



WEEK5 - Feedbacks

Mathias COUSTÉ
05.03.2020

All teams compete !

2 → 2

teams had runtime errors... (*GenericClientError*)

1 → 1 NPE

2 → 1 Index Out Of Bounds

3 → 0 Invalid JSON

No timeout

:)

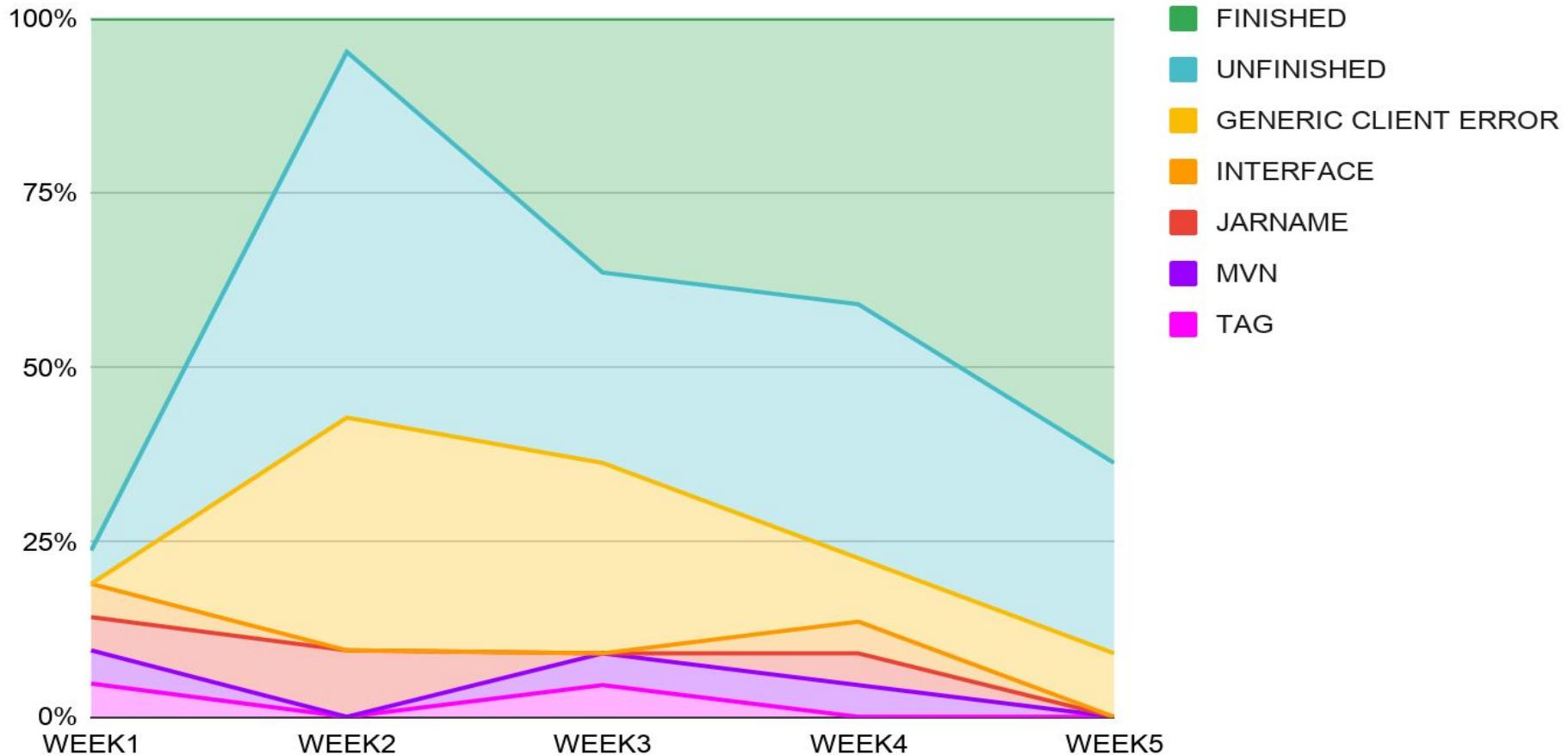
14

(out of 22)

