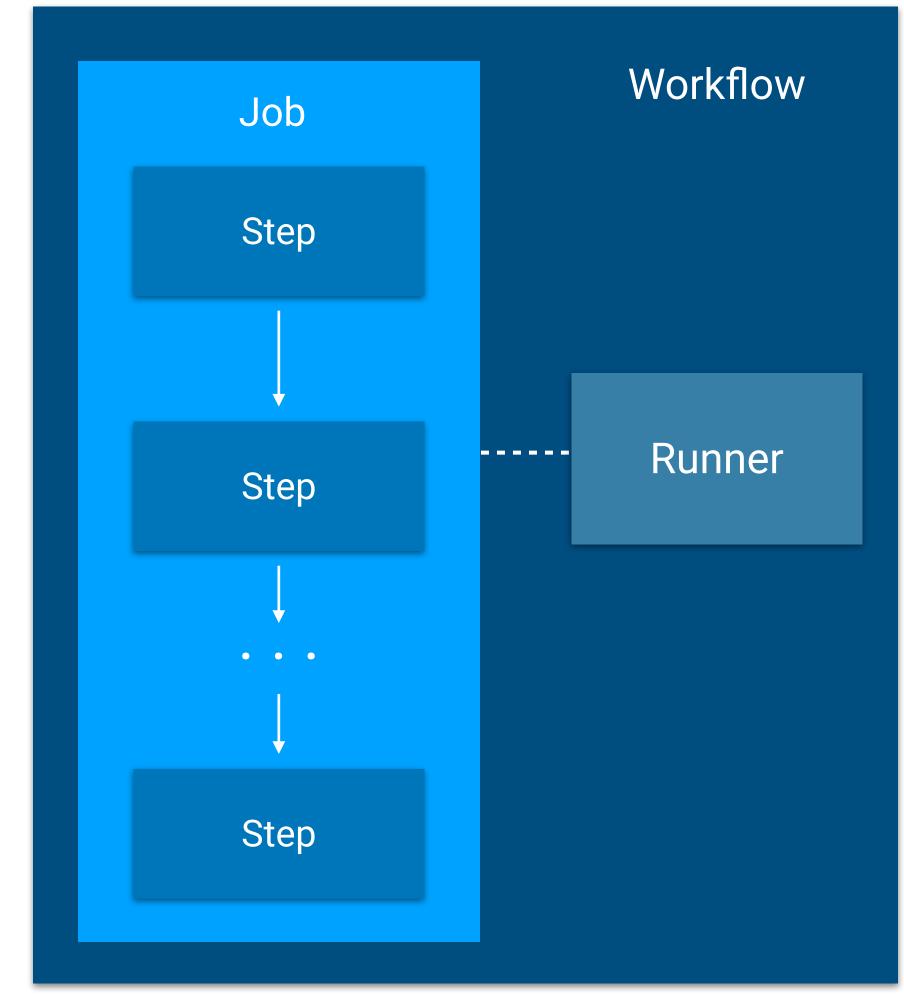
#### Sign up for the beta

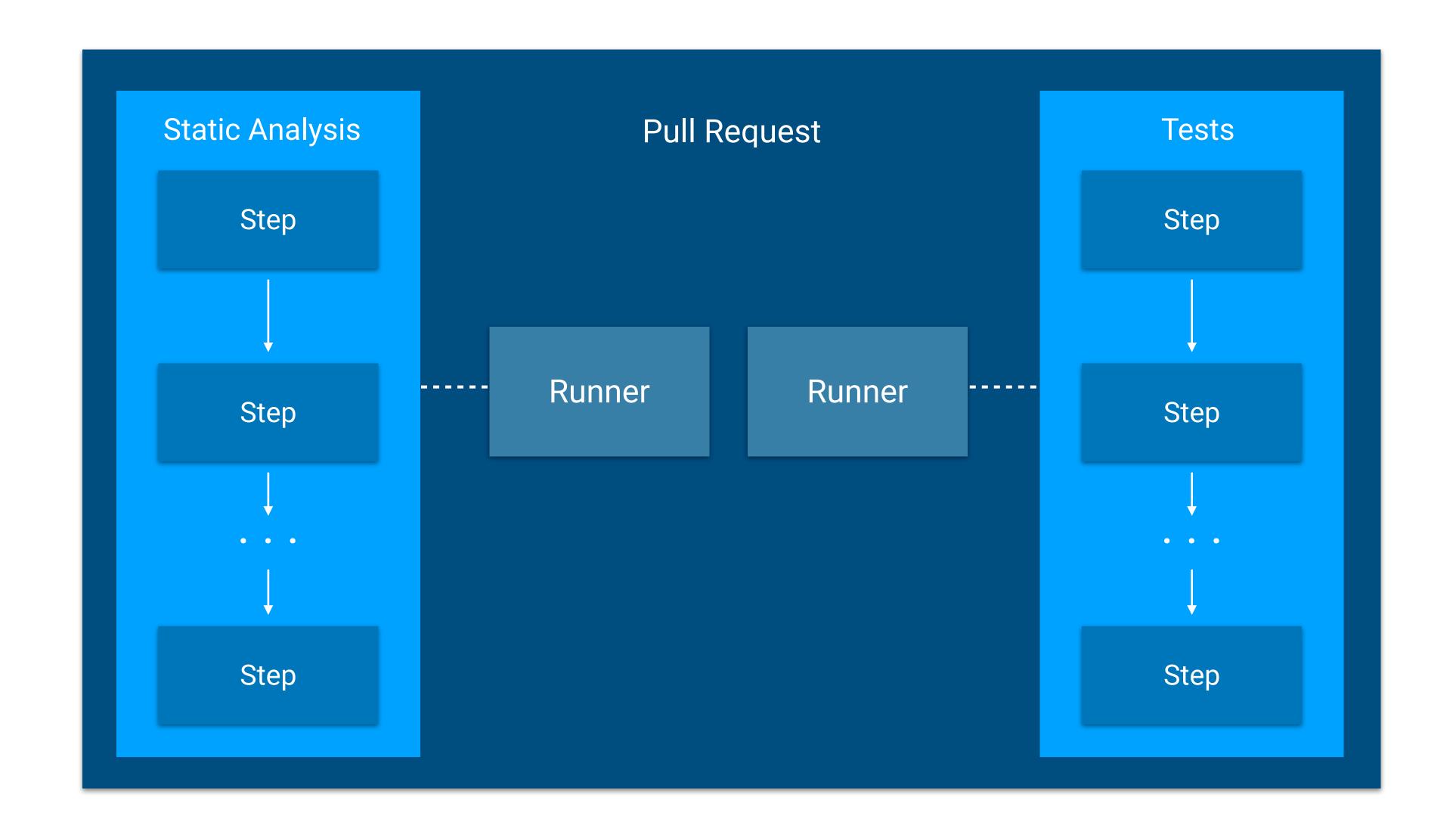


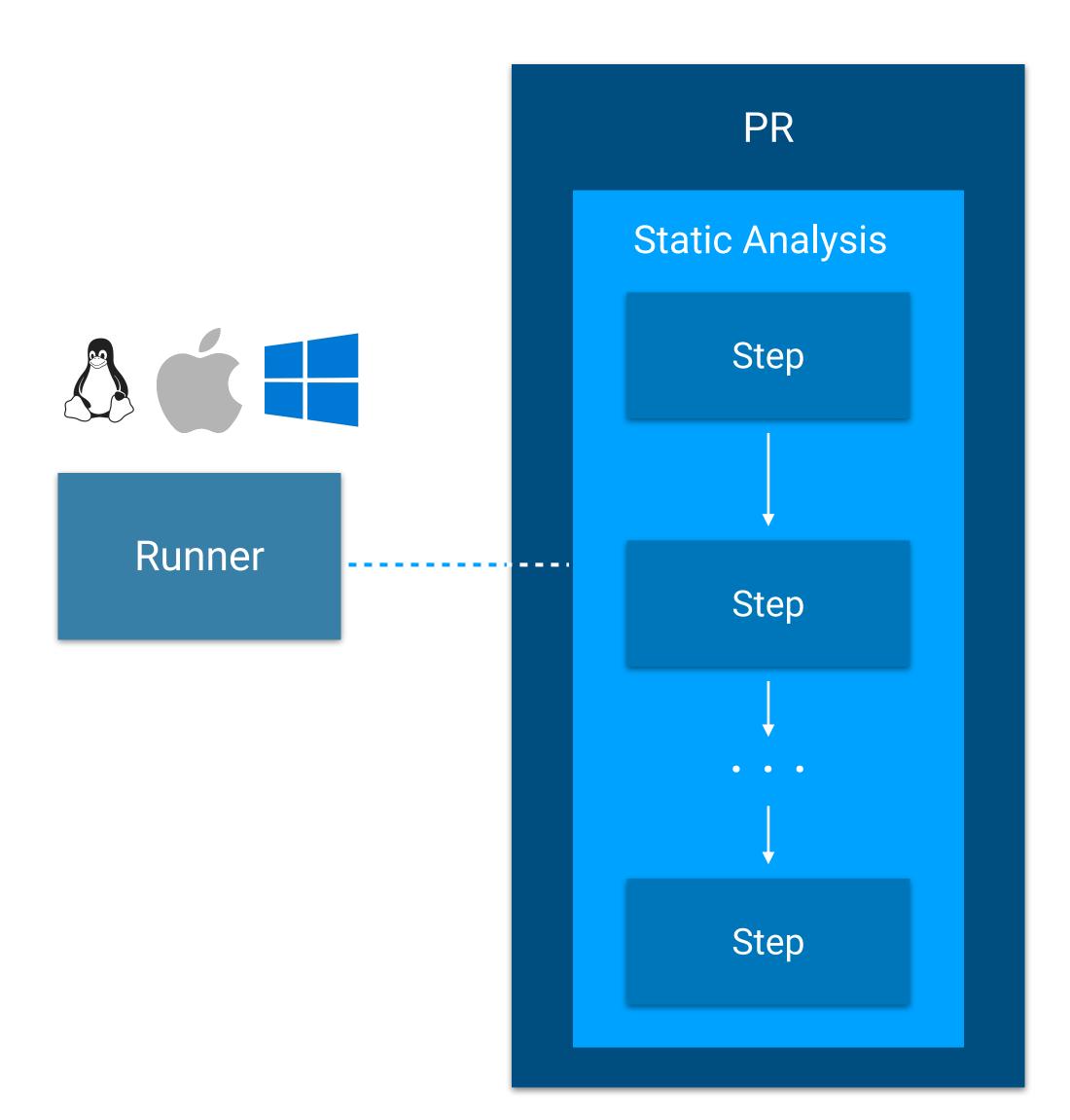
## PLATFORM MODEL



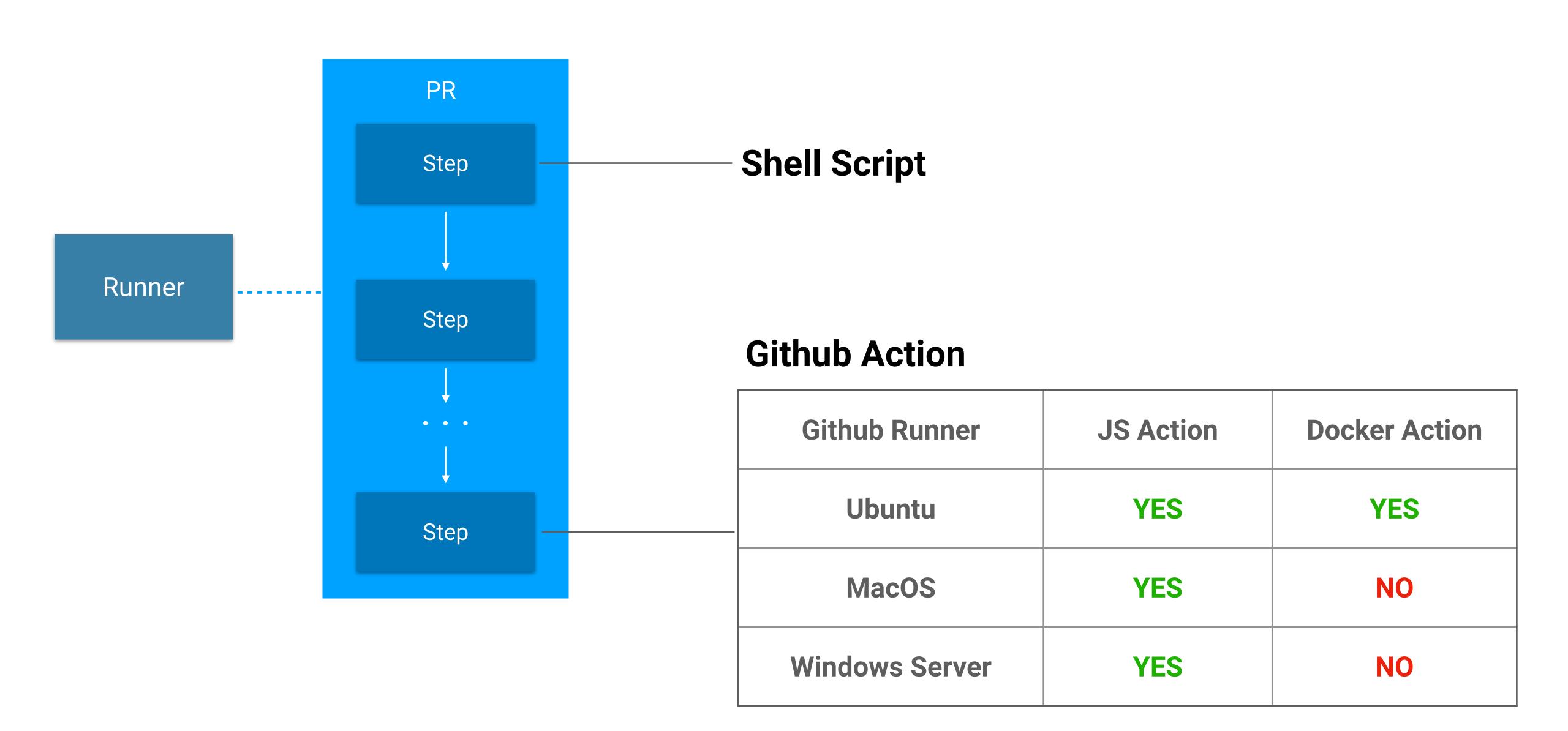


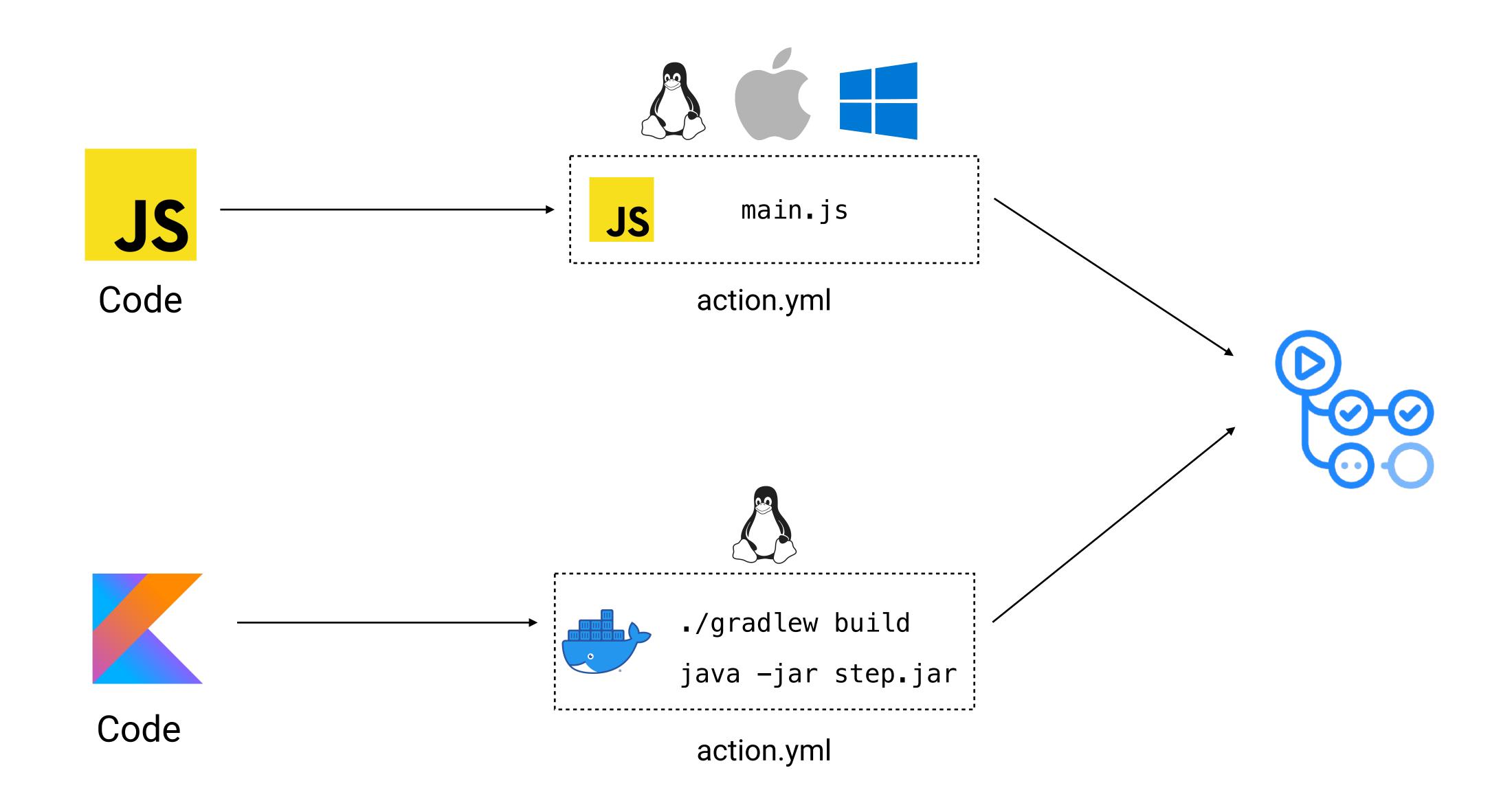


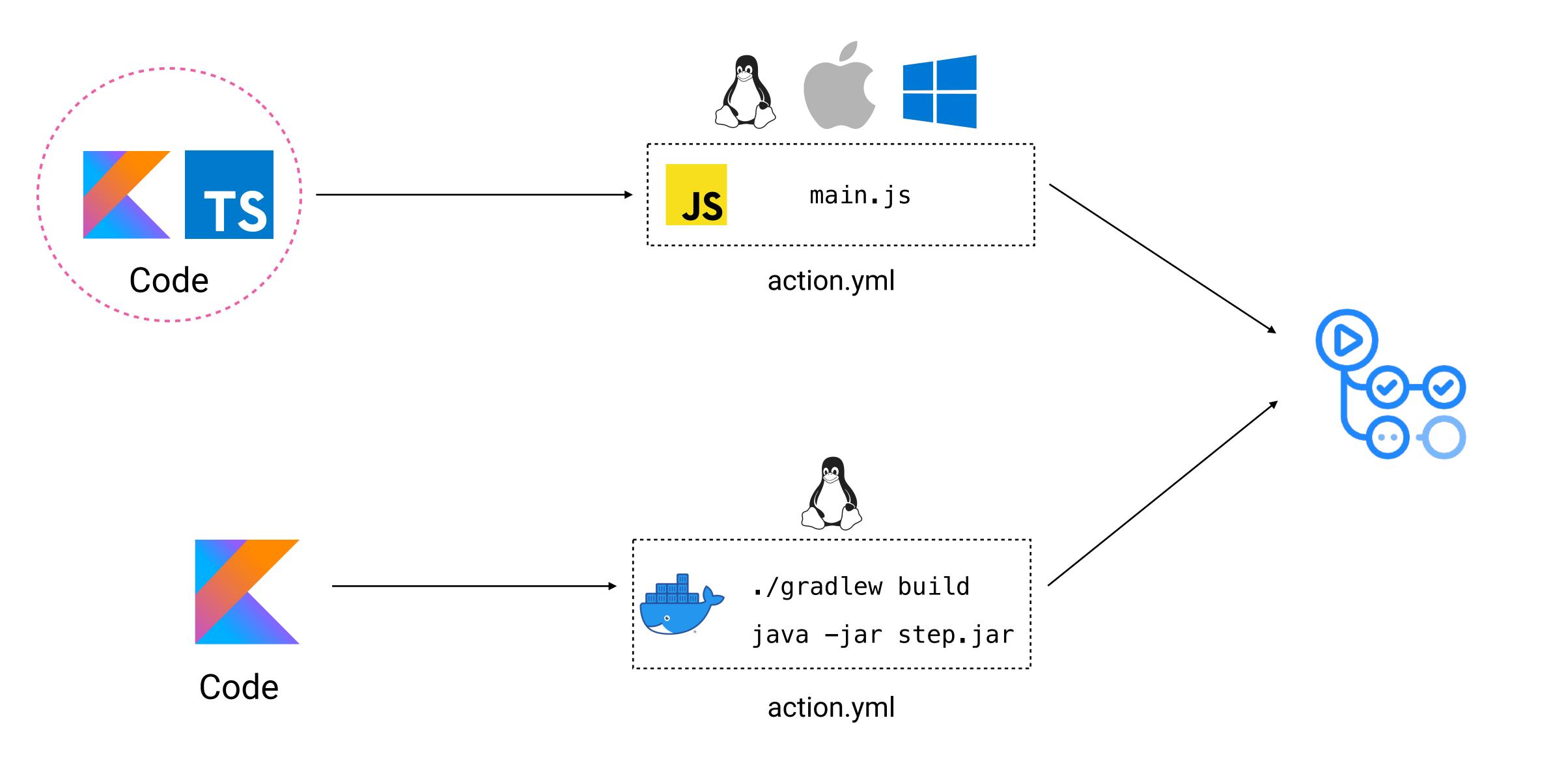




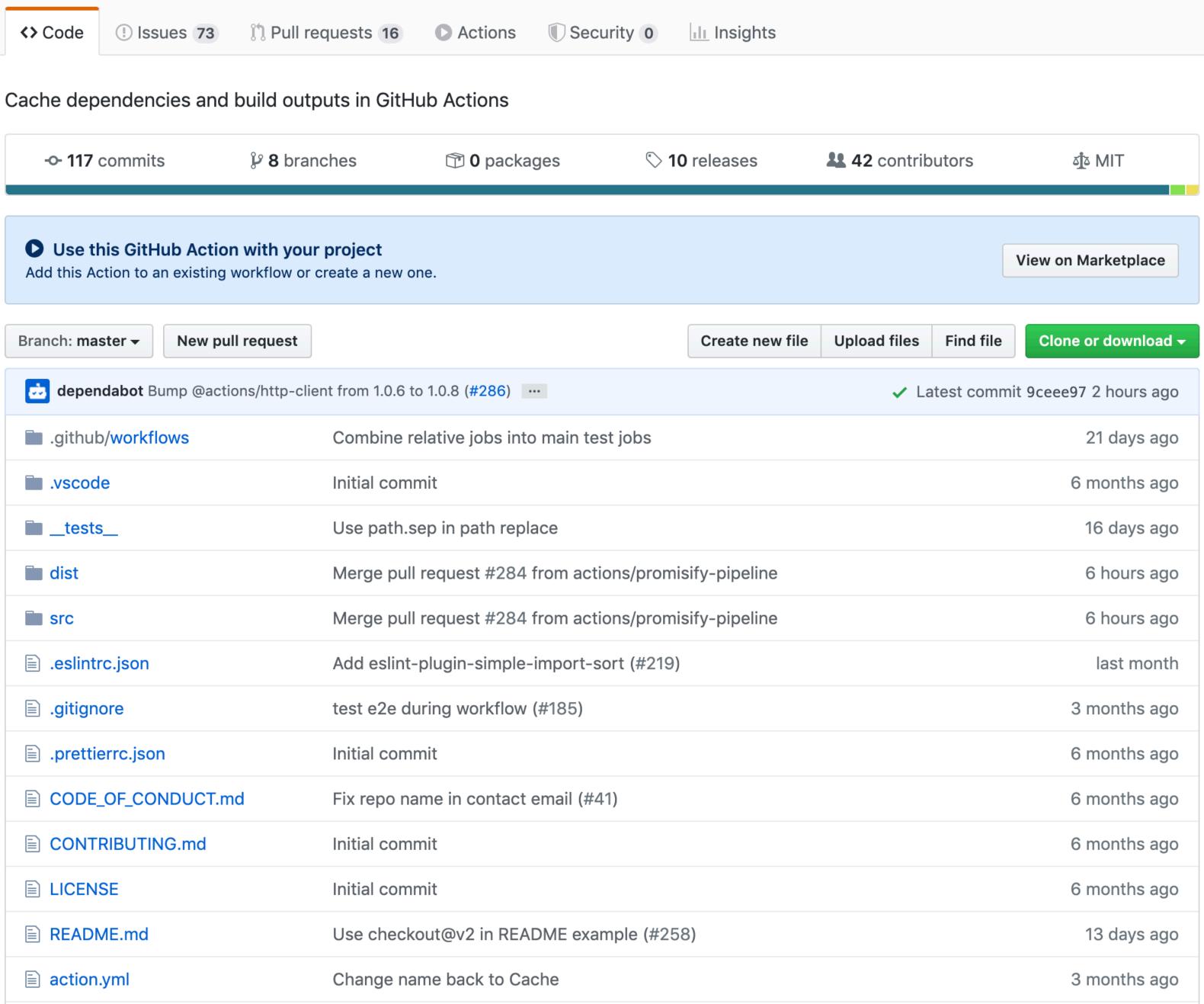
Github-hosted Runner	vCPUs	RAM	SSD
Ubuntu	2	7 GB	14 GB
MacOS Catalina	2	7 GB	14 GB
Windows Server 2019	2	7 GB	14 GB







#### actions / cache Watch ▼ ! Issues 73 Actions <> Code 1 Pull requests 16 Security 0 <u>ılı</u> Insights Cache dependencies and build outputs in GitHub Actions ♦ 10 releases **0** packages **-0- 117** commits ₽ 8 branches jobs: build: # Something before Use this GitHub Action with your project Add this Action to an existing workflow or create a new one. steps: Create new file New pull request Branch: master -- uses: | actions/cache@v1 dependabot Bump @actions/http-client from 1.0.6 to 1.0.8 (#286) .... iii .github/workflows Combine relative jobs into main test jobs .vscode Initial commit Use path.sep in path replace \_\_tests\_\_ Merge pull request #284 from actions/promisify-pipeline dist



**∀** Fork 180

\* Star