team finished the race

\o/

WEEK1, WEEK2, WEEK3, WEEK4 et WEEK5



SPECIAL Super Stream Rider PRICE



Le Hollandais Volant



SPECIAL Cartographer PRICE



The Fellowship Survivors



SPECIAL Walk the plank PRICE



Tipiak





team_jar



hollandais_volant

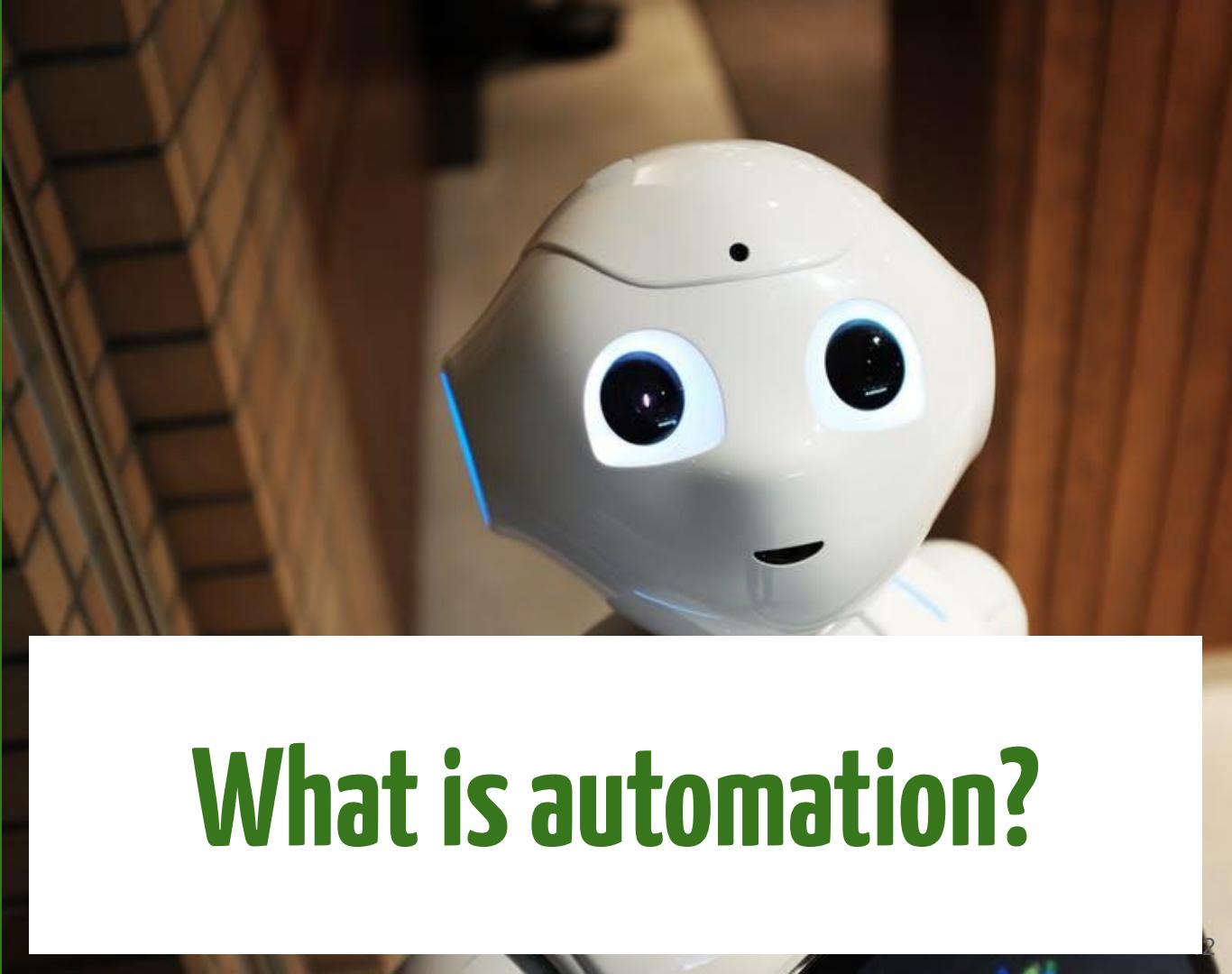
Championship leaders



Introduction to automation

Philippe COLLET, Mathias COUSTÉ
05.03.2020

1



What is automation?

A little history

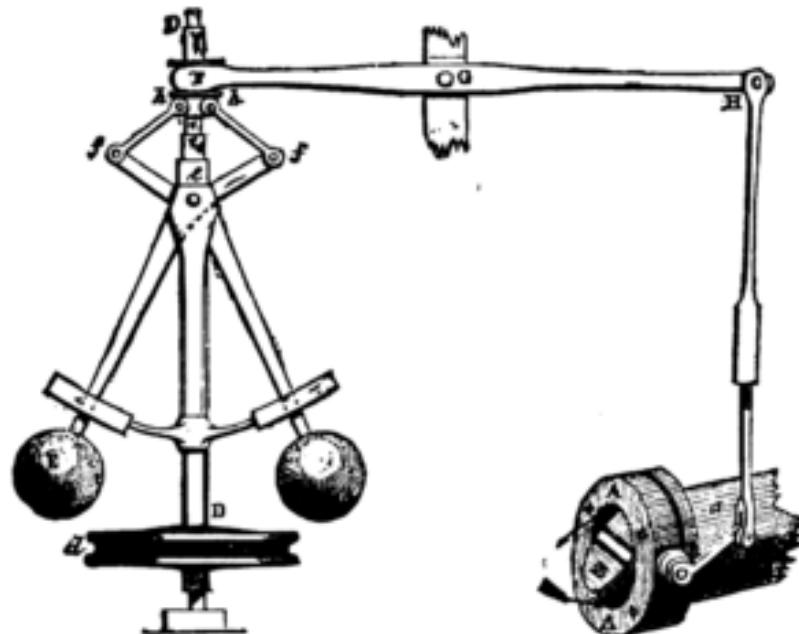


FIG. 4.—Governor and Throttle-Valve.

James Watt - 1788

What can we automate?

How to know if something should be automated ?

- Is it done by a human?
- Is it expensive?
- Is it recurrent?



What about computer sciences?



- If something is hard to do, do it often.
- Our job is to automate things for others but we sometimes forget to do it for ourselves.
- With good automation a developer will spend more time delivering value.

2



Automation you already know

Coding = Automating

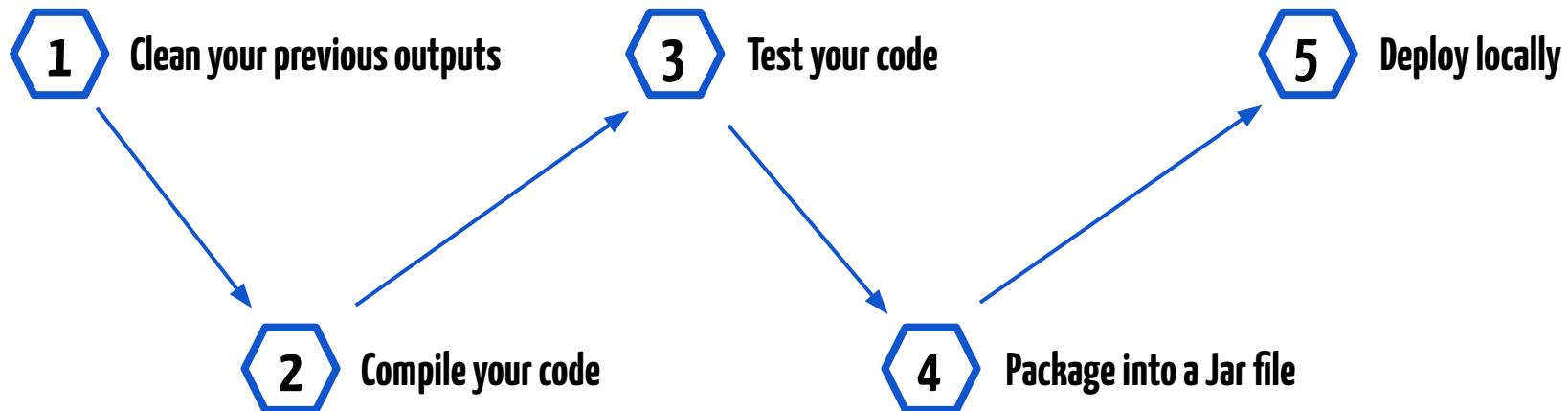
```
private static void setupFolder(AppConfig config, TeamPool pool) {
    // Create pool folder
    File poolFolder = FileUtils.getFile(config.getWorkspaceFolder(), POOL_FOLDER_NAME_PREFIX + pool.getId());
    if (!poolFolder.exists()) {
        poolFolder.mkdir();
    }

    pool.setPoolFolder(poolFolder);

    // Create teams config file
    File teamsConfig = FileUtils.getFile(poolFolder, POOL_TEAMCONFIG_FILENAME);
    try {
        Files.writeString(Paths.get(teamsConfig.toURI()), pool.toConfigFile(), StandardOpenOption.CREATE,
                         StandardOpenOption.APPEND);
    } catch (IOException e) {
        e.printStackTrace();
    }
    pool.setTeamsConfigFile(teamsConfig);
}
```

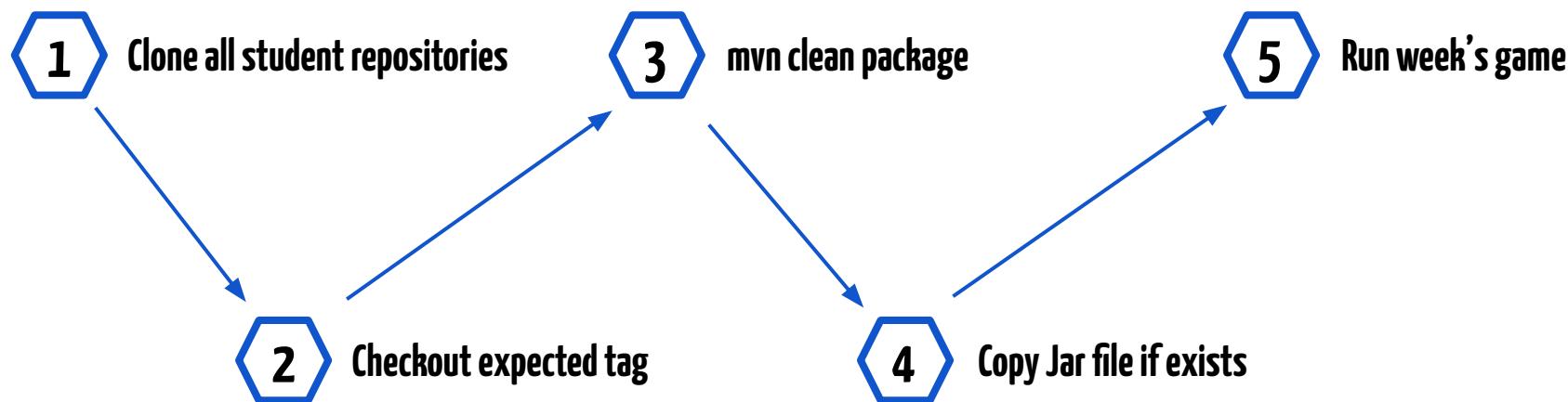
Maven

```
user ~ $ > mvn clean install
```



QGL weekly retrieve script

```
user ~ $ > ./retrieve.sh WEEK2
```



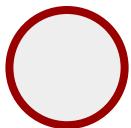
3



From code to prod !

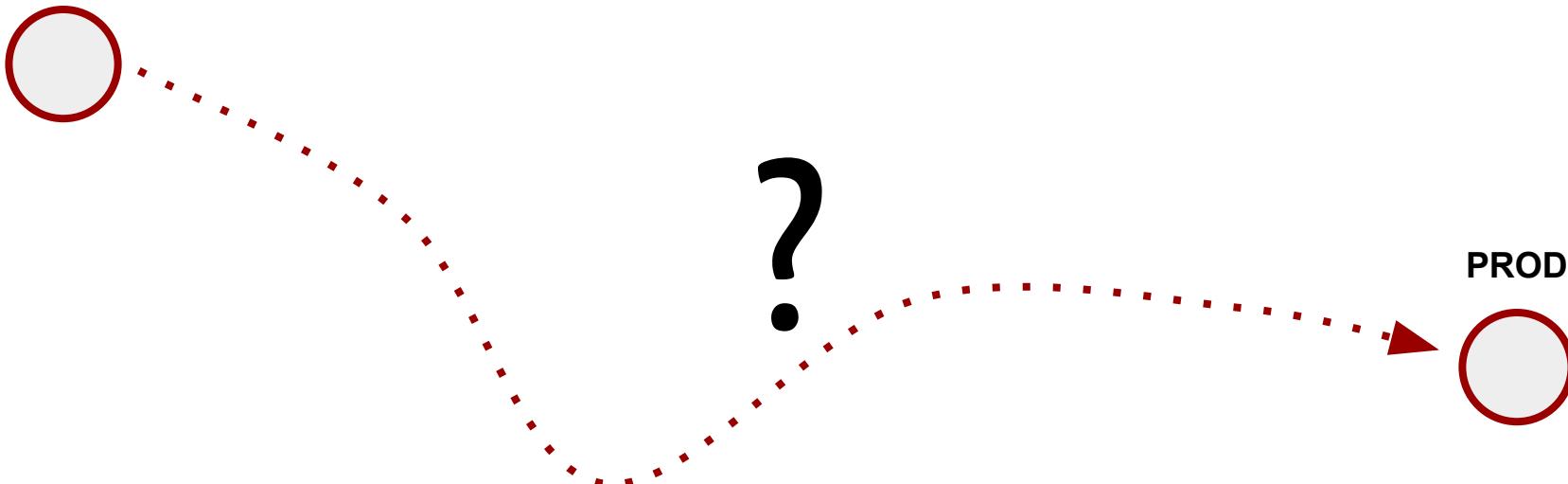
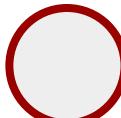
Build automation

CODE



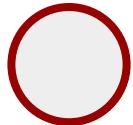
?