999

```
name: 'Cache'
[. . .]
inputs:
 path:
    description: 'A list of files, directories, and wildcard patterns to cache and restore'
    required: true
  key:
    description: 'An explicit key for restoring and saving the cache'
    required: true
  restore-keys:
    description: 'An ordered list of keys to use for restoring the cache if no cache hit occurred'
    required: false
outputs:
  cache-hit:
    description: 'A boolean value to indicate an exact match was found for the primary key'
```

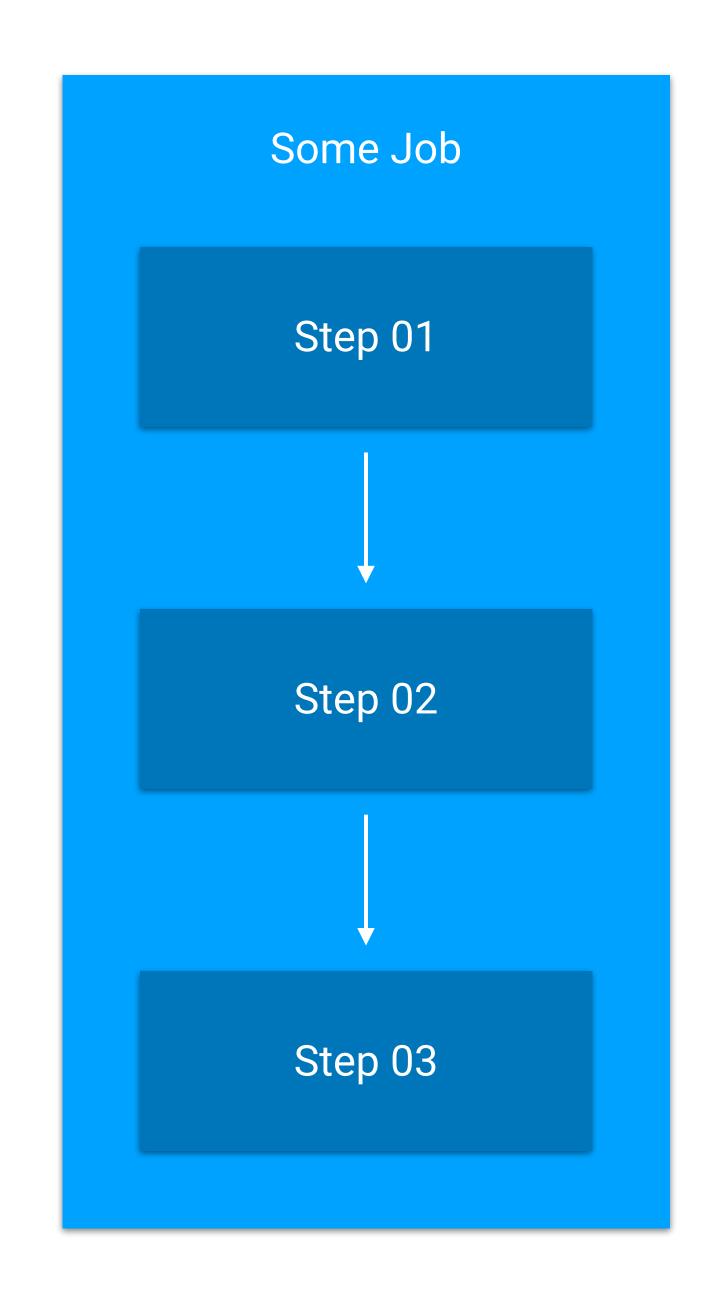
```
name: 'Cache'
[. . .]
inputs:
 path:
    description: 'A list of files, directories, and wildcard patterns to cache and restore'
    required: true
  key:
    description: 'An explicit key for restoring and saving the cache'
    required: true
  restore-keys:
```

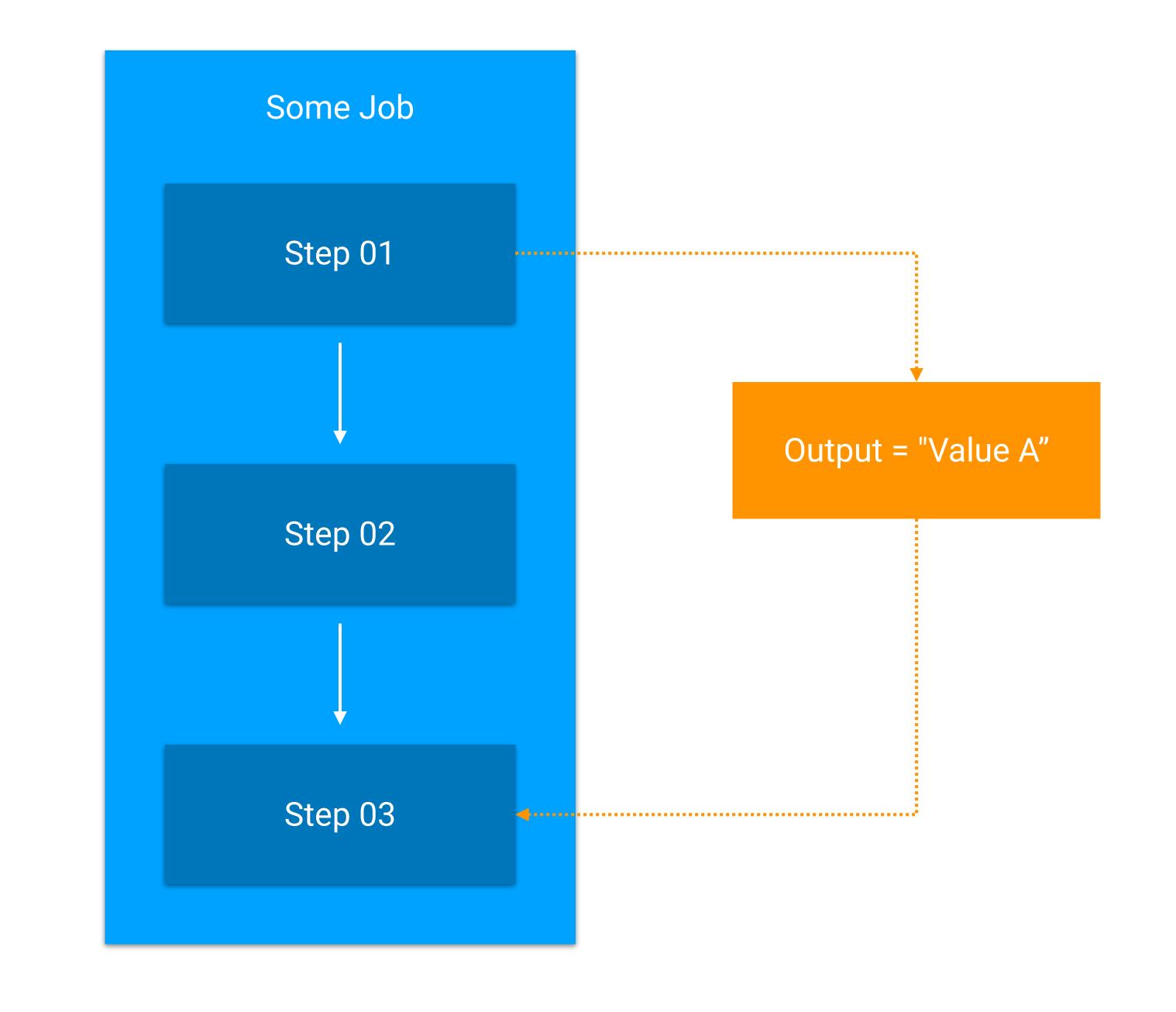
description: 'An ordered list of keys to use for restoring the cache if no cache hit occurred' required: false

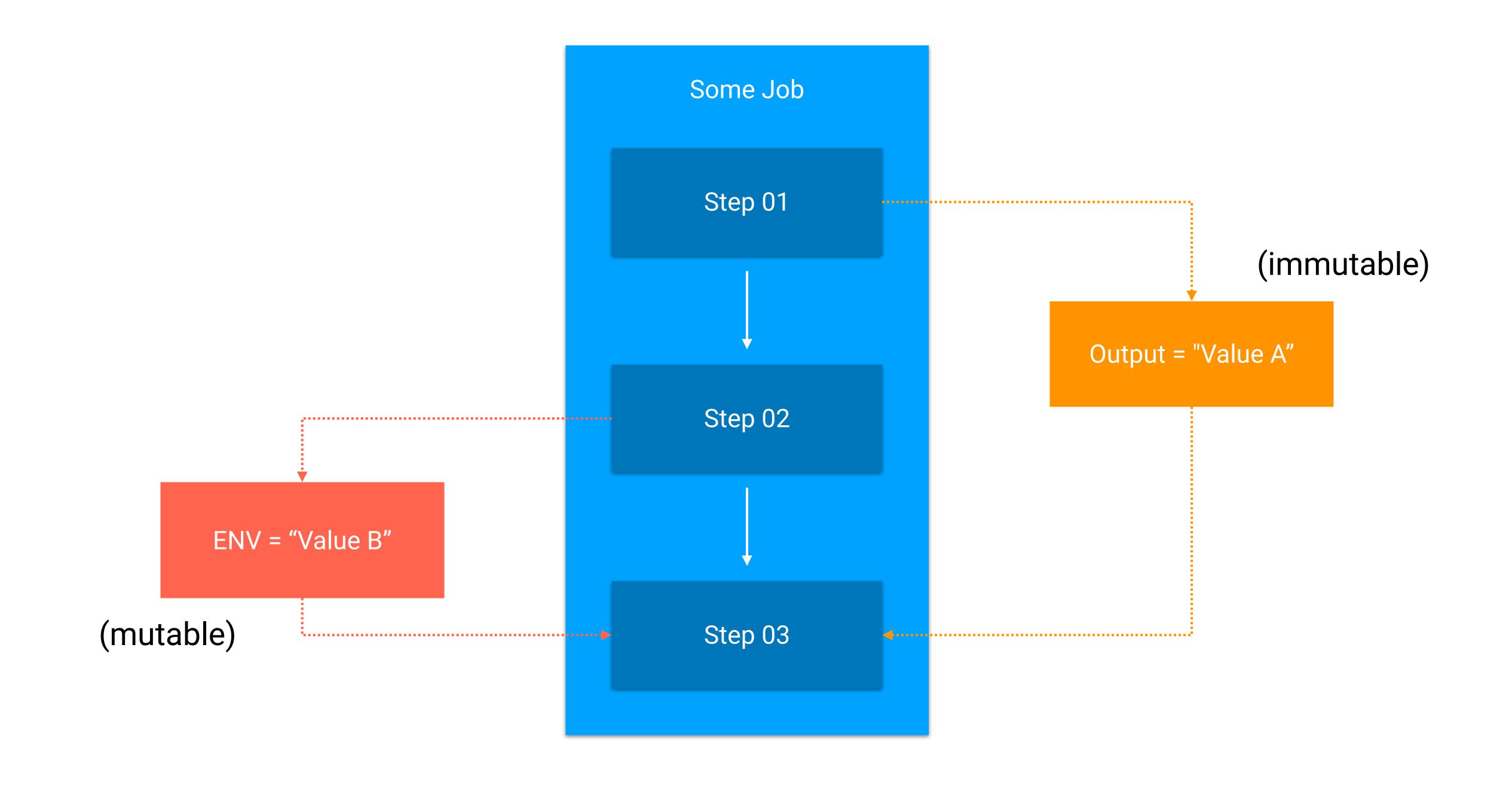
#### outputs:

#### cache-hit:

description: 'A boolean value to indicate an exact match was found for the primary key'

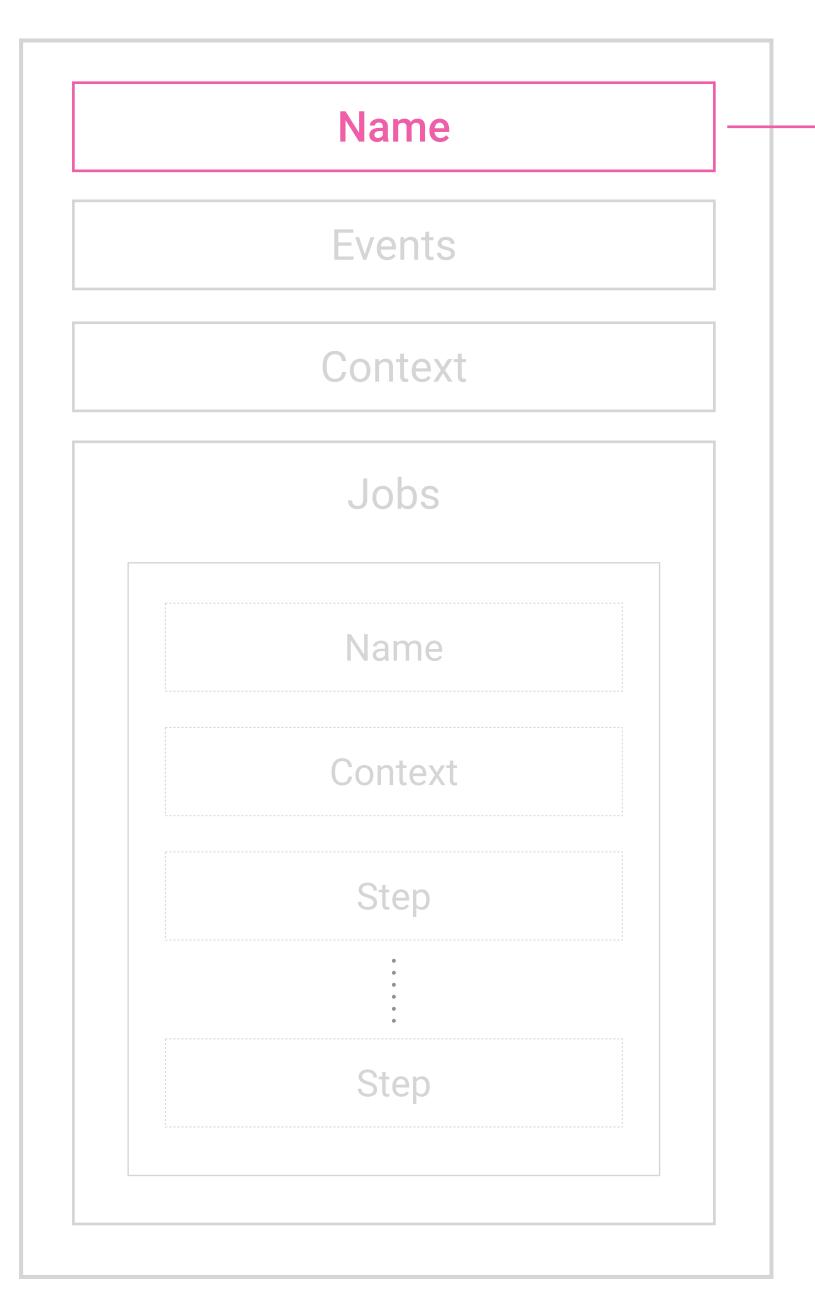




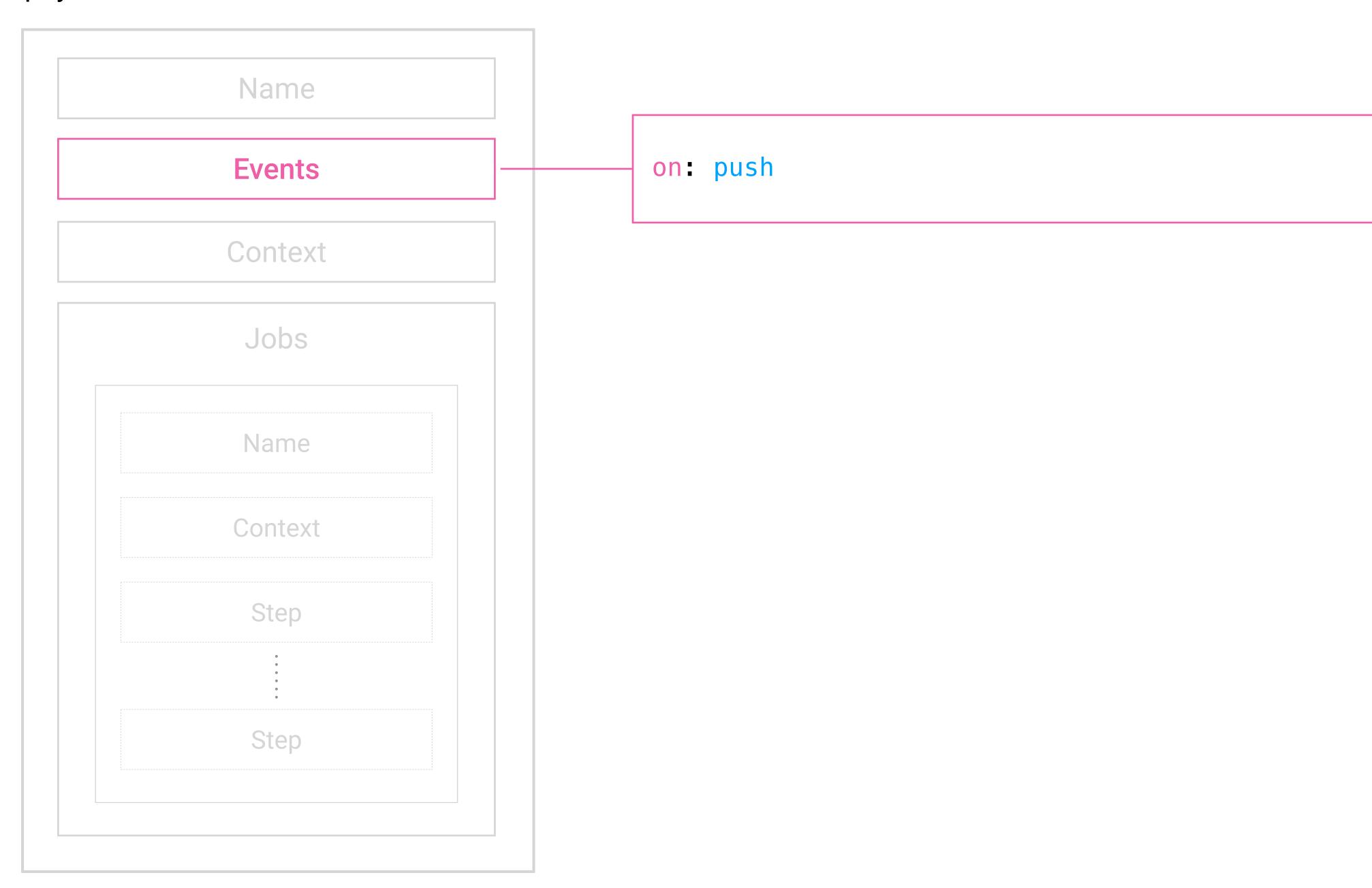


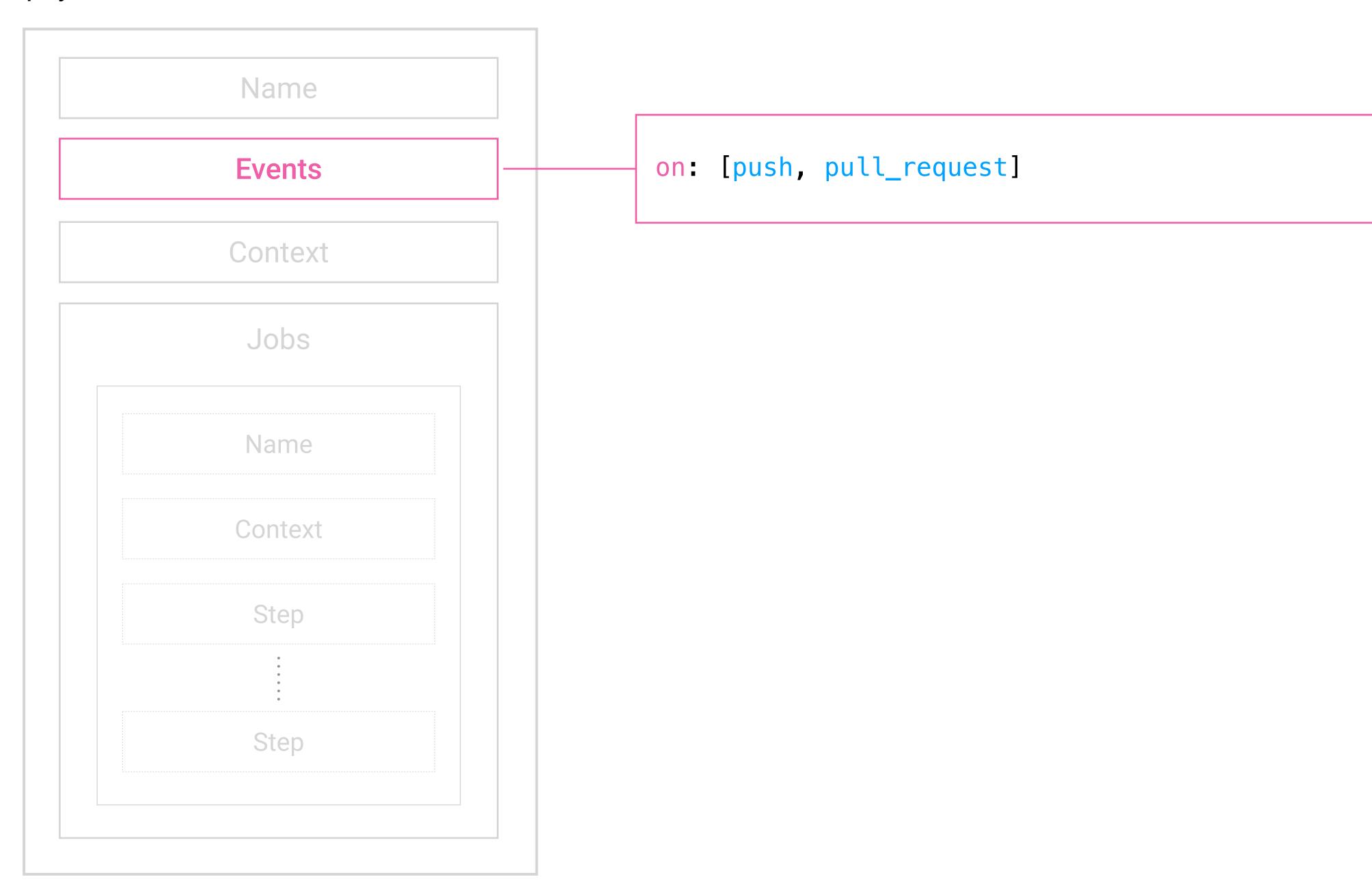
# DIVING IN THE CONFIGURATION

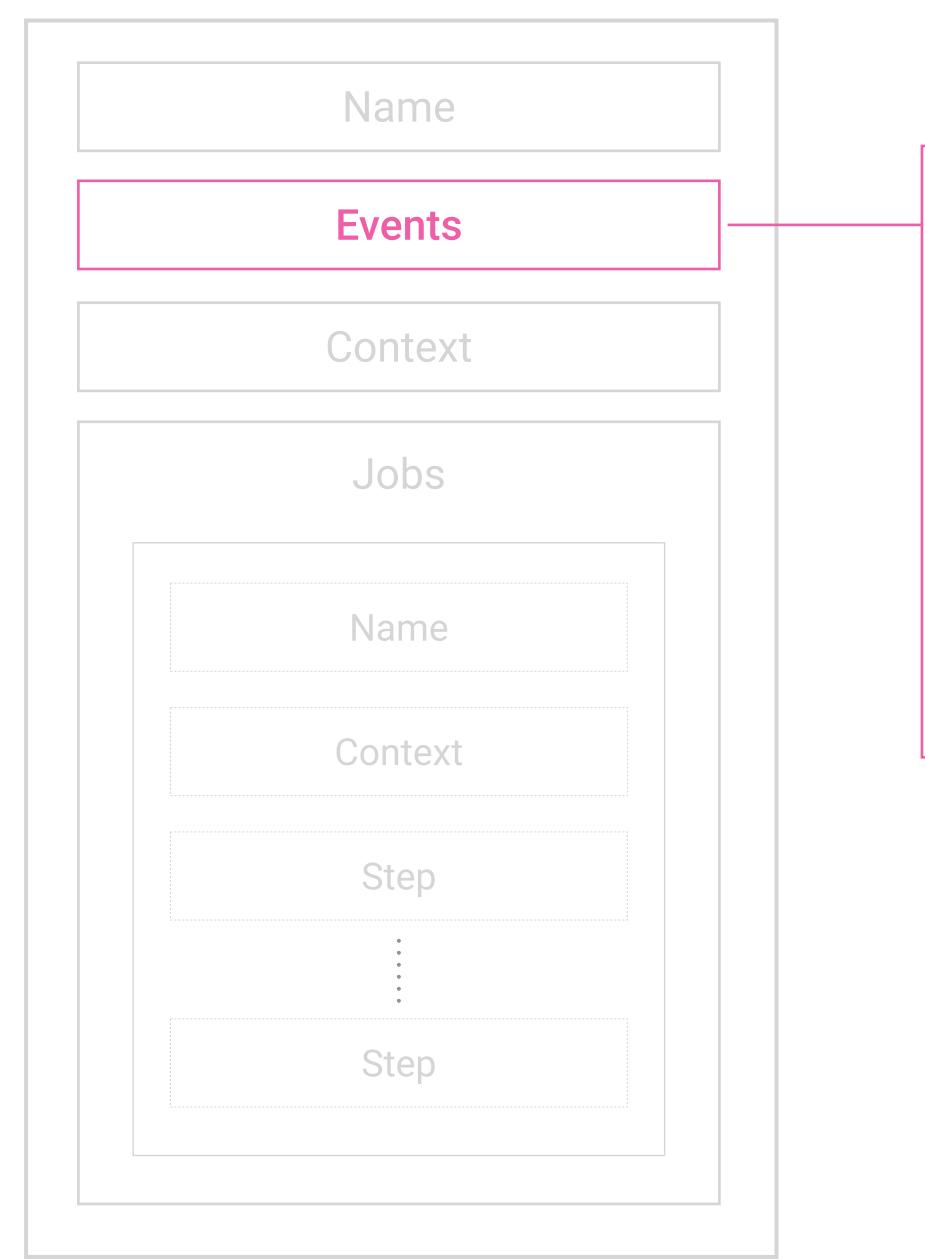
Name **Events** Context Jobs Name Context Step Step



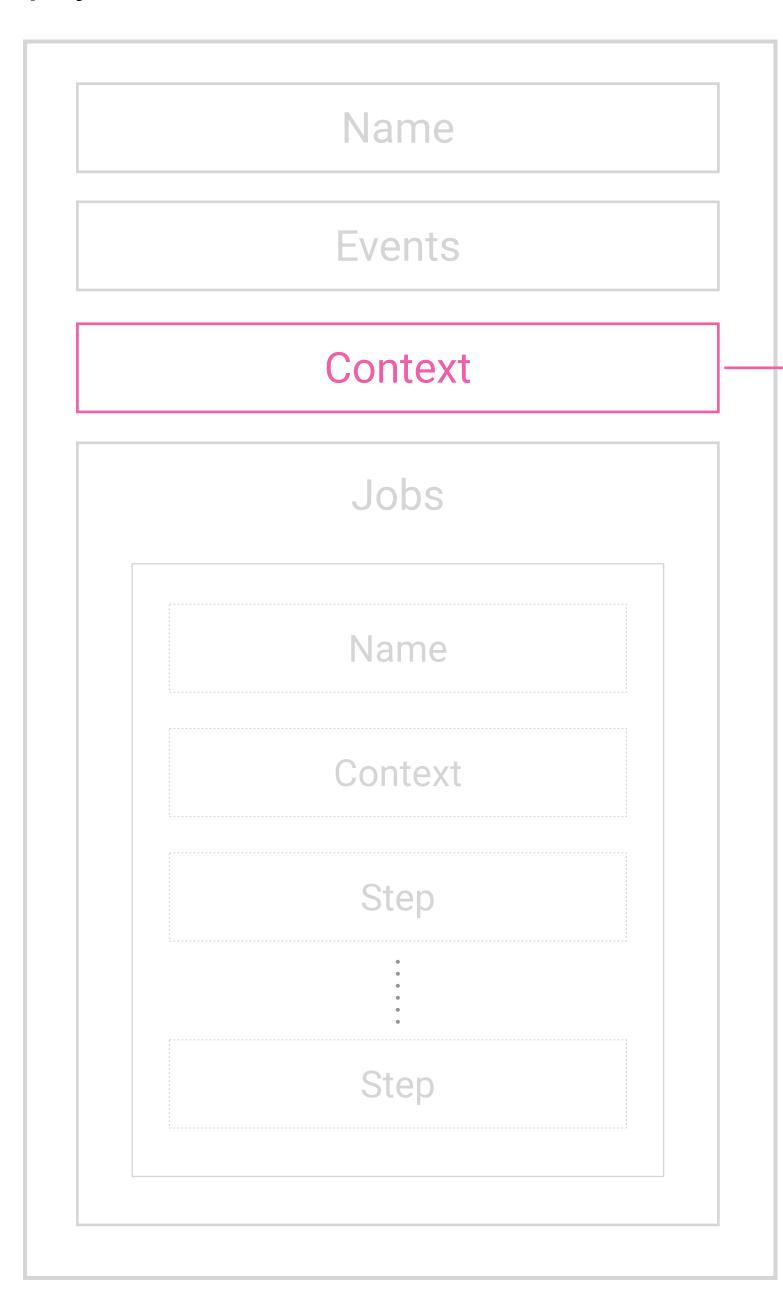
name: pr-pipeline





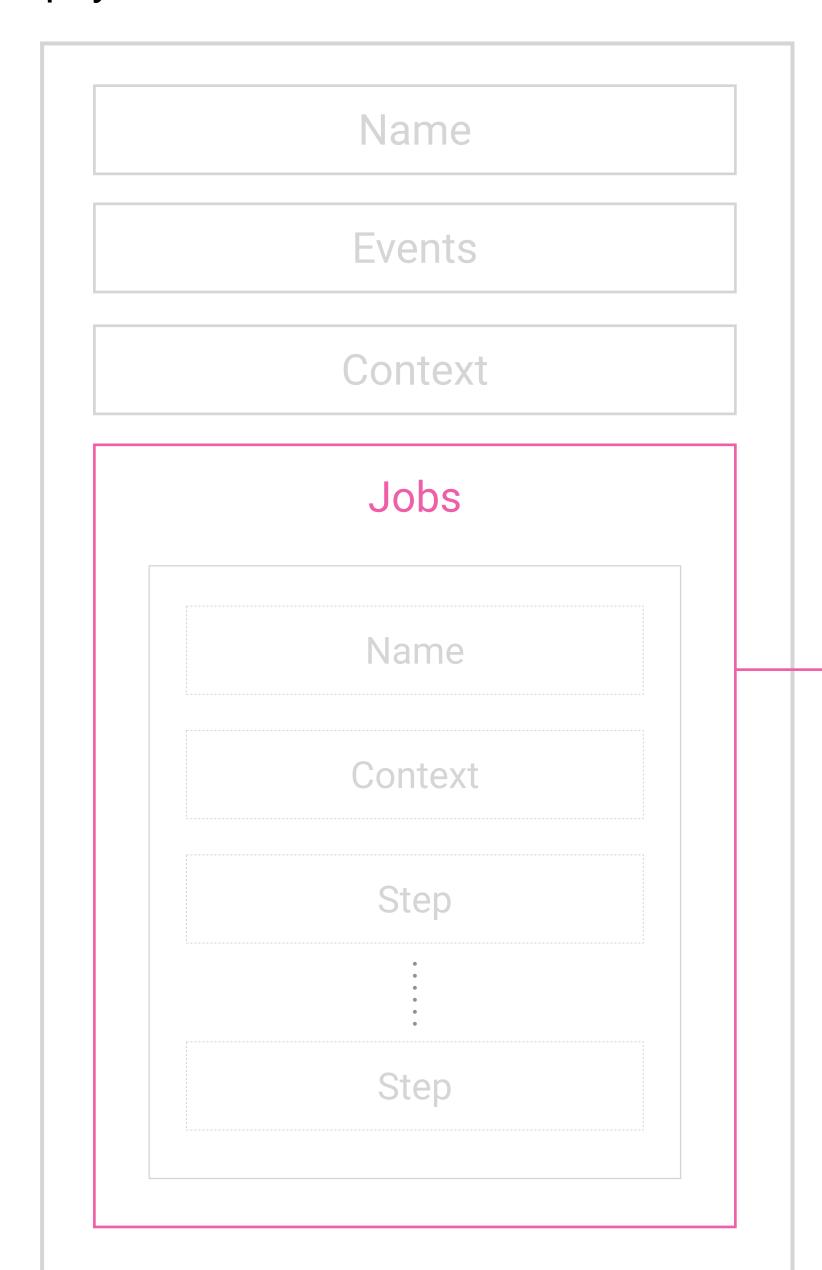


```
on:
    push:
        branches:
            - master
pull_request:
        branches:
            - master
release:
        types:
            - created
```



```
env:
    GRADLE_OPTS: -Dorg.gradle.daemon=false

defaults:
    run:
        shell: bash
        working-directory: temp
```



```
jobs:
  static_analysis:
   # Detekt and Ktlint
  assemble:
   # Build debug APK
  unit_tests:
   # Run JVM tests
  acceptance_tests:
   # Run Espresso tests
  quality_checks:
   # Reports to quality gate system (eg Sonarqube)
```

```
Name
Events
Context
 Jobs
                            jobs:
                              unit_tests:
                                 runs-on: ubuntu-latest
 Name
                                steps:
Context
                                   - name: Checkout sources
                                    uses: actions/checkout@v2
 Step
                                   - name: Run tests
                                    run: ./gradlew test
 Step
```