PROD



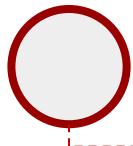
Build automation

CODE

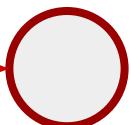


Build automation

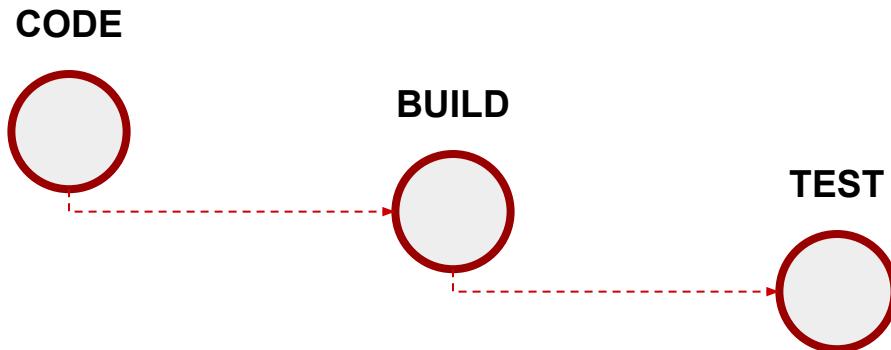
CODE



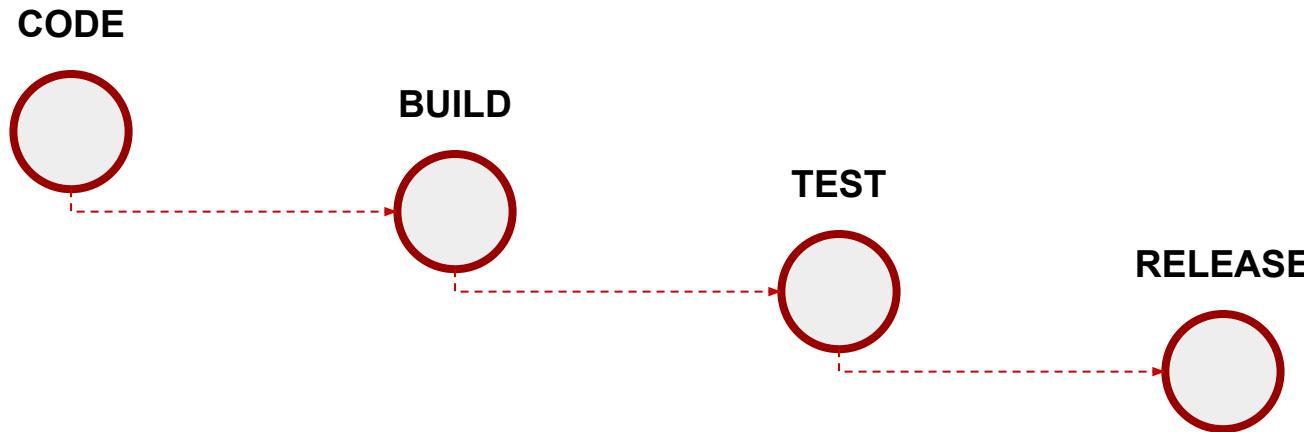
BUILD



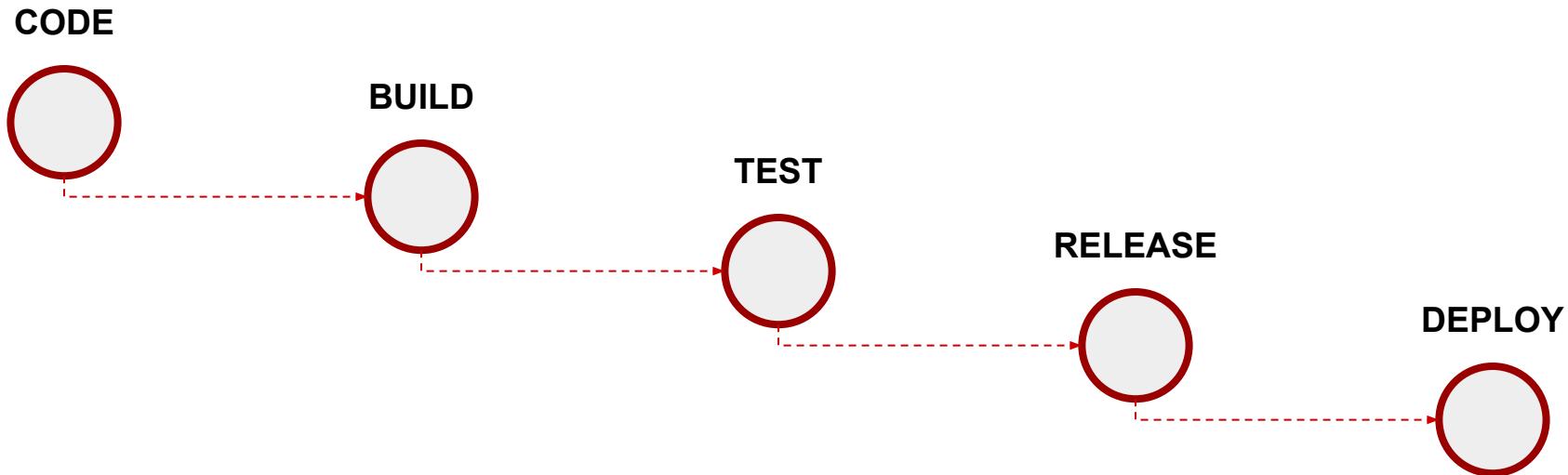
Build automation



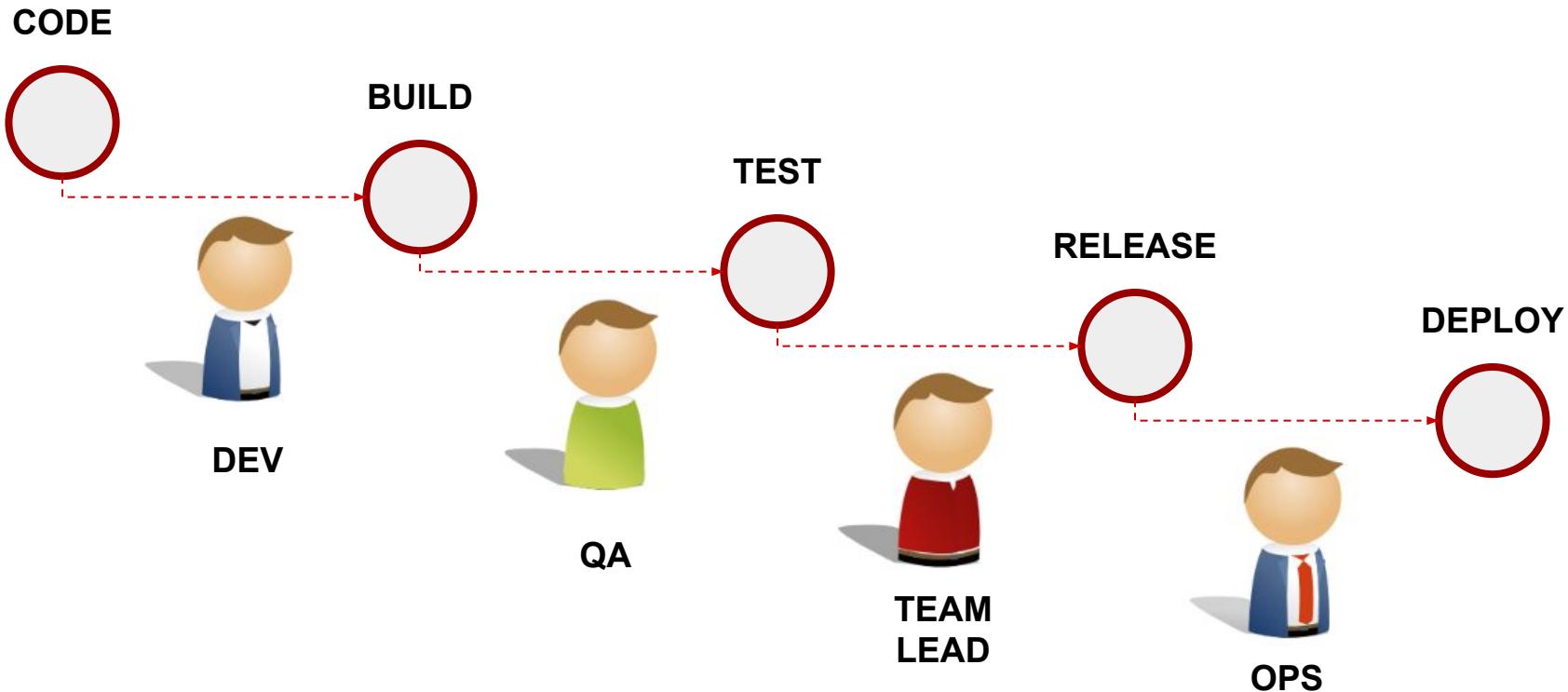
Build automation



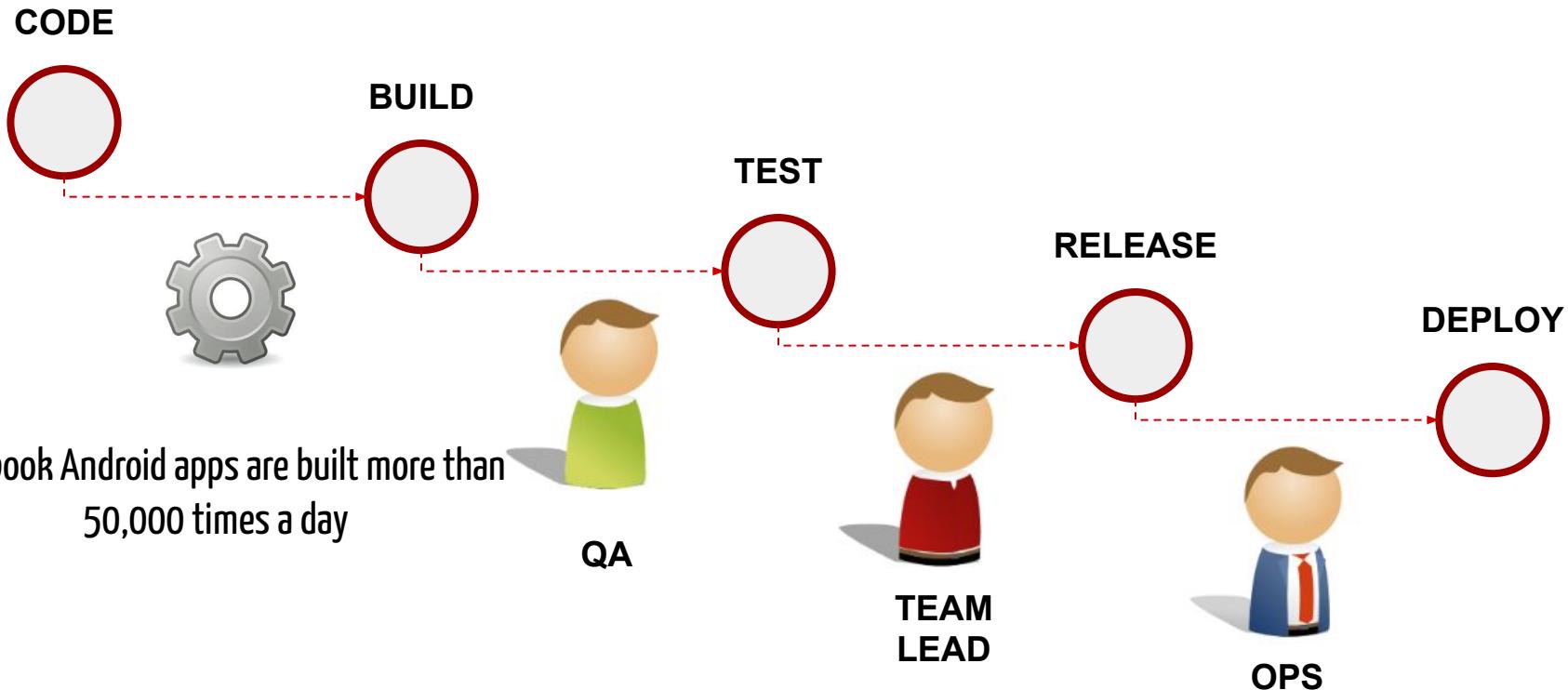
Build automation



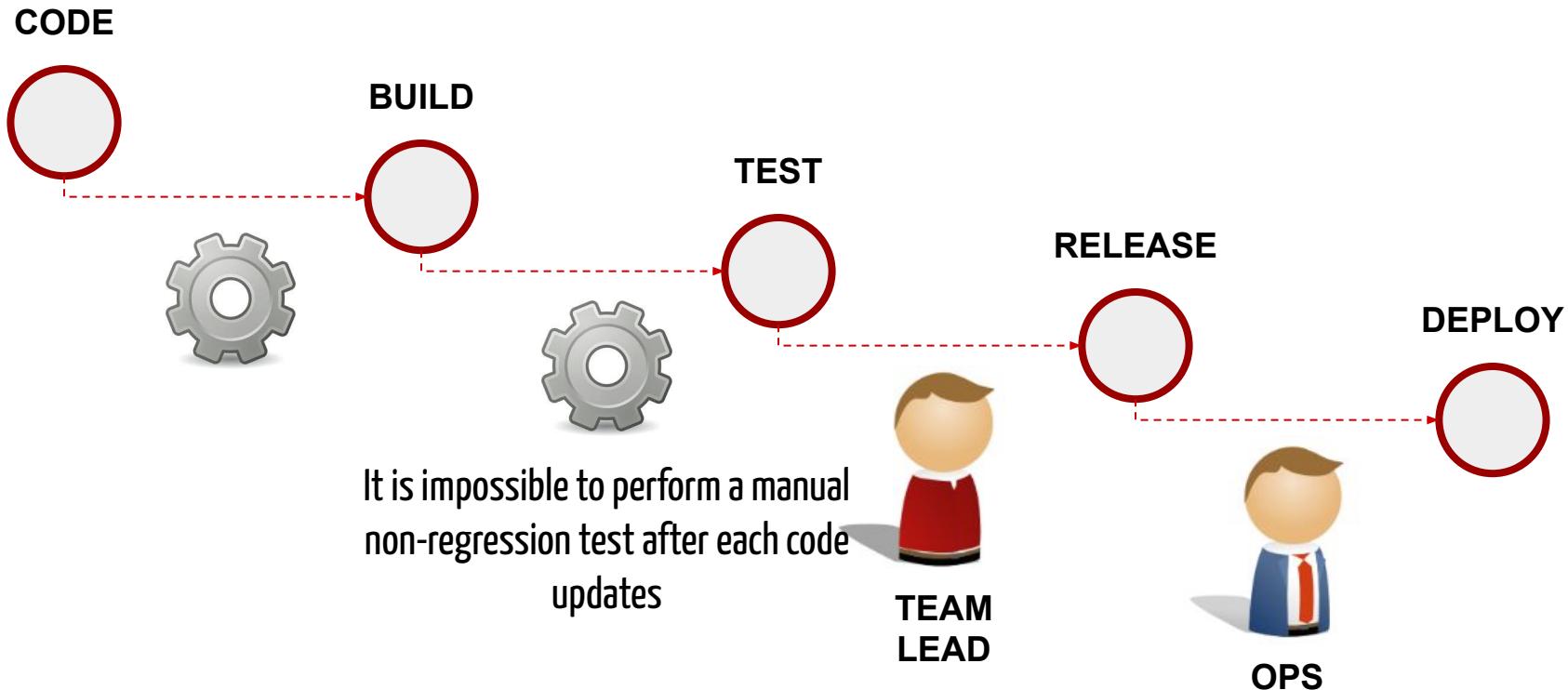
Build automation



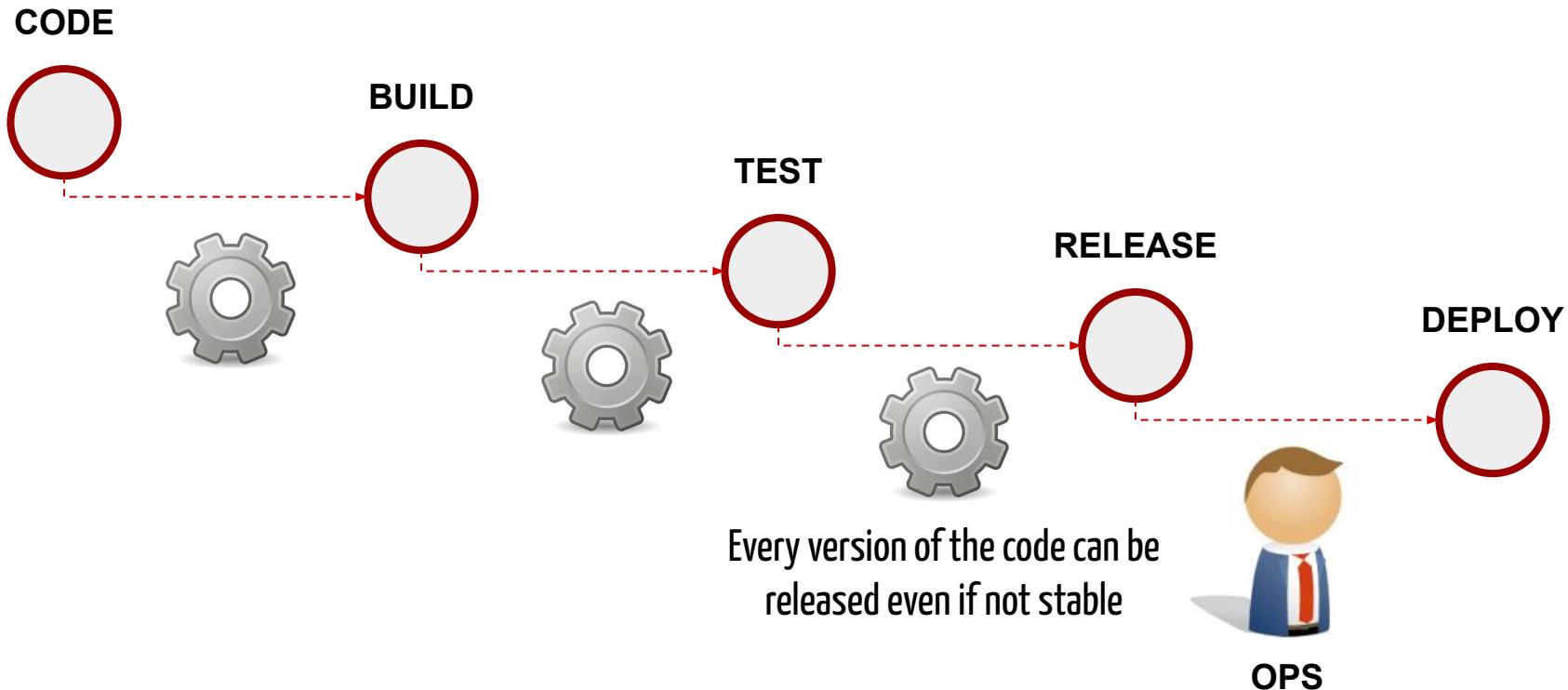
Build automation



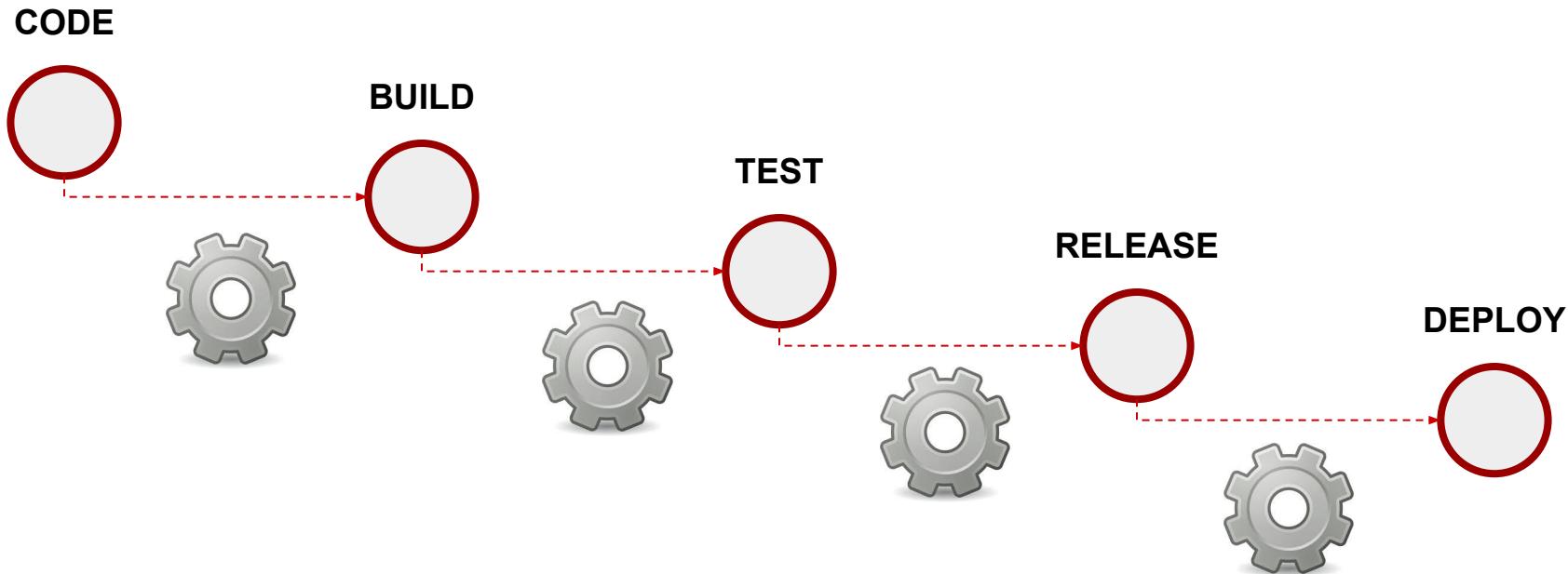
Build automation



Build automation

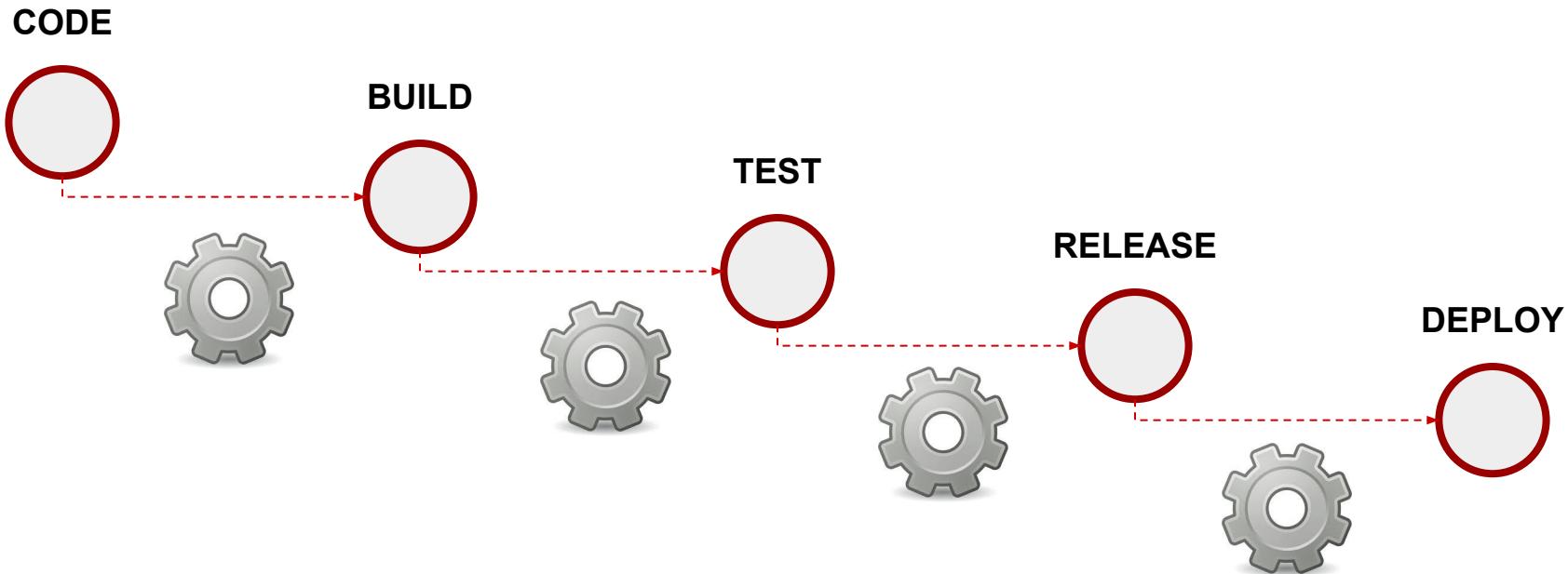


Build automation

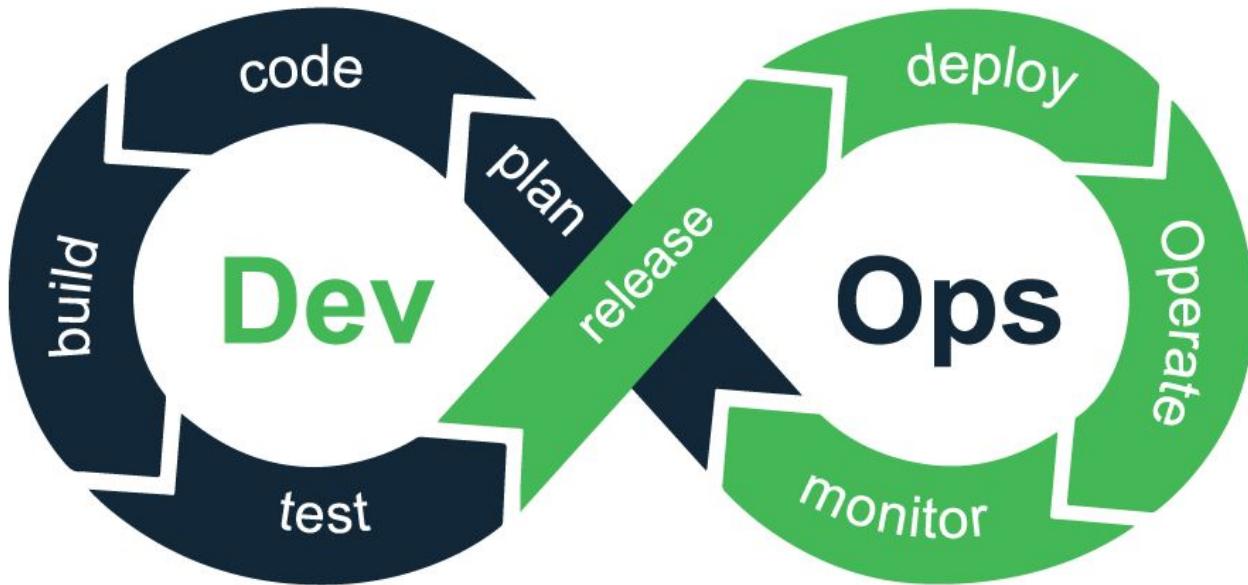


Facebook deploy in production multiple times per day
(and you never notice it)

Build automation



Be DevOps



Q&A



Automating your project

Philippe COLLET, Mathias COUSTÉ
05.03.2020

1



Existing tools

Jenkins

Jenkins 2

rechercher

Mathias Cousté | se déconnecter

Rafraîchissement automatique

Nouveau Item

Utilisateurs

Historique des constructions

Relations entre les builds

Vérifier les empreintes numériques

Administrer Jenkins

Mes vues

Identifiants

New View

File d'attente des constructions (1)

leaf » ngleaf

État du lanceur de compilations

1 leaf » leaf #20

2 MyKitchen #5

Tous +

S	M	Nom du projet	Dernier succès	Dernier échec	Dernière durée
Folder	Sunny	Escape Coding Game	S. o.	S. o.	ND
Folder	Cloudy	leaf	S. o.	S. o.	ND
Ball	Sunny	MyKitchen	21 j - #4	S. o.	7 mn 28 s

Icône: S M L

Légende RSS pour tout RSS de tous les échecs RSS juste pour les dernières compilations

Jenkins

37

Travis CI

Travis CI



Dashboard

Changelog

Documentation

Help



Search all repositories



pns-si3-qgl / pns-si3-qgl-regatta-1920-mugiwara-crew



build unknown

My Repositories

Running (0/0)