# A COMPLETE PIPELINE

```
name: Main
on: [push]
jobs:
  build:
    runs-on: macOS-latest
    steps:
      - name: Project Checkout
        uses: actions/checkout@v2.3.2
      - name: Compute key for CI cache
        run: ./compute-ci-cache-key.sh key.txt
      - name: Setup cache
        uses: actions/cache@v2.1.0
        continue-on-error: true
        with:
          path: ~/.gradle/caches
          key: ${{ runner.os }}-gradle-${{ hashFiles('key.txt') }}
          restore-keys: ${{ runner.os }}-gradle-
```

```
- name: Setup JDK 1.8
                                                  https://github.com/dotanuki-labs/norris
  uses: actions/setup-java@v1.4.1
  with:
    java-version: 1.8
- name: Copy CI gradle.properties
  run:
    mkdir −p ~/.gradle
    cp .github/githubci-gradle.properties ~/.gradle/gradle.properties

    name: Resolve dependencies

  run: ./gradlew androidDependencies --no-daemon --stacktrace

    name: Check code formatting

  run: ./gradlew ktlintCheck --no-daemon --stacktrace
name: Check code smells
  run: ./gradlew detekt --no-daemon --stacktrace

    name: Run unit tests and capture code coverage

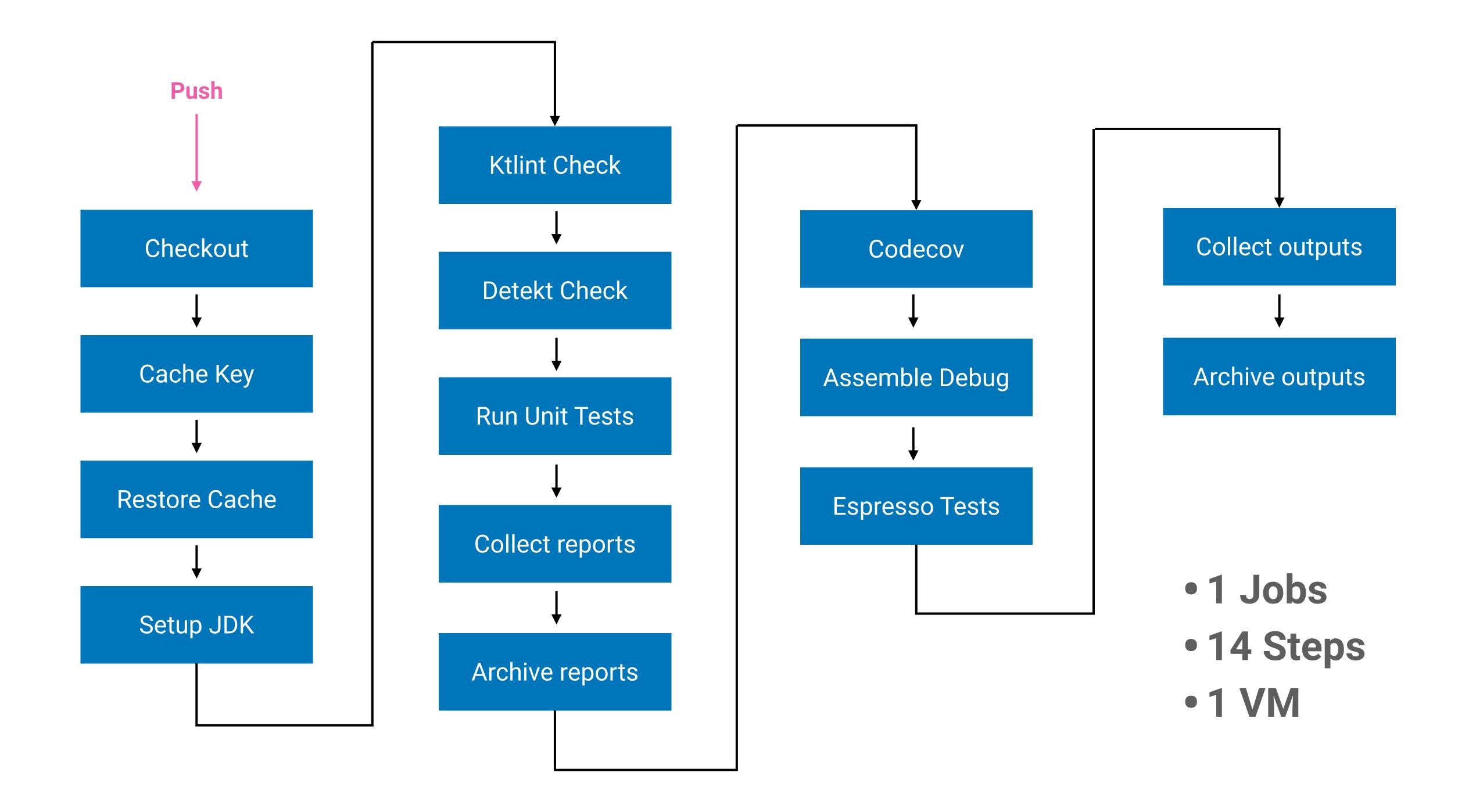
  run: ./gradlew clean jacocoTestReport jacocoTestReportDebug --no-daemon
- name: Assemble APK
  run: ./gradlew assembleDebug -xlint --no-daemon --stacktrace
```

```
- name: Assemble APK
  run: ./gradlew assembleDebug -xlint --no-daemon --stacktrace

    name: Run functional acceptance tests with Espresso

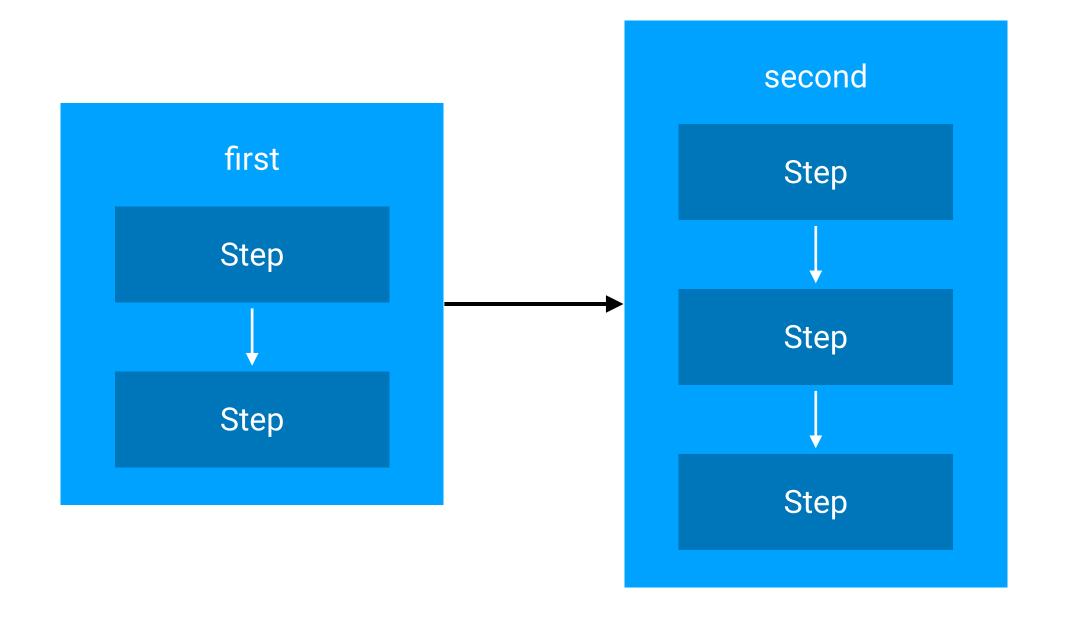
  uses: reactivecircus/android-emulator-runner@v2.11.0
  with:
    api-level: 29
    arch: x86_64
    script: ./gradlew :app:connectedDebugAndroidTest --stacktrace
- name: Archive build reports
  if: always()
  uses: actions/upload-artifact@v2.1.4
  with:
    name: build-reports
    path: app/build/reports
- name: Archive build outputs
  if: always()
  uses: actions/upload-artifact@v2.1.4
  with:
                                                 https://github.com/dotanuki-labs/norris
    name: build-outputs
    path: app/build/outputs
```

```
- name: Collect all test results from all modules
 if: always()
 run:
   mkdir -p junit
    find - -type f -regex ".*/build/test-results/.*xml" -exec cp {} junit\;
- name: Archive test results
  if: always()
 uses: actions/upload-artifact@v2.1.4
 with:
   name: junit-results
    path: junit
- name: Share test reports with Codecov
 uses: codecov/codecov-action@v1.0.12
```



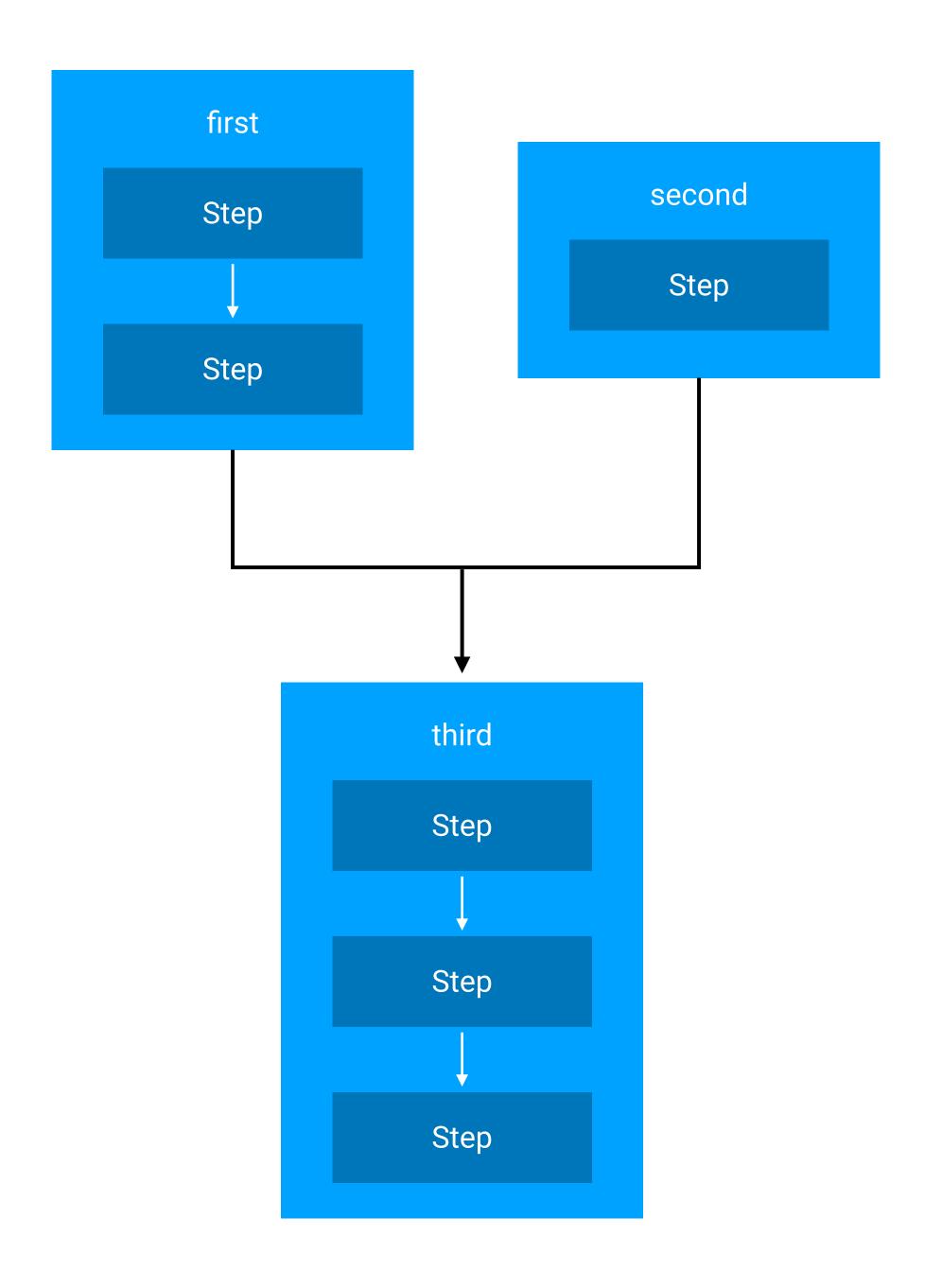
# PIPELINES AND TOPOLOGIES

### Sequential Jobs



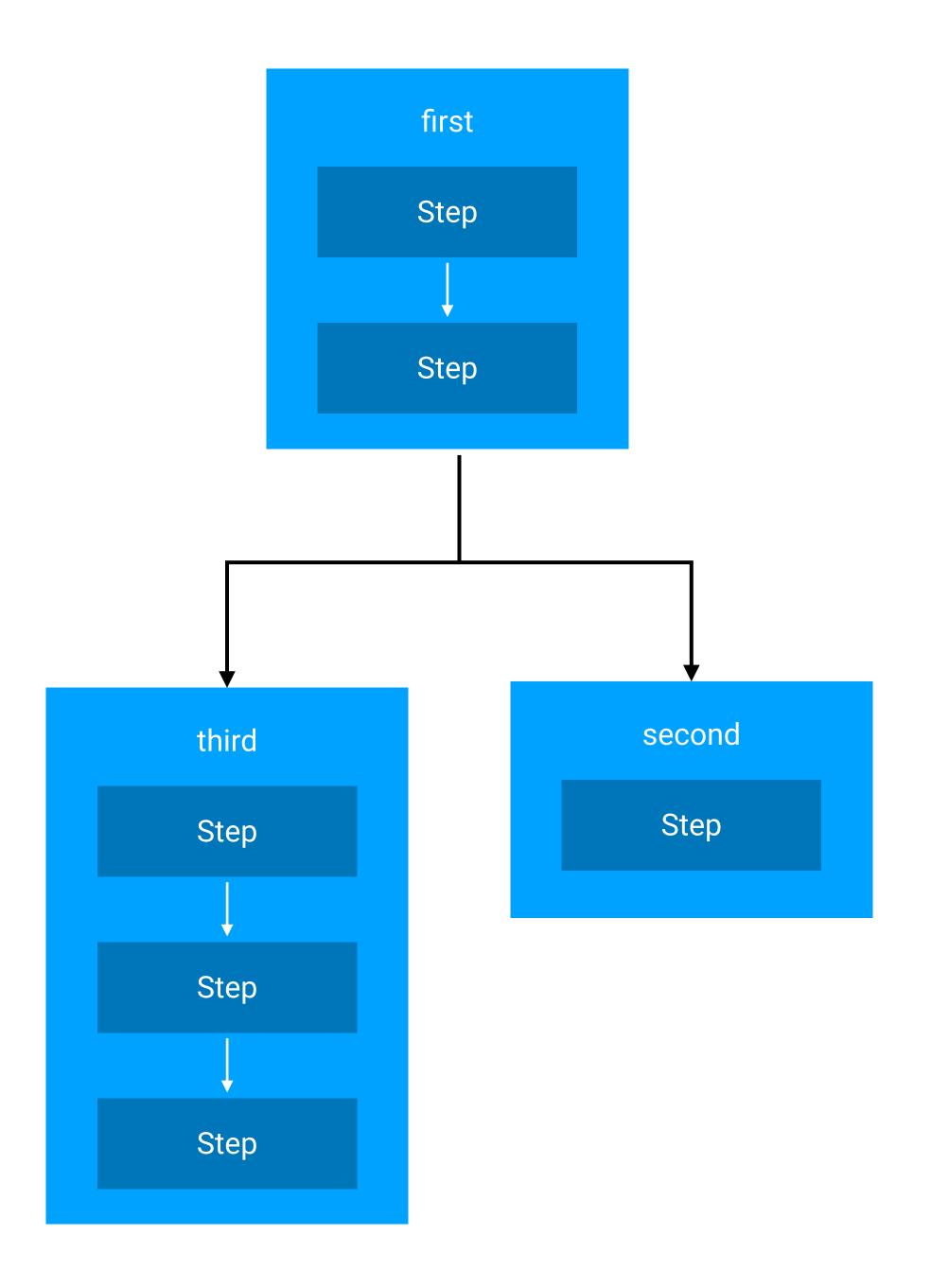
### Fan-in to Job

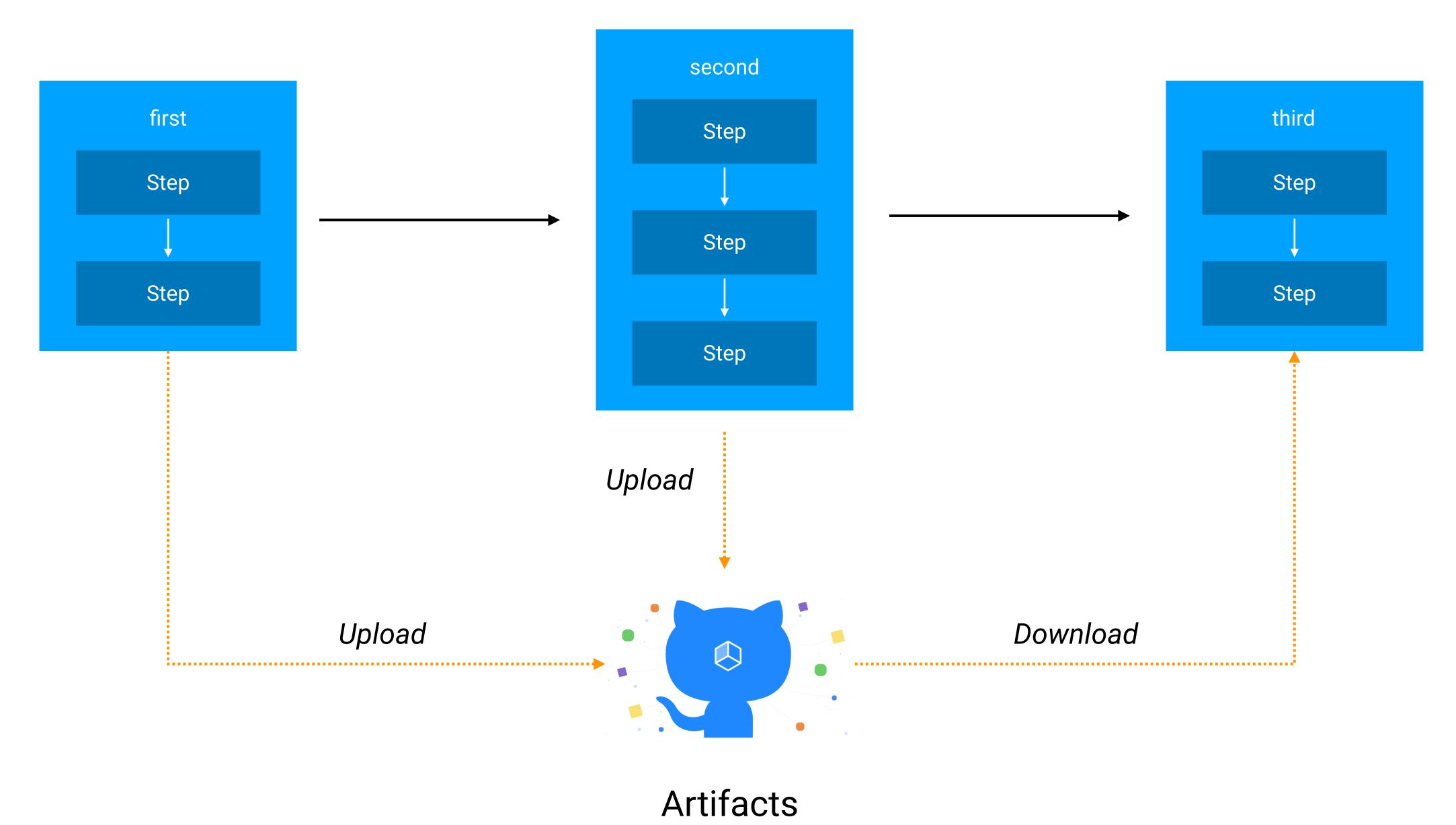
```
jobs:
  first:
    steps:
    # Steps for first job
  second:
    steps:
    # Steps for second job
  third:
    needs: [first, second]
    steps:
    # Steps for third job
```

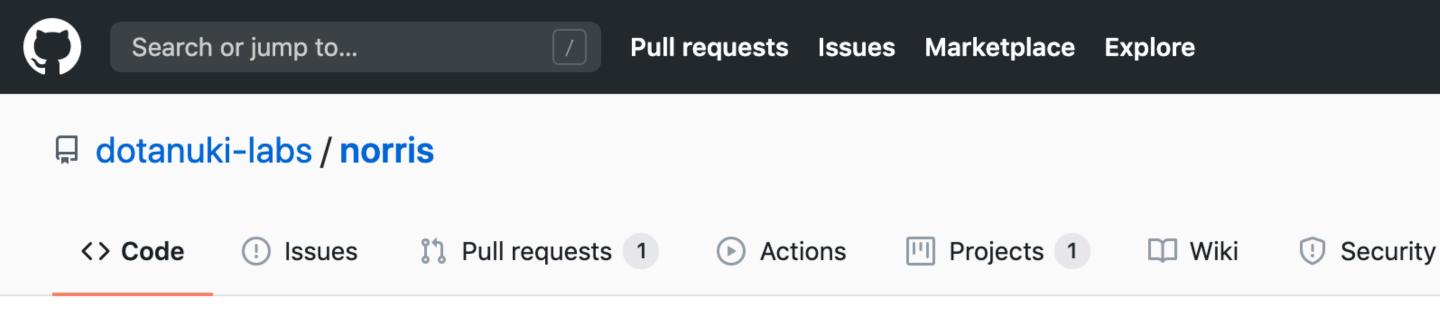


# Fan-out from Job

```
jobs:
  first:
    steps:
    # Steps for first job
  second:
    needs: first
    steps:
    # Steps for second job
  third:
    needs: first
   steps:
   # Steps for third job
```







\$\mathcal{L}^2\text{ branches } \overline{\text{\tilde{\text{\te}\text{\texi}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texi}\text{\text{\text{\texi}\text{\text{\texi}\text{\text{\texitil{\text{\texi}\tex{\texi}\text{\text{\ti}\text{\text{\text{\texi{\text{\texi}\text{

Removing un-needed step

Purging Mockito from project

Purging Mockito from project

Added rules for Kotlinx. Serialization

Refactored tests for SearchViewModel with fakes

Ignoring test for now

Bumped Gradle to 6.6

Added editorconfig

Project bootstrap

Project bootstrap

Added config for Mergify

Added Github Actions badge

Reworked CI emulation script

ubiratansoares Removing un-needed step

₽ 94f22540ed ▼

.github

buildSrc

features

platform

proguard

.editorconfig

.gitignore

.mergify.yml

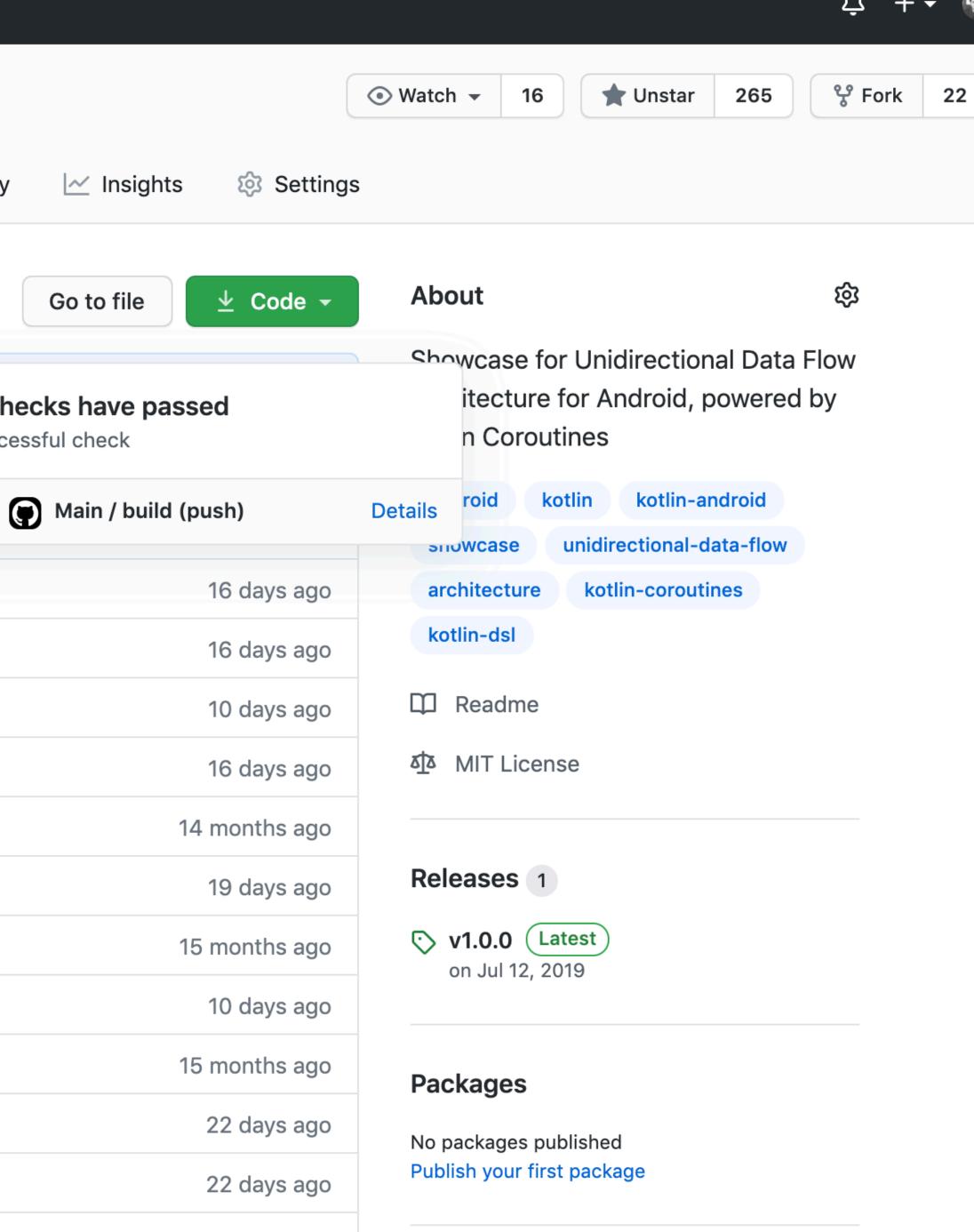
LICENSE.md

README.md

act.env

gradle/wrapper

app

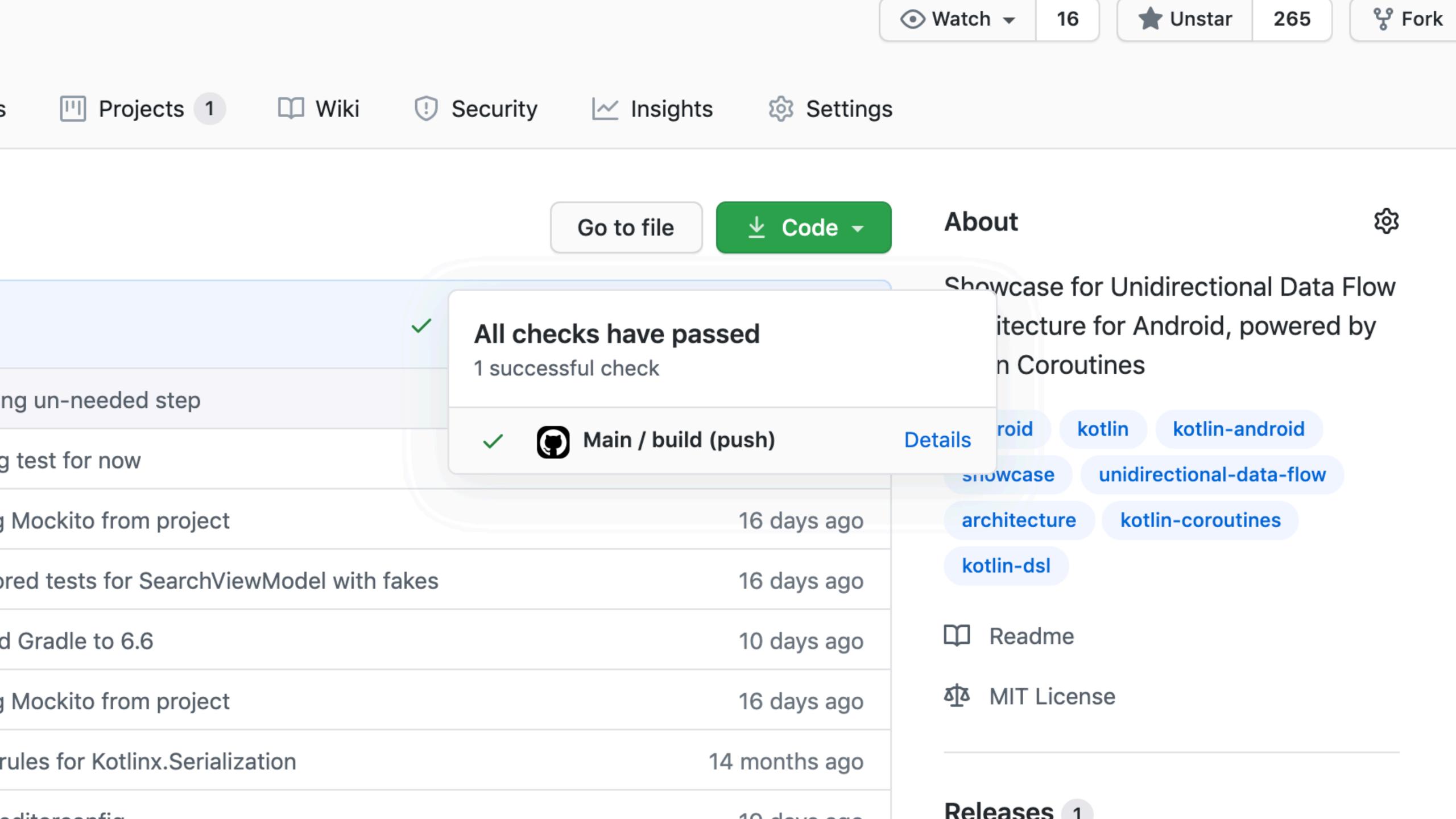


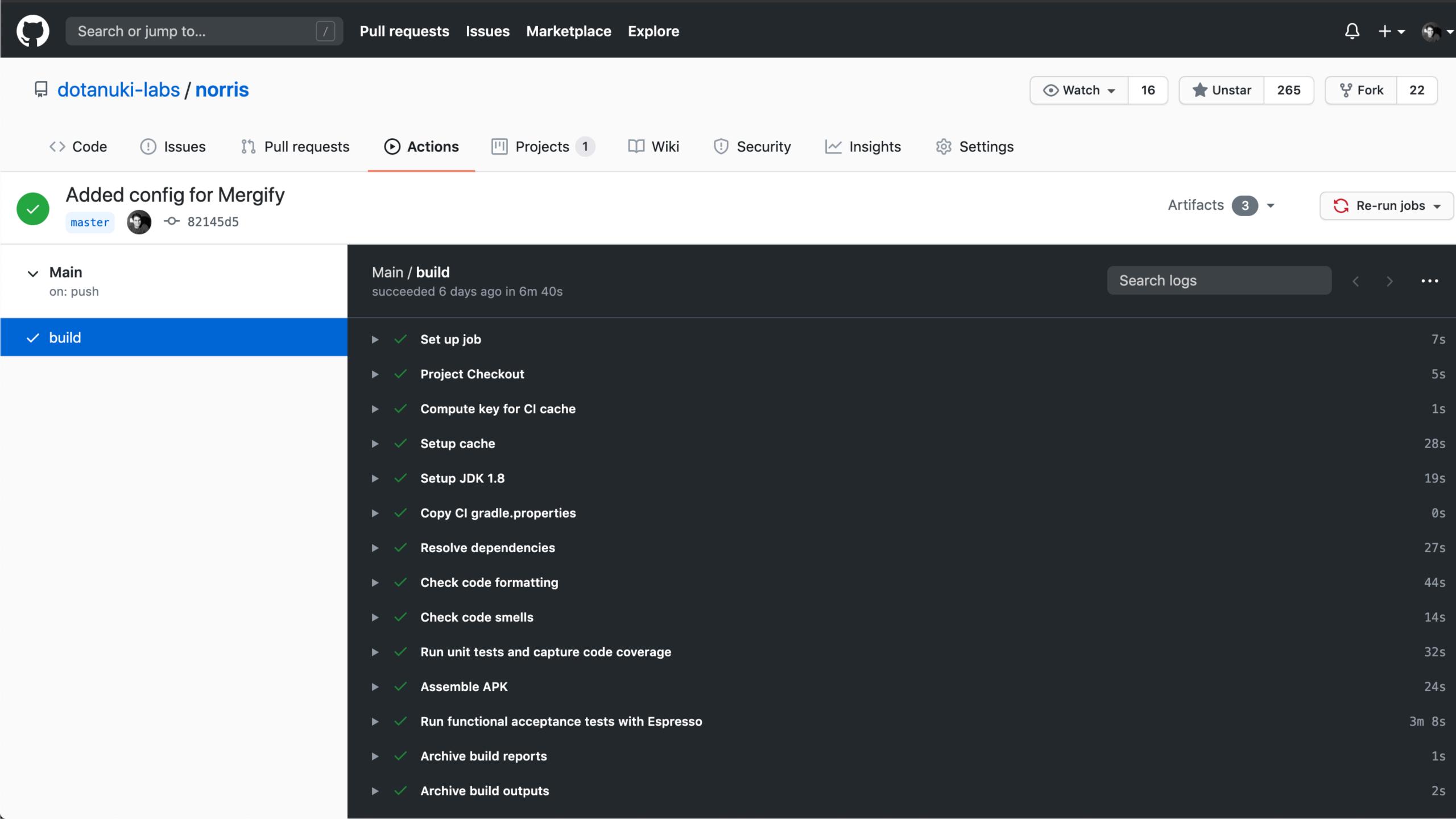
✓ Insights

Go to file

All checks have passed

1 successful check

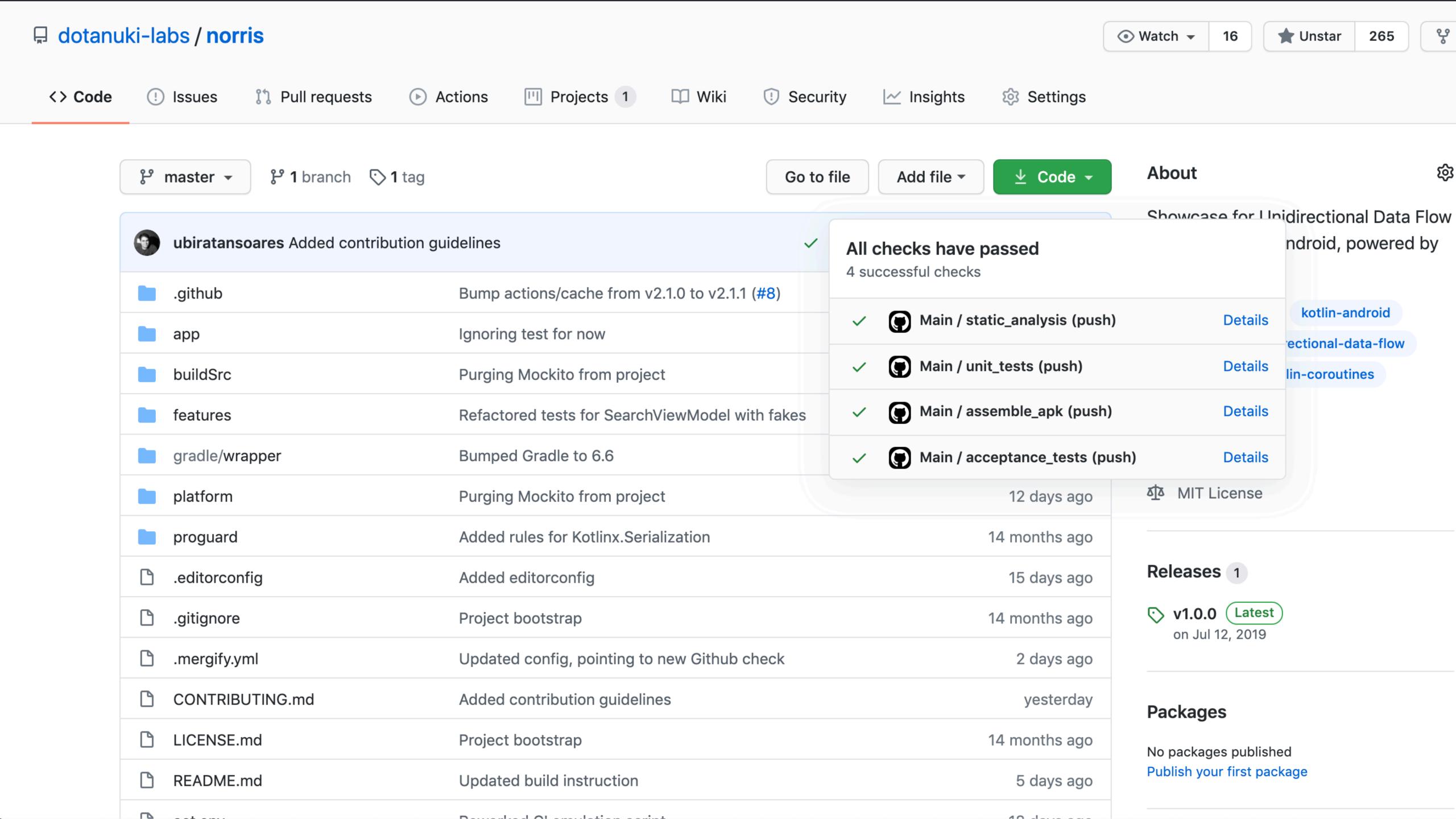


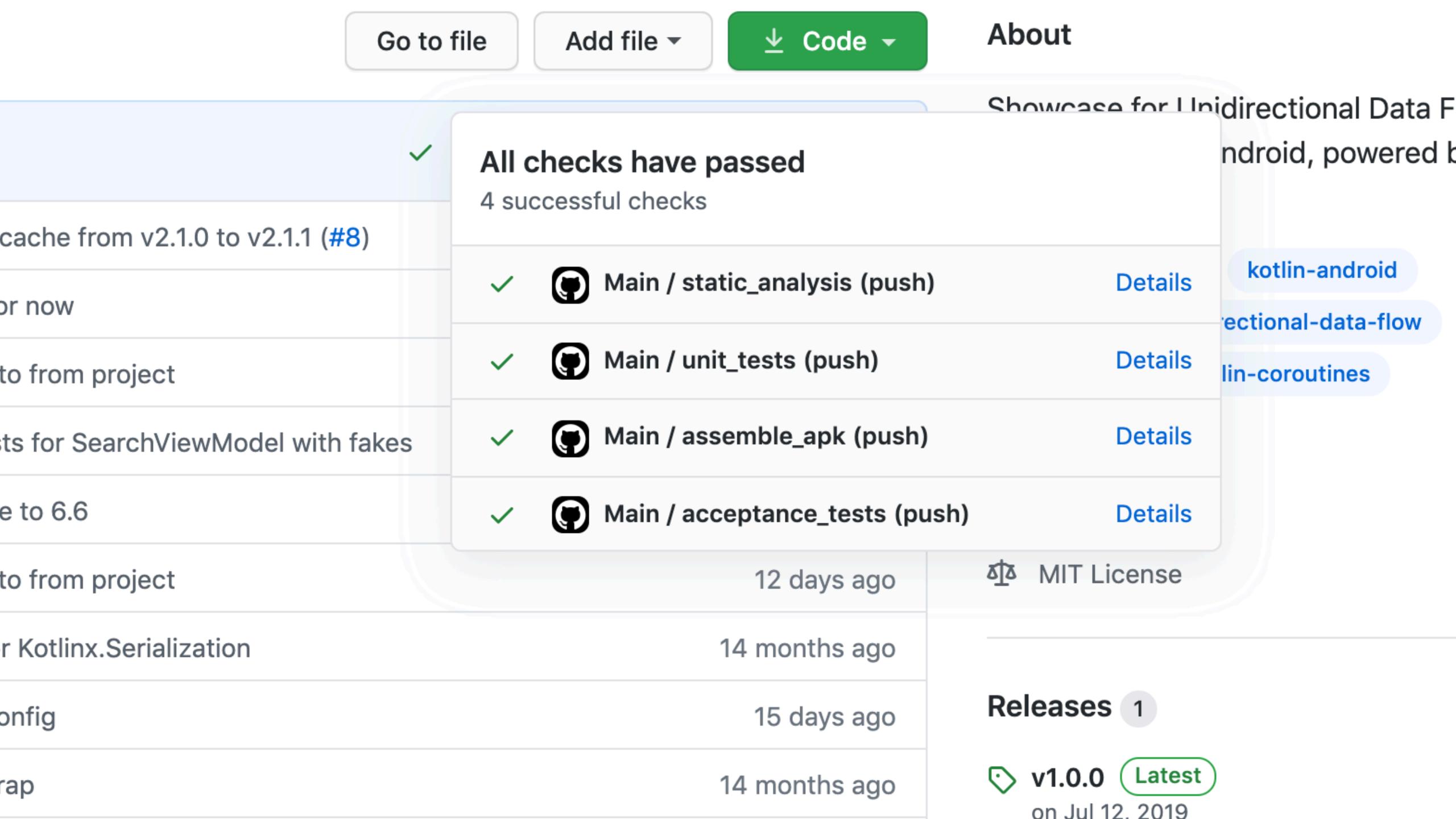


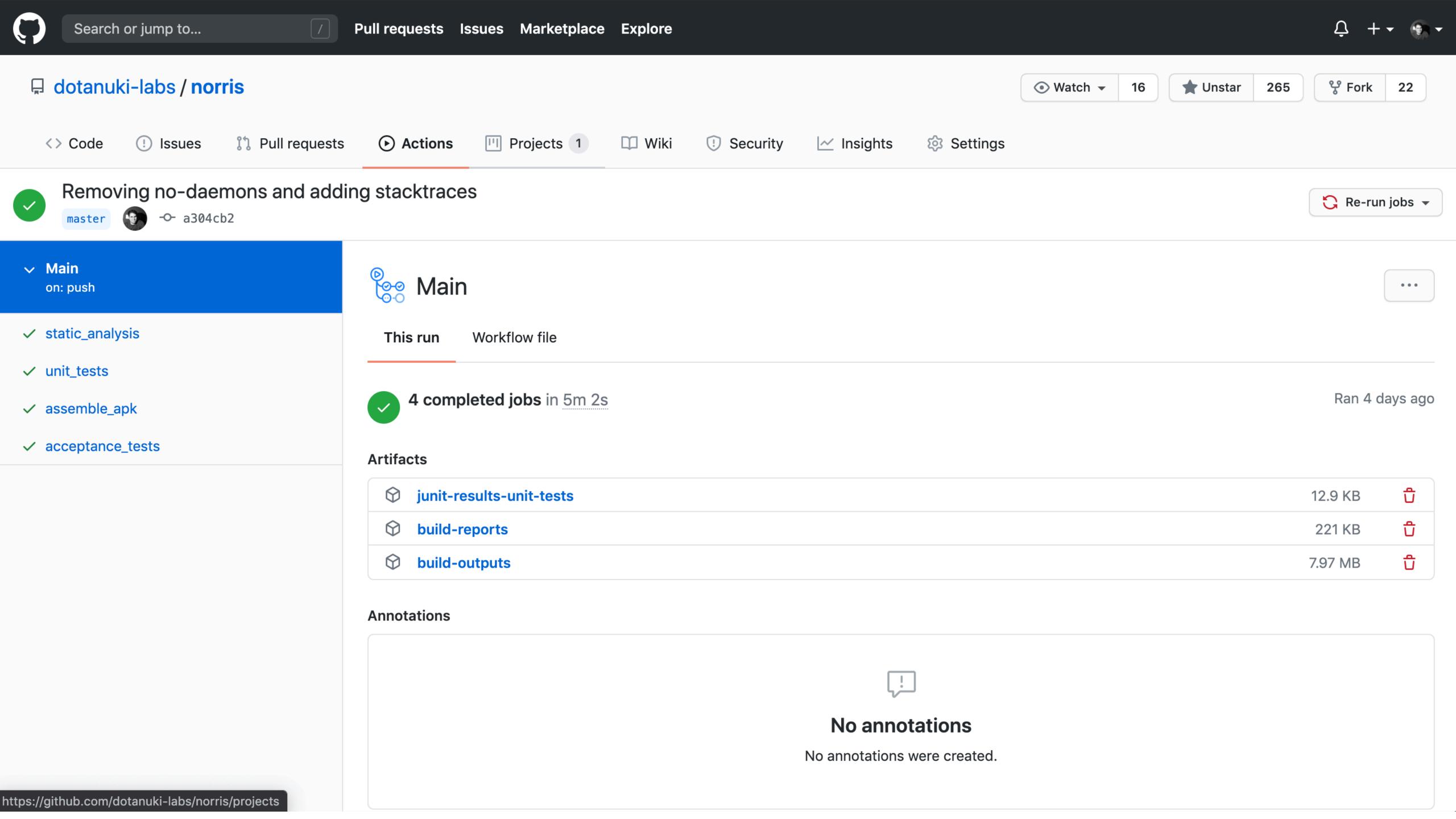
# Main / build

succeeded 6 days ago in 6m 40s

- Set up job
- Project Checkout
- Compute key for CI cache
- Setup cache
- Setup JDK 1.8
- Copy Cl gradle.properties
- Resolve dependencies









This run Workflow file

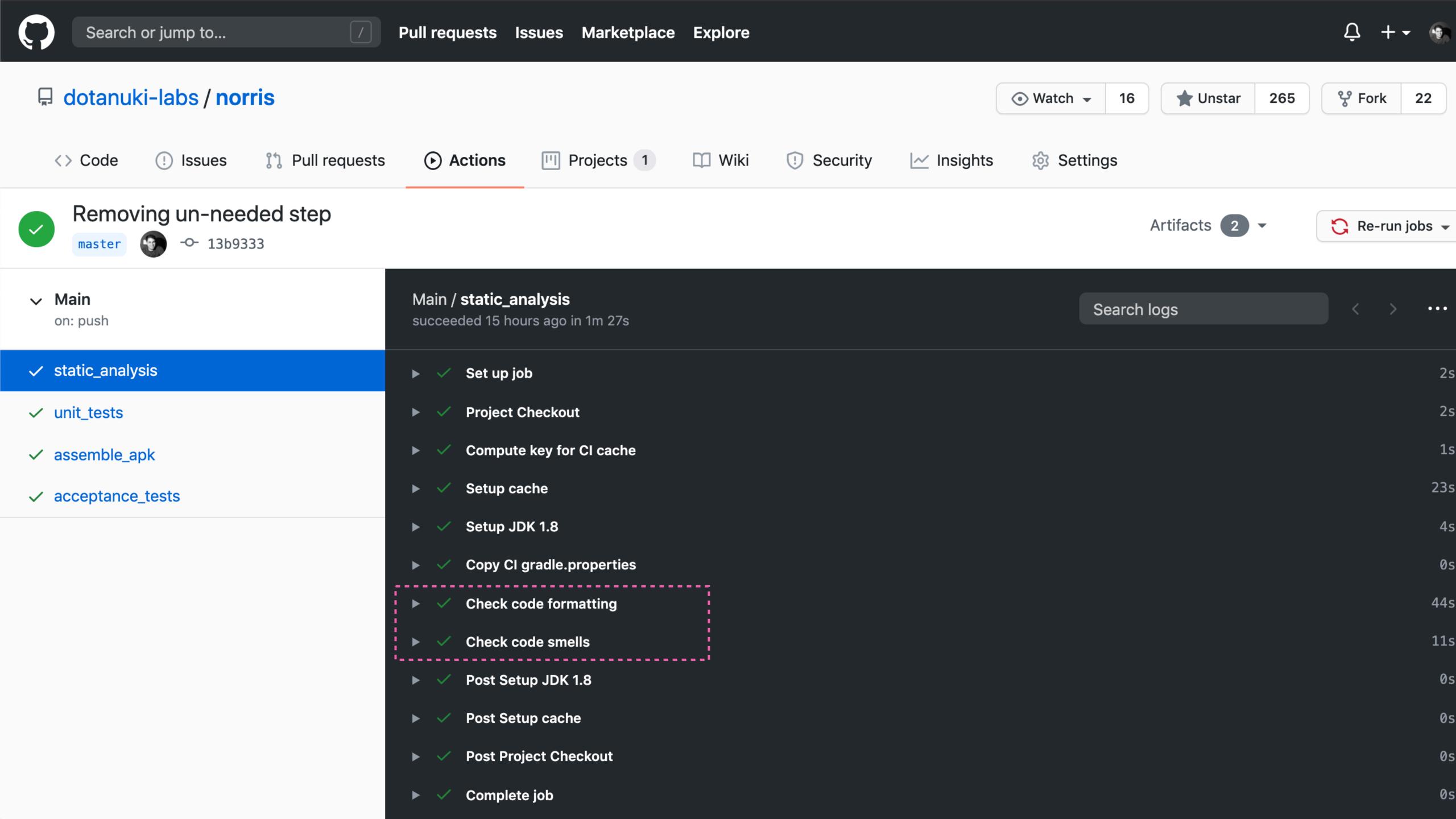


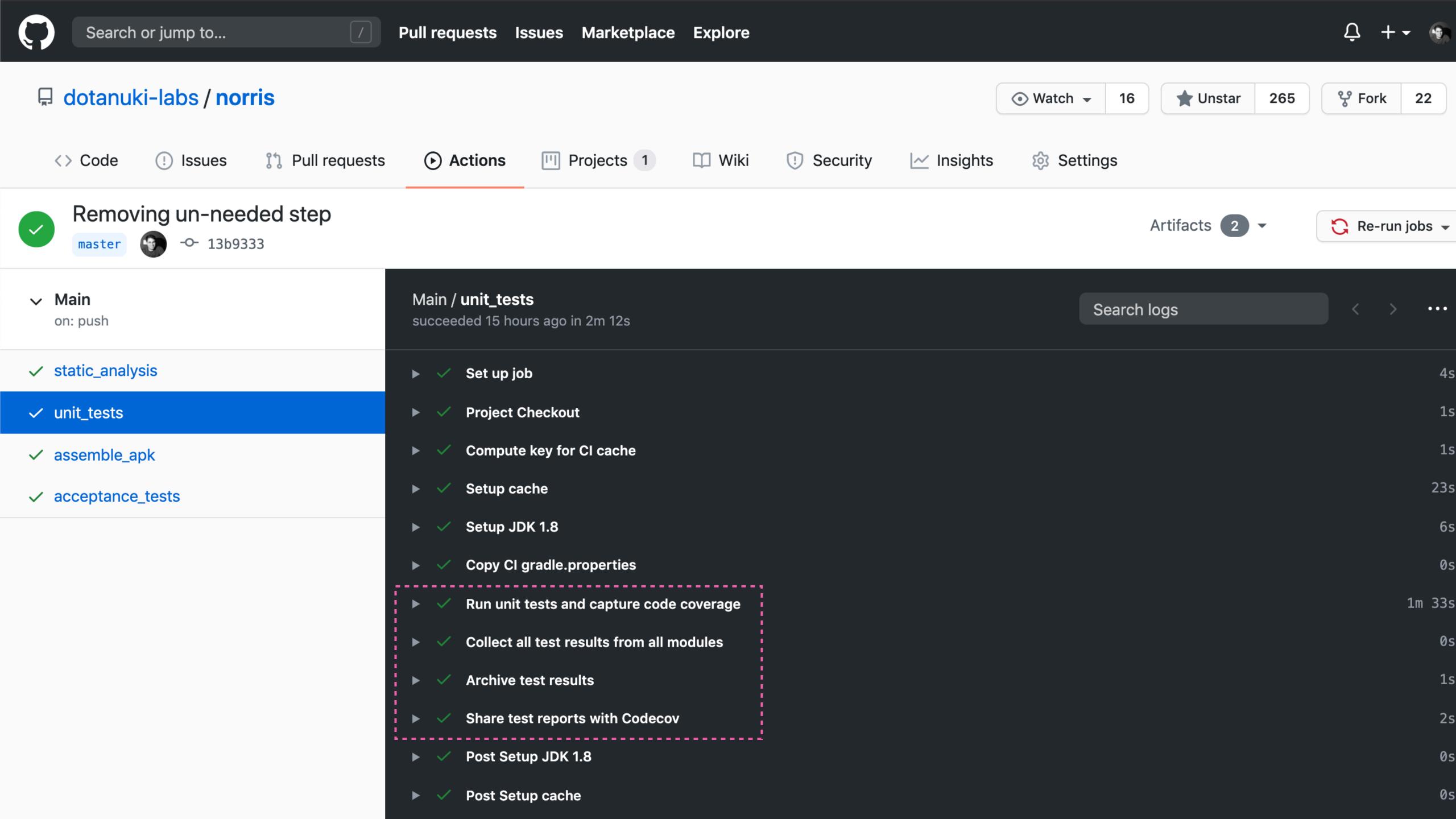
4 completed jobs in 5m 2s

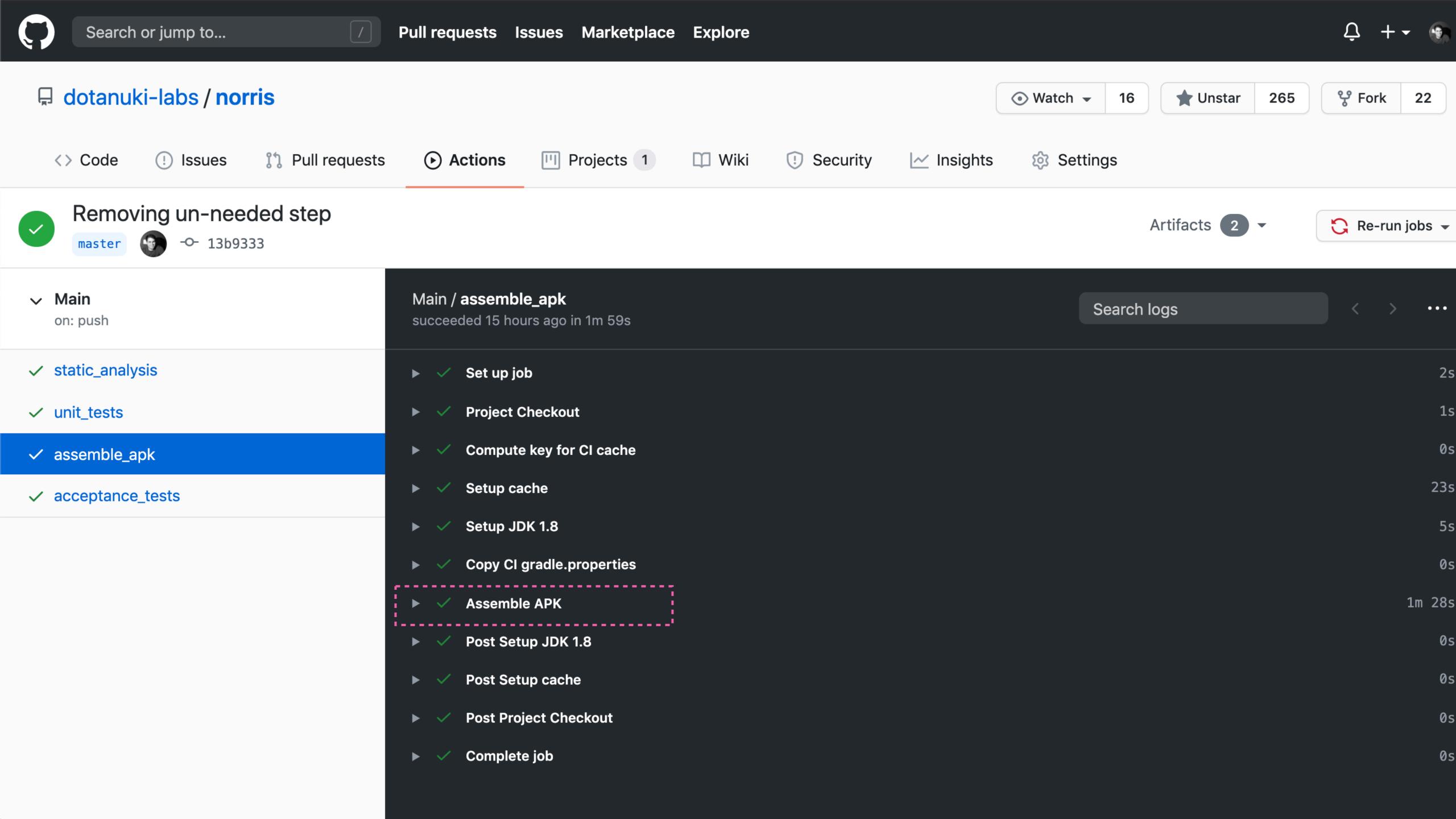
# **Artifacts**

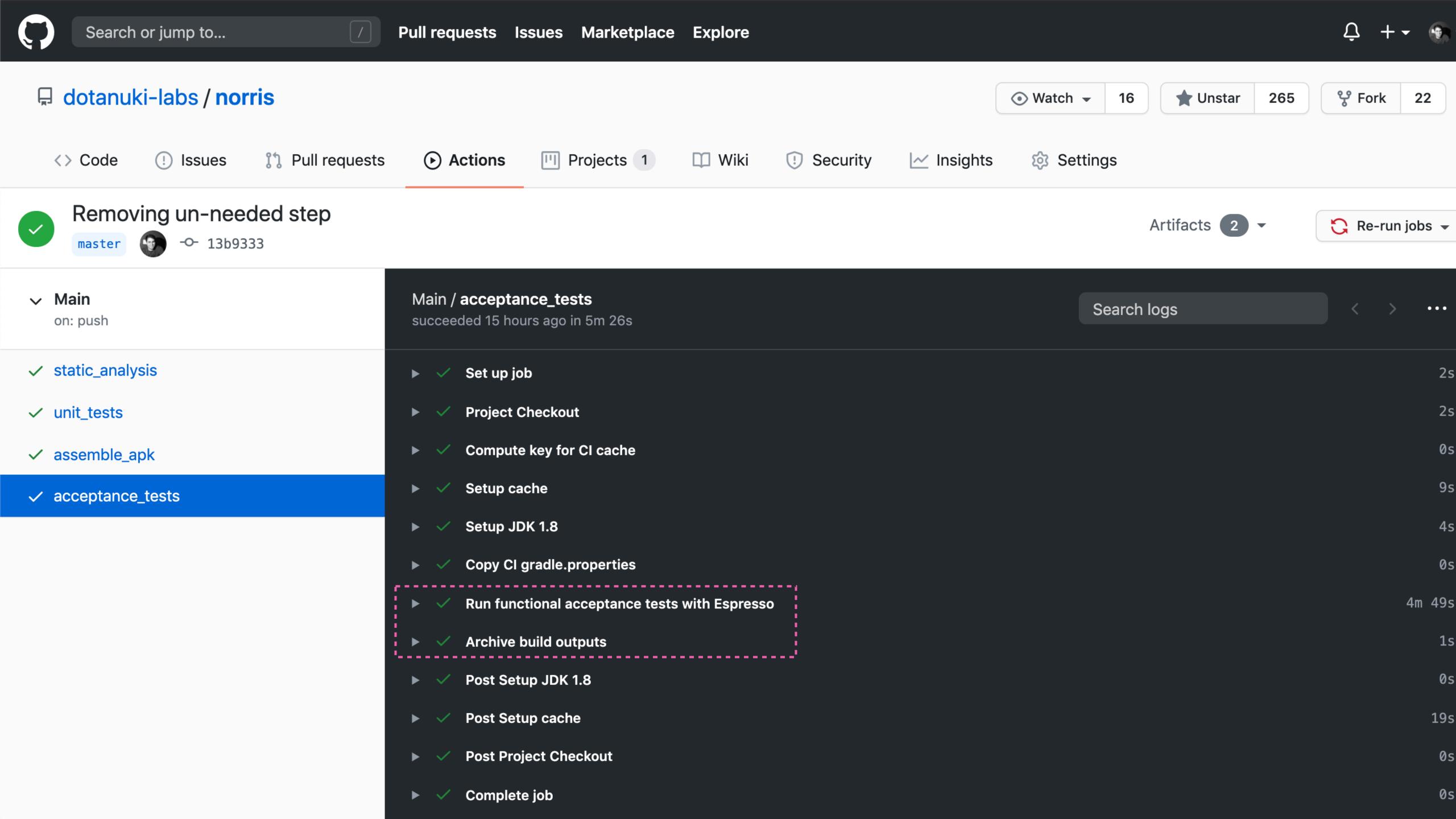
- junit-results-unit-tests
- **build-reports**
- **build-outputs**

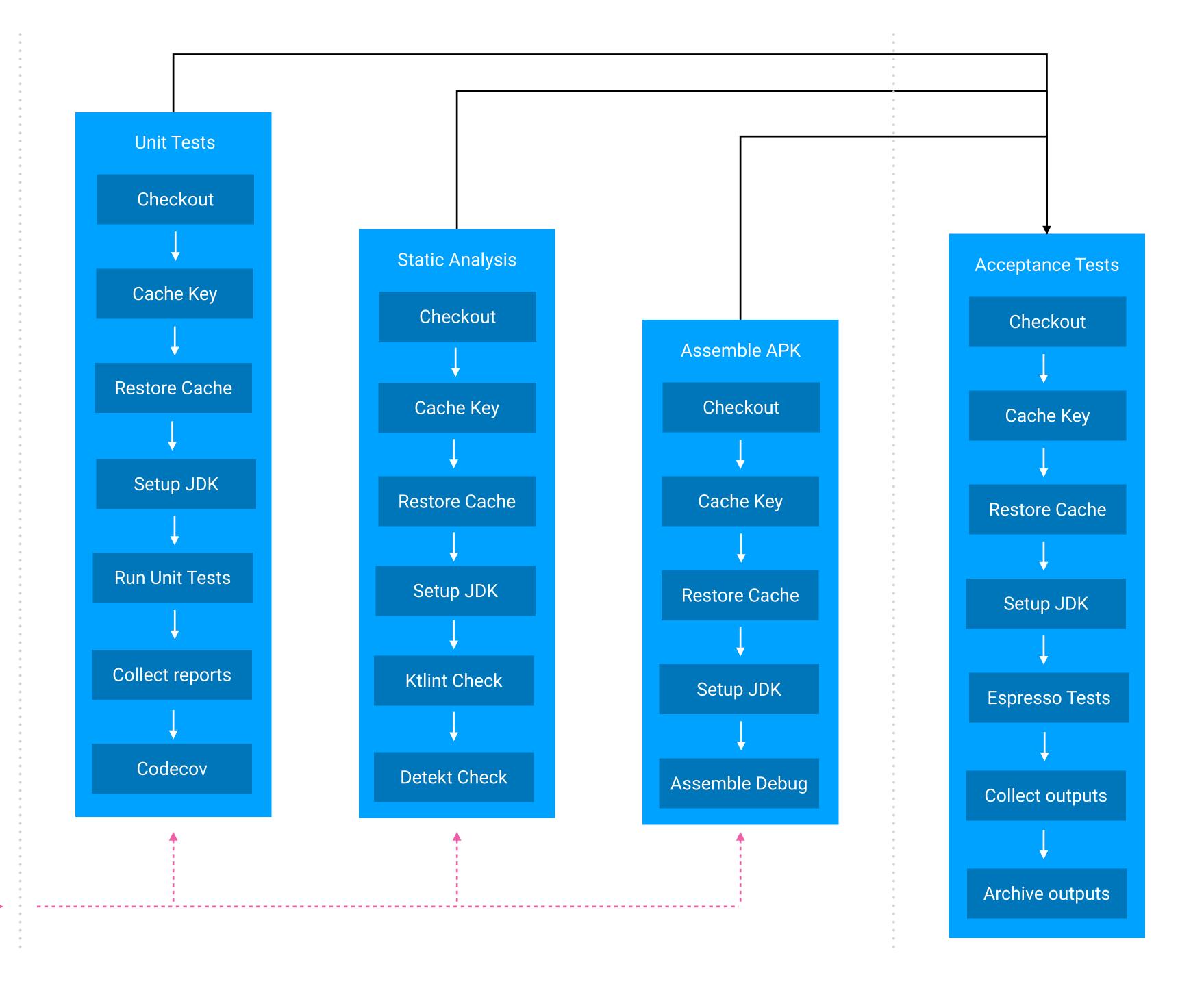
# **Annotations**





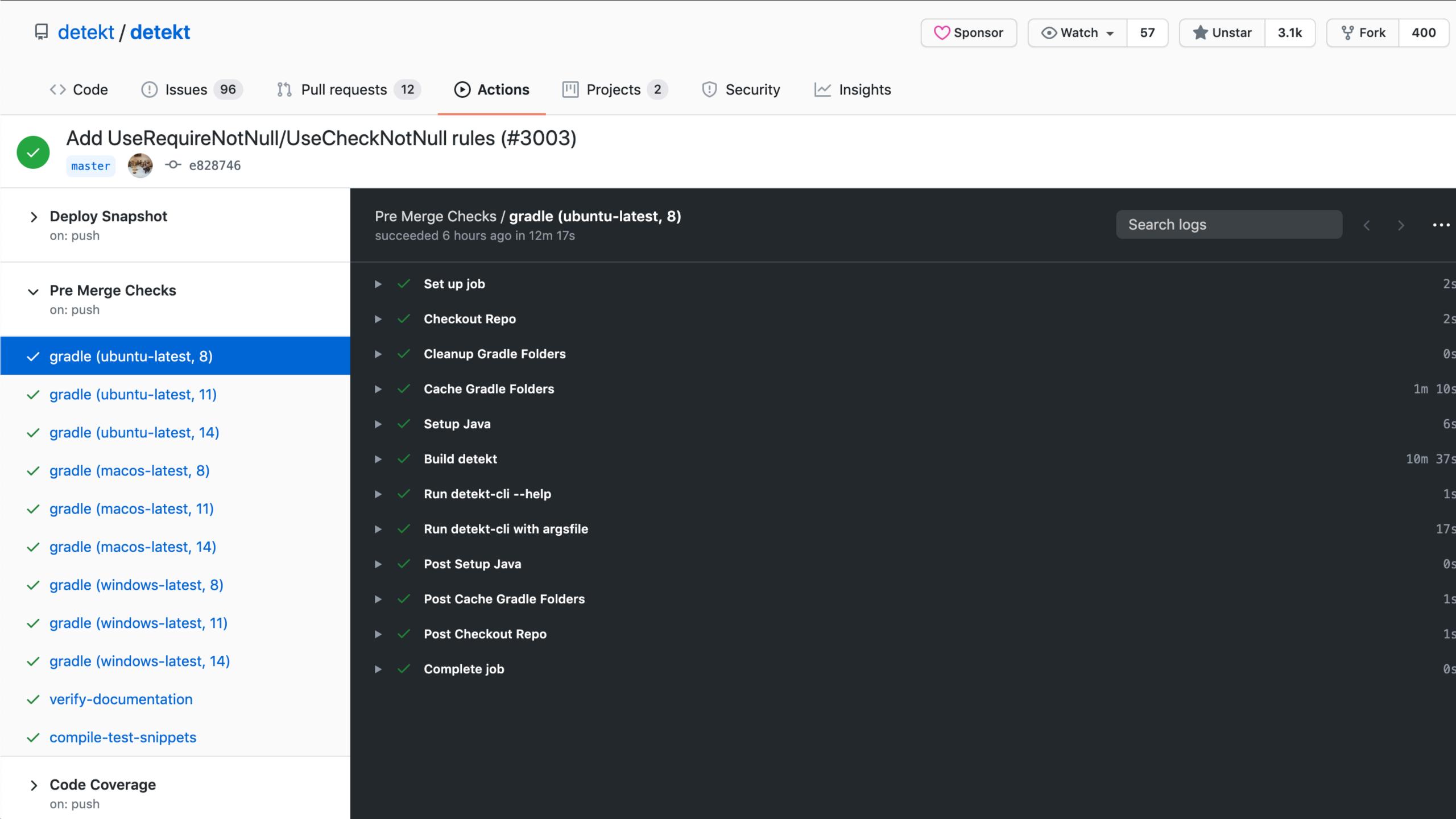






- 4 Jobs
- 25 StepsUp to 3 VMs

# BUILDING WITH MATRICES



- Pre Merge Checks on: push
- gradle (ubuntu-latest, 8)
- ✓ gradle (ubuntu-latest, 11)
- ✓ gradle (ubuntu-latest, 14)
- gradle (macos-latest, 8)
- gradle (macos-latest, 11)
- gradle (macos-latest, 14)
- ✓ gradle (windows-latest, 8)
- ✓ gradle (windows-latest, 11)
- ✓ gradle (windows-latest, 14)
- verify-documentation
- compile-test-snippets

- Set up job
- Checkout Repo
- Cleanup Gradle Folders
- Cache Gradle Folders
- Setup Java
- Build detekt
- Run detekt-cli --help
- Run detekt-cli with argsfile
- Post Setup Java
- Post Cache Gradle Folders
- Post Checkout Repo
- Complete job

```
name: Pre Merge Checks
on:
  push:
    branches:
      master
jobs:
  gradle:
    if: ${{ !contains(github.event.head_commit.message, 'ci skip') }}
    strategy:
      fail-fast: false
      matrix:
        os: [ubuntu-latest, macos-latest, windows-latest]
        jdk: [8, 11, 14]
    runs-on: ${{ matrix.os }}
    env:
      JDK_VERSION: ${{ matrix.jdk }}
      GRADLE_OPTS: -Dorg.gradle.daemon=false
```

```
name: Pre Merge Checks
on:
  push:
    branches:
      master
jobs:
  gradle:
    if: ${{ !contains(github.event.head_commit.message, 'ci skip') }}
    strategy:
      fail-fast: false
      matrix:
        os: [ubuntu-latest, macos-latest, windows-latest]
        jdk: [8, 11, 14]
    runs-on: ${{ matrix.os }}
    env:
      JDK_VERSION: ${{ matrix.jdk }}
      GRADLE_OPTS: -Dorg.gradle.daemon=false
```

```
steps:
- name: Checkout Repo
  uses: actions/checkout@v2
 # Let's cleanup the gradle cache folders to make sure
 # we don't accidentally cache stale files.
- name: Cleanup Gradle Folders
  shell: bash
  run:
    rm -rf ~/ gradle/caches/ && \
    rm -rf ~/ gradle/wrapper/
- name: Cache Gradle Folders
  uses: actions/cache@v2
 with:
    path:
     ~/ gradle/caches/
     ~/ gradle/wrapper/
    key: cache-gradle-${{ matrix.os }}-${{ matrix.jdk }}-${{ hashFiles('...') }}
    restore-keys:
      cache-gradle-${{ matrix.os }}-${{ matrix.jdk }}-
      cache-gradle-${{ matrix.os }}-
      cache-gradle-
```

```
steps:
name: Checkout Repo
  uses: actions/checkout@v2
 # Let's cleanup the gradle cache folders to make sure
 # we don't accidentally cache stale files.

    name: Cleanup Gradle Folders

  shell: bash
  run:
    rm -rf ~/.gradle/caches/ && \
    rm -rf ~/.gradle/wrapper/

    name: Cache Gradle Folders

  uses: actions/cache@v2
 with:
   path:
      ~/ gradle/caches/
      ~/ gradle/wrapper/
    key: cache-gradle-${{ matrix.os }}-${{ matrix.jdk }}-${{ hashFiles('...') }}
    restore-keys:
      cache-gradle-${{ matrix.os }}-${{ matrix.jdk }}-
      cache-gradle-${{ matrix.os }}-
      cache-gradle-
```

```
- name: Setup Java
  uses: actions/setup-java@v1
  with:
   java-version: ${{ matrix.jdk }}
- name: Build detekt
  run: ./gradlew build :detekt-cli:shadowJarExecutable --parallel
- name: Run detekt-cli --help
  run: java -jar ./detekt-cli/build/run/detekt --help
- name: Run detekt-cli with argsfile
  run: java -jar ./detekt-cli/build/run/detekt "@./config/detekt/argsfile"
```

```
- name: Setup Java
  uses: actions/setup-java@v1
  with:
    java-version: ${{ matrix.jdk }}
- name: Build detekt
  run: ./gradlew build :detekt-cli:shadowJarExecutable --parallel
- name: Run detekt-cli --help
```

run: java -jar ./detekt-cli/build/run/detekt "@./config/detekt/argsfile"

run: java -jar ./detekt-cli/build/run/detekt --help

name: Run detekt-cli with argsfile

# Matrix (A, B) Ao, Bo **A**1, **B**0 A2, B0 An, Bm Job Job Job Job Step Step Step Step • • • Step Step Step Step



← All products

**GitHub Actions** 

GETTING STARTED

Overview

**About GitHub Actions** 

Core concepts

Security hardening

Using community workflows and actions

**WORKFLOWS** 

LANGUAGE AND FRAMEWORK GUIDES

PUBLISHING PACKAGES

~

**CONTINUOUS INTEGRATION** 

MIGRATING TO GITHUB ACTIONS

CREATING ACTIONS ~

**HOSTING YOUR OWN RUNNERS** 

REFERENCE

complete. This limit does not apply to self-nosted runners.

- Workflow run time Each workflow run is limited to 72 hours. If a workflow run
  reaches this limit, the workflow run is cancelled. This limit also applies to selfhosted runners.
- Job queue time Each job for self-hosted runners can be queued for a maximum of 24 hours. If a self-hosted runner does not start executing the job within this limit, the job is terminated and fails to complete. This limit does not apply to GitHub-hosted runners.
- API requests You can execute up to 1000 API requests in an hour across all
  actions within a repository. If exceeded, additional API calls will fail, which might
  cause jobs to fail. This limit also applies to self-hosted runners.
- Concurrent jobs The number of concurrent jobs you can run in your account depends on your GitHub plan, as indicated in the following table. If exceeded, any additional jobs are queued. There are no concurrency limits for self-hosted runners.

GitHub plan	Total concurrent jobs	Maximum concurrent macOS jobs
Free	20	5
Pro	40	5
Team	60	5
Enterprise	180	50

• **Job matrix** - A job matrix can generate a maximum of 256 jobs per workflow run. This limit also applies to self-hosted runners.

### In this article

**About GitHub Actions** 

Discovering actions in the GitHub community

Disabling or limiting GitHub Actions for your repository or organization

Notifications for workflow runs

Usage limits

Usage policy

About billing for GitHub Actions

Contacting support

Further reading

Did this doc help you?





# epts ardening unity workflows and ID FRAMEWORK ACKAGES GITHUB ACTIONS **INTEGRATION CIONS** R OWN RUNNERS

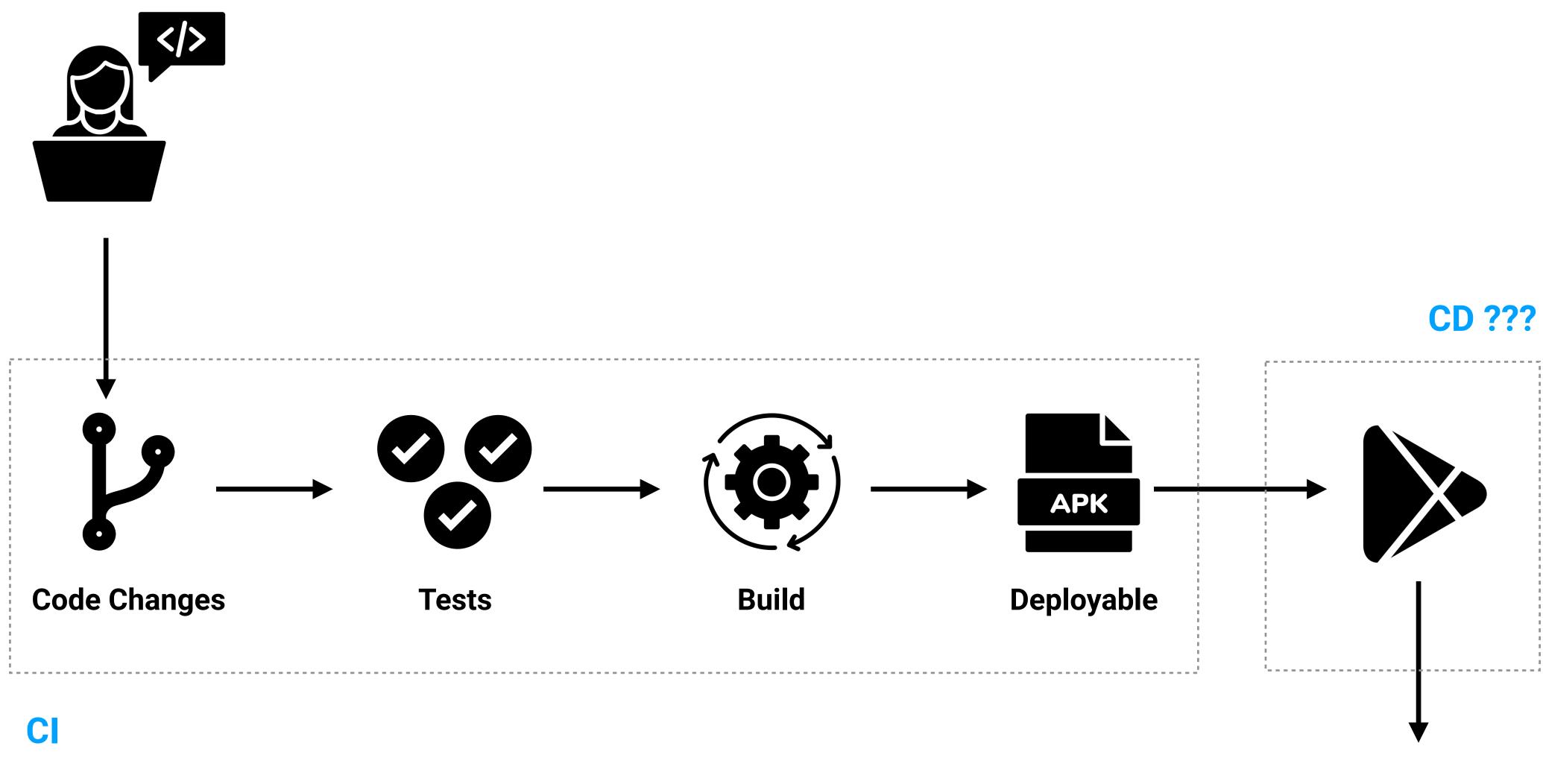
actions within a repository. If exceeded, additional API calls will fail, which might cause jobs to fail. This limit also applies to self-hosted runners.

 Concurrent jobs - The number of concurrent jobs you can run in your account depends on your GitHub plan, as indicated in the following table. If exceeded, any additional jobs are queued. There are no concurrency limits for self-hosted runners.

GitHub plan	Total concurrent jobs	Maximum concurrent macOS jobs
Free	20	5
Pro	40	5
Team	60	5
Enterprise	180	50

• **Job matrix** - A job matrix can generate a maximum of 256 jobs per workflow run. This limit also applies to self-hosted runners.

# CHALENGES OF ANDROID





Decision Matrix	Merged PR	Push	Cherry pick	Tag	Nightly
Static Analysis					
Unit tests					
Espresso tests					
Smoke Tests					
Security Analysis					
Build					
Artifacts generation					
Artifact distribution					

<b>Decision Matrix</b>	Merged PR	Push	Cherry pick	Tag	Nightly
Static Analysis					
Unit tests					
Espresso tests					
Smoke Tests					
Security Analysis					
Build					
Artifacts generation					
Artifact distribution					

Watch ▼

5

**†** Unstar

195

**앟** Fork

25

<> Code

! Issues 10

Pull requests 1

Actions

Wiki Projects

! Security

✓ Insights



ሦ main ▾

Go to file

Add file ▼

a59d5e6 10 days ago



96 commits

2 months ago

6 months ago

11 days ago

11 days ago

11 days ago

10 months ago

10 months ago

2 months ago

View on Marketplace

ychescale9 Add cashapp/copper to adapter list

Support running multiple actions sequentially in a single job. .github/workflows

\_\_tests\_\_ Add support for API 15-19 system images. lib SDK Build tools 30.0.2.

SDK Build tools 30.0.2. src

test-fixture SDK Build tools 30.0.2.

Add emulator-launcher. .eslintrc.json

.gitignore Initial commit.

CHANGELOG.md Prepare for release 2.11.0.

10 months ago LICENSE Initial commit.

README.md Add cashapp/copper to adapter list 10 days ago RELEASING.md Rename master branch to main. 2 months ago

## **About**

A GitHub Action for installing, configuring and running hardwareaccelerated Android Emulators on macOS virtual machines.

github-actions

android-emulators testing ci

Readme

▲ Apache-2.0 License

## Releases 21

**v2.11.0** (Latest) on Jun 20

+ 20 releases

# **Packages**

No packages published





5



195



25

☐ Wiki

Security

✓ Insights

View on Marketplace

Go to file

quentially in a single job.

Add file ▼



a59d5e6 10 days ago 🕒 96 commits

2 months ago

**About** 

A GitHub Action for installing, configuring and running hardwareaccelerated Android Emulators on macOS virtual machines.

android-emulators

github-actions

testing

ci



YOUR ENTERPRISE ACCOUNT

ORGANIZATIONS AND TEAMS

**BILLING AND PAYMENTS** 

Managing your GitHub billing settings

Managing billing for your GitHub account

Managing billing for GitHub Marketplace apps

Managing billing for GitHub
Actions

About billing for GitHub Actions

Viewing your GitHub Actions usage

Managing your spending limit for GitHub Actions

Managing billing for Git Large File Storage

Managing billing for GitHub Sponsors

Managing billing for GitHub Packages

Product	Storage	Minutes (per month)

Jobs that run on Windows and macOS runners that GitHub hosts consume minutes at 2 and 10 times the rate that jobs on Linux runners consume. For example, using 1,000 Windows minutes would consume 2,000 of the minutes included in your account. Using 1,000 macOS minutes, would consume 10,000 minutes included in your account.

Operating system	Minute multiplier
Linux	1
macOS	10
Windows	2

The storage used by a repository is the total storage used by GitHub Actions artifacts and GitHub Packages. Your storage cost is the total usage for all repositories owned by your account. For more information about pricing for GitHub Packages, see "About billing for GitHub Packages."

If your account's usage surpasses these limits and you have set a spending limit above \$0, you will pay \$0.25 USD per GB of storage per month and per-minute usage depending on the operating system used by the GitHub-hosted runner. GitHub rounds the minutes each job uses up to the nearest minute.

Note: Minute multipliers do not apply to the per-minute rates shown below.

YOUR ENTERPRISE ACCOUNT ~

**BILLING AND PAYMENTS** 

Managing your GitHub billing settings

ORGANIZATIONS AND TEAMS

Managing billing for your GitHub account

Managing billing for GitHub Marketplace apps

Managing billing for GitHub Actions

About billing for GitHub Actions

Viewing your GitHub Actions usage

Managing your spending limit for GitHub Actions

Managing billing for Git Large File Storage

Managing billing for GitHub Sponsors

Managing billing for GitHub Packages

Product Storage Minutes (per month)

The storage used by a repository is the total storage used by GitHub Actions artifacts and GitHub Packages. Your storage cost is the total usage for all repositories owned by your account. For more information about pricing for GitHub Packages, see "About billing for GitHub Packages."

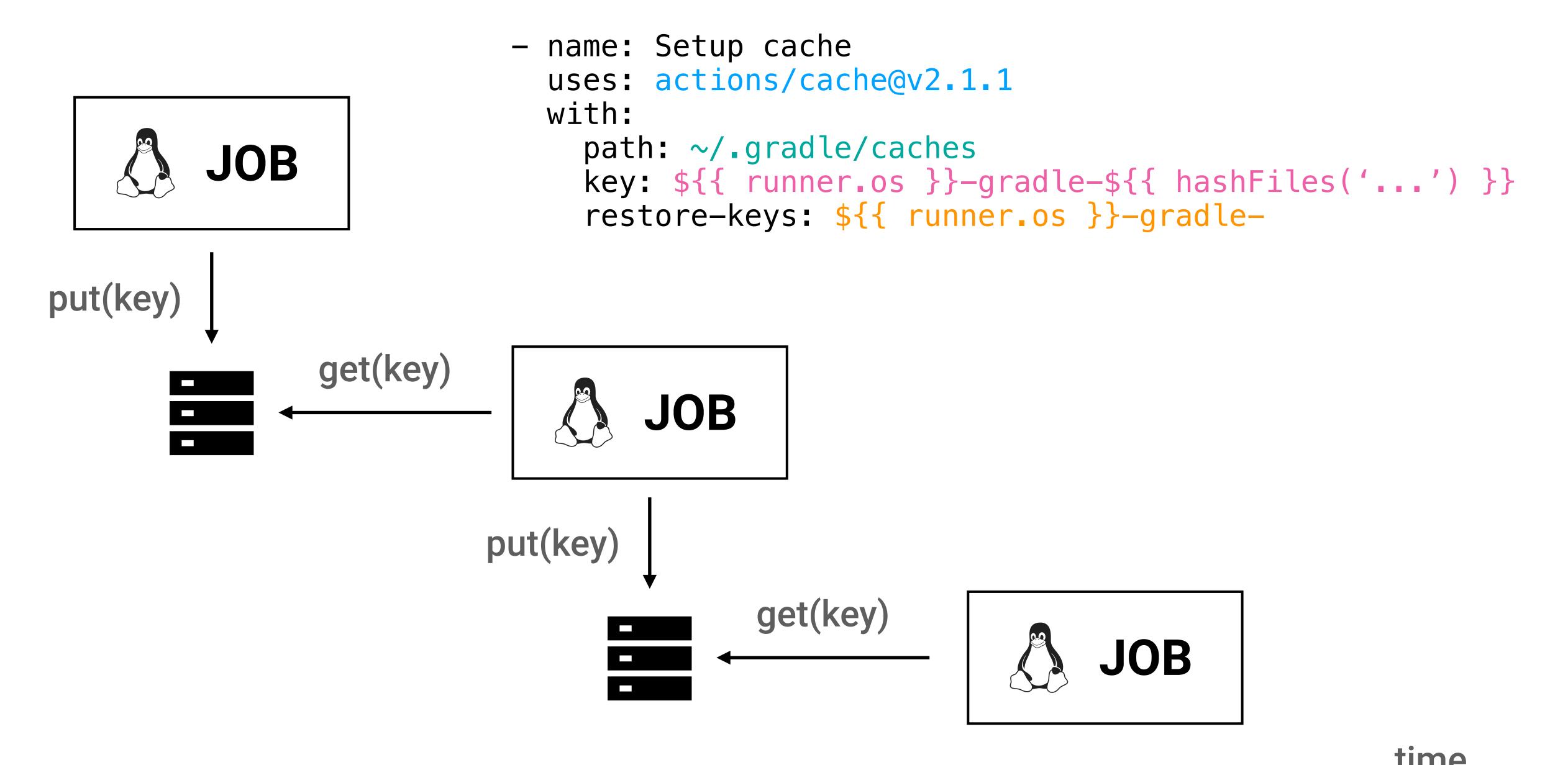
If your account's usage surpasses these limits and you have set a spending limit above \$0, you will pay \$0.25 USD per GB of storage per month and per-minute usage depending on the operating system used by the GitHub-hosted runner. GitHub rounds the minutes each job uses up to the nearest minute.

Note: Minute multipliers do not apply to the per-minute rates shown below.

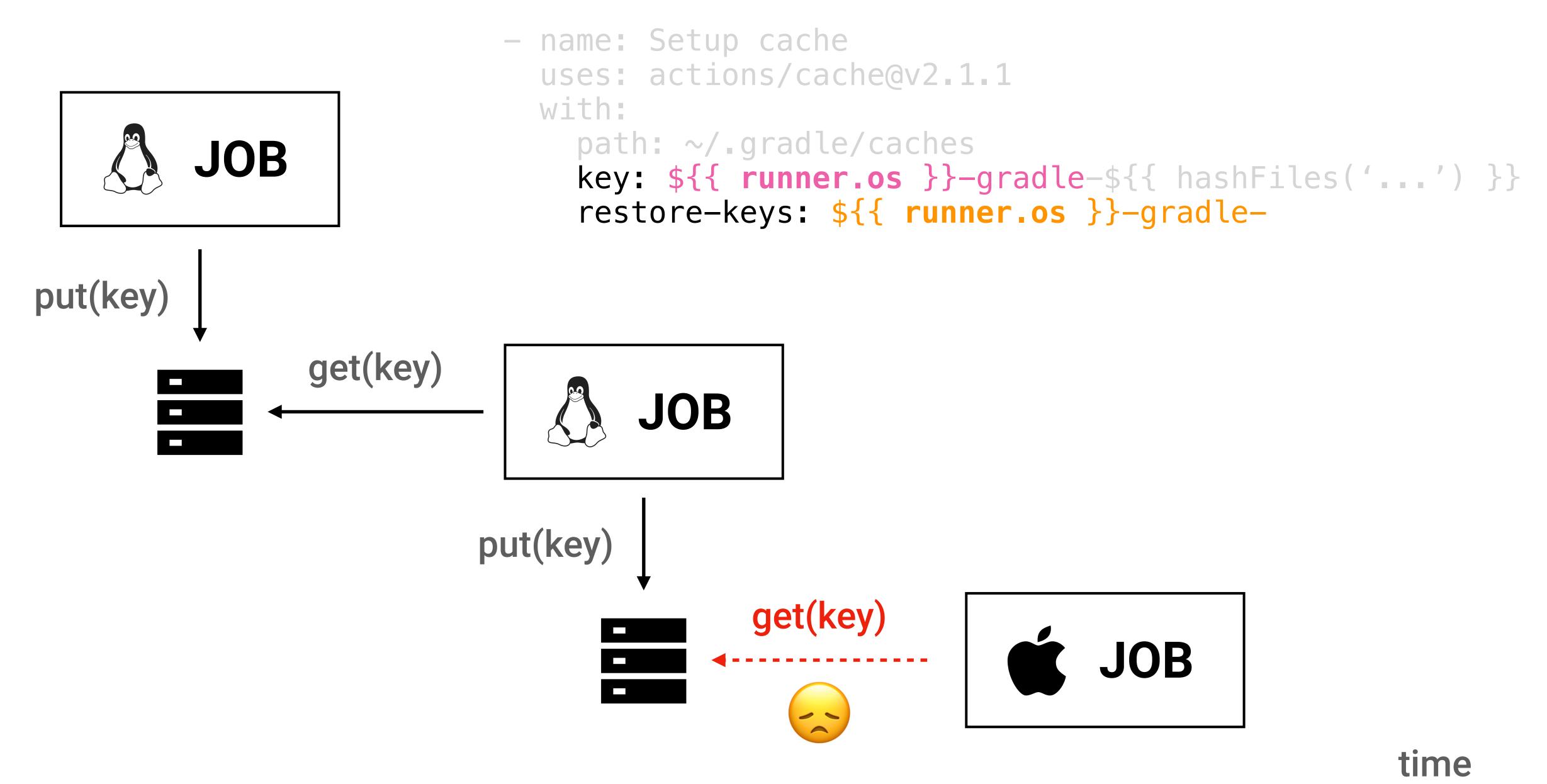
Operating system	Per-minute rate	
Linux	\$0.008	
macOS	\$0.08	
Windows	\$0.016	

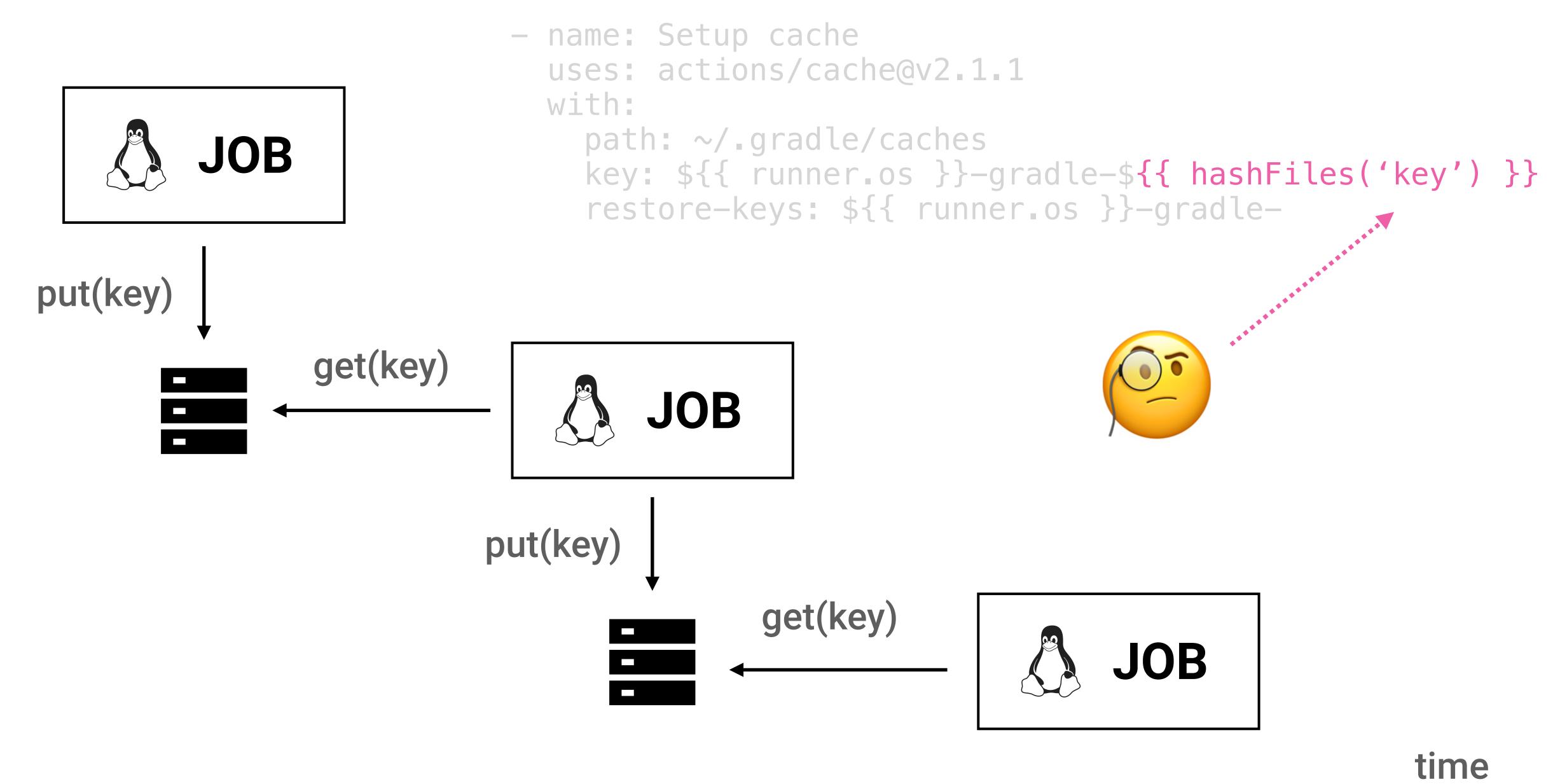
The number of jobs you can run concurrently across all repositories in your user or organization account depends on your GitHub plan. For more information, see "About GitHub Actions."

# Calculating minute and storage spending



\_\_\_\_\_





```
wireguard-android git:(master) x tree -L 4
 COPYING
 README.md
 app
     app.iml
     build
     build.gradle
     nonnull.gradle
     proguard-rules.pro
      src
     tools
 build.gradle
 gradle
     wrapper
         gradle-wrapper.jar
         gradle-wrapper.properties
 gradle.properties
 gradlew
- settings.gradle
```

```
wireguard-android git:(master) x tree -L 4
 COPYING
 README.md
 app
     app.iml
     build
     build.gradle
     nonnull.gradle
     proguard-rules.pro
     src
     tools
 build.gradle -
                                           HASH
                                                               key
 gradle
     wrapper
       — gradle-wrapper.jar
       gradle-wrapper.properties
 gradle.properties
 gradlew
- settings.gradle
```

```
→ plaid git:(master) x tree -L 4
   about
    app
    └── build.gradle
   build
   build.gradle
   core
   designernews
    dribbble
   gradle
    gradle
     — wrapper
        — gradle-wrapper.jar
        ___ gradle-wrapper.properties
   gradle.properties
    gradlew
    repositories gradle
   screenshots
   search
    settings.gradle
    shared_dependencies.gradle
   test_dependencies.gradle
    test_shared
    third_party
```

```
→ plaid git:(master) x tree -L 4
   about
   app
   build.gradle ————
   build
  - build.gradle
  - core
  - designernews
   dribbble
   gradle
   gradle
    — wrapper
       — gradle-wrapper.jar
                                              HASH
      gradle-wrapper.properties
                                                                  key
   gradle.properties
   gradlew
   repositories gradle
  - screenshots
   search
   settings.gradle
 test_dependencies.gradle ————
  - test_shared
  - third_party
```

```
→ norris git:(master) tree -L 4
    app
   build.gradle.kts
   buildSrc
        build.gradle.kts
        src
        └─ main
            └─ kotlin
                    BuildPlugins.kt
                   - Libraries.kt
                   - configs
                   dependencies
                   - plugins
                    versioning.kt
    features
   gradle
       wrapper
            gradle-wrapper.jar
           gradle-wrapper.properties
  - gradle.properties
  gradlew
   platform
  - settings.gradle.kts
```

```
→ norris git:(master) tree -L 4
   app
   build.gradle.kts
   buildSrc
       build.gradle.kts
       src
        └─ main
            └─ kotlin
                   BuildPlugins.kt
                  Libraries.kt
                  configs
                  - dependencies
                  - plugins
                                                          HASH
                versioning.kt
                                                                                 key
    features
   gradle
    └─ wrapper
         — gradle-wrapper.jar
        gradle-wrapper.properties -
  - gradle.properties
  - gradlew
   platform
  - settings.gradle.kts
```

```
#!/bin/bash
RESULT_FILE=$1
if [ -f $RESULT_FILE ]; then
  rm $RESULT_FILE
fi
touch $RESULT_FILE
checksum_file() {
  echo $(openssl md5 $1 | awk '{print $2}')
```

```
FILES=()
while read -r -d ''; do
 FILES+=("$REPLY")
done < <(find . -type f \( -name "build.gradle*" -o -name "dependencies.kt" \</pre>
 -o -name "gradle-wrapper.properties" \) -print0)
# Loop through files and append MD5 to result file
for FILE in ${FILES[@]}; do
 echo $(checksum_file $FILE) >> $RESULT_FILE
done
# Now sort the file so that it is
sort $RESULT_FILE -o $RESULT_FILE
```

```
FILES=()
while read -r -d ''; do
 FILES+=("$REPLY")
done < <(find . -type f \( -name "build.gradle*" -o -name "dependencies.kt" \</pre>
 -o -name "gradle-wrapper.properties" \) -print0)
# Loop through files and append MD5 to result file
for FILE in ${FILES[@]}; do
 echo $(checksum_file $FILE) >> $RESULT_FILE
done
# Now sort the file so that it is
```

sort \$RESULT\_FILE -o \$RESULT\_FILE





Issues 10

<> Code

matar 👚 Unstar

**♀** Fork

19

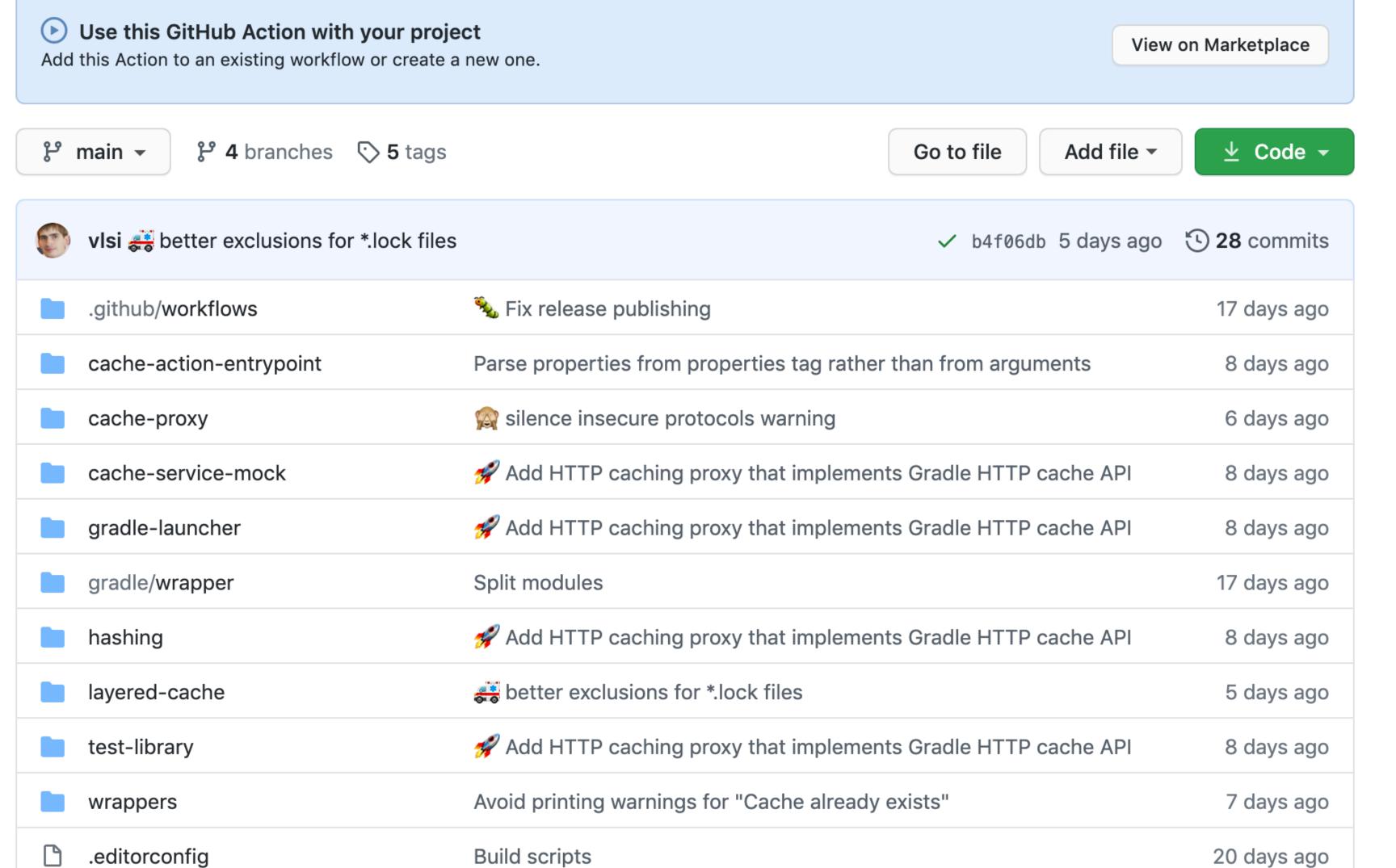
Pull requests 1

Actions Projects

III Wiki

Security

Insights



### About

Watch ▼

GitHub Action to properly cache ~/.gradle folder

- ☐ Readme
- ♠ Apache-2.0 License

#### Releases 5

- Initial version (Latest)
  19 days ago
- + 4 releases

### **Packages**

No packages published

#### Languages

• Kotlin 99.4%

JavaScript 0.6%

### THE ENDIS NEAR

### Final Remarks

- Open-source model for reusable Actions is quite powerful
- Mixed execution model (Cloud + Self-hosted Runners) is handy!
- Lacking some features, but with a great release peace
- Very promissig solution with a great Developer Experience

# UBIRATAN SOARES

Brazilian Computer Scientist
Senior Software Engineer @ N26

GDE for Android and Kotlin

@ubiratanfsoares
ubiratansoares.dev





https://speakerdeck.com/ubiratansoares

## THANKS