+

✓ pns-si3-qgl/pns-si3-qgl-reg # 16

⌚ Duration: 53 sec

📅 Finished: 3 hours ago

○ PNS-PSS-1819/baseline

⌚ Duration: -

○ mathiascouste/qgl-templat

⌚ Duration: -

○ pns-si3-qgl/pns-si3-qgl-reg

⌚ Duration: -

○ pns-si3-qgl/pns-si3-qgl-reg

⌚ Duration: -

○ pns-si3-qgl/pns-si3-qgl-reg

⌚ Duration: -

Current

Branches

Build History

Pull Requests

More options



✓ feature/create-regatta-manager #12 Begin to create managers structure and add

-o- #16 passed

-o- Commit 55a3c4a ↗

↳ Compare 55a3c4a60008 ↗

↳ Branch feature/create-regatta-manager ↗

👤 pauldevelopmentfr

↻ Restart build

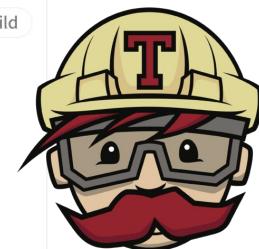
🔍 Debug build

⌚ </> JDK: openjdk11 Java

_AMD64

Job log

View config



Travis CI

X Remove log ↴ Raw log

worker_info

0.07s

system_info

0.01s

docker_mtui

2.37s

▶ 1 Worker information

6

▶ 7 Build system information

165

166

2



Travis' features

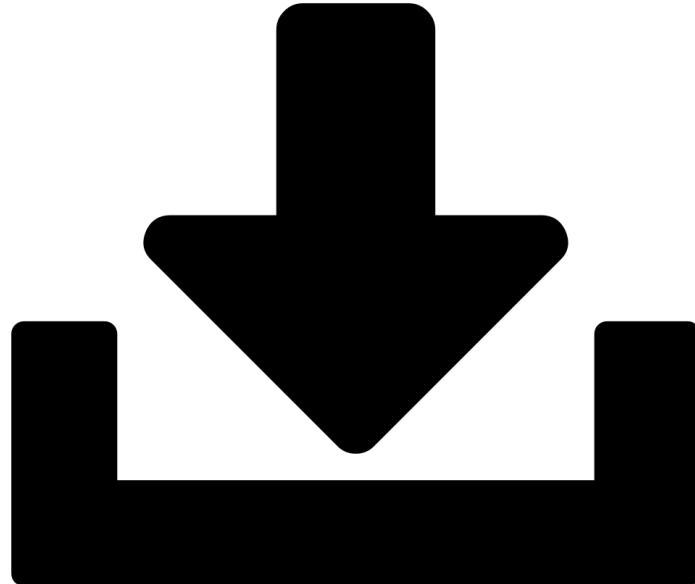
In the cloud



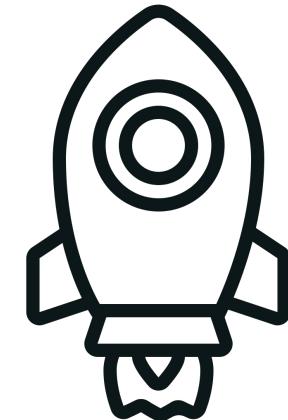
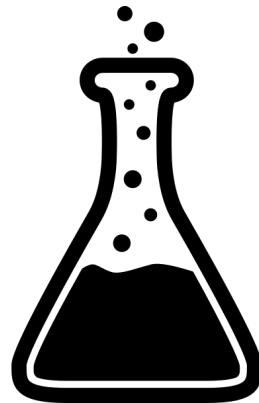
No installation ...

Integration only !

Clone your Git repository



Run some specific tasks



PASS or FAIL

DeathStar3 / symfinder-internal  build passing

Current Branches Build History Pull Requests More options ⚙

✓ **vamos2020** Decorator detection on name + updated README  #66 passed
Commit 6@acb98 ⚙ Compare vamos2020 ⚙ Tag vamos2020 ⚙ Johann Mortara

Ran for 29 min 56 sec Total time 28 min 52 sec 3 months ago

Build jobs View config

Unit tests  10 min 24 sec

✓ # 66.1	AMD64	⌚	Symfinder engine unit tests	9 min 13 sec	
✓ # 66.2	AMD64	⌚	Visualization unit tests	51 sec	

Integration tests  19 min 11 sec

✓ # 66.3	AMD64	⌚	Tests on sample projects	12 min 11 sec	
✓ # 66.4	AMD64	⌚	Acceptance tests on a pilot project	6 min 37 sec	

DeathStar3-PFE / symfinder-internal  build unknown

Current Branches Build History Pull Requests More options ⚙

✗ **develop** Merge remote-tracking branch 'origin/develop' into develop  #64 failed
Commit b@6aee1d ⚙ Compare 1cf883..b@6aee1d ⚙ Branch develop ⚙ Nathan Strobbe

Ran for 32 min 26 sec Total time 31 min 32 sec 2 months ago

Build jobs View config 

Unit tests  10 min 30 sec

✓ # 64.1	AMD64	⌚	Symfinder engine unit tests	9 min 32 sec	
✓ # 64.2	AMD64	⌚	Visualization unit tests	40 sec	

Integration tests  21 min 36 sec

✗ # 64.3	AMD64	⌚	Tests on sample projects	16 min 1 sec	
✓ # 64.4	AMD64	⌚	Acceptance tests on a pilot project	5 min 19 sec	

Configuration

.travis.yml (*at the root of your repository*)

```
language: java
# use Java 8
jdk:
- oraclejdk8

script:
- ./buildMyProjectPlease.sh

sudo: false

# cache the build tool's caches
cache:
  directories:
- $HOME/.m2

notifications:
  email:
    - travis@polytech.com
```

3



Integration with other tools

Github

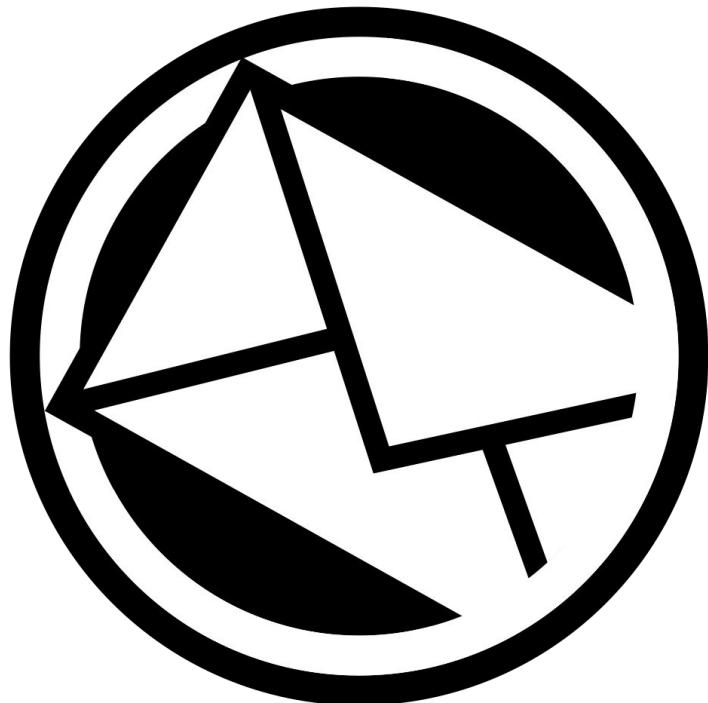


Heroku



HEROKU

Get an email

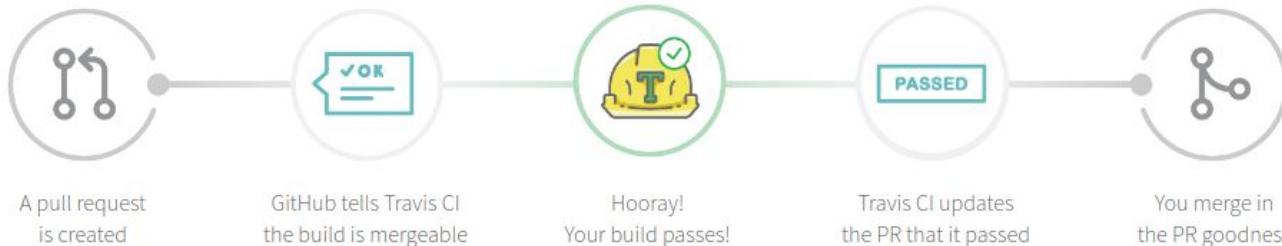


Integration chains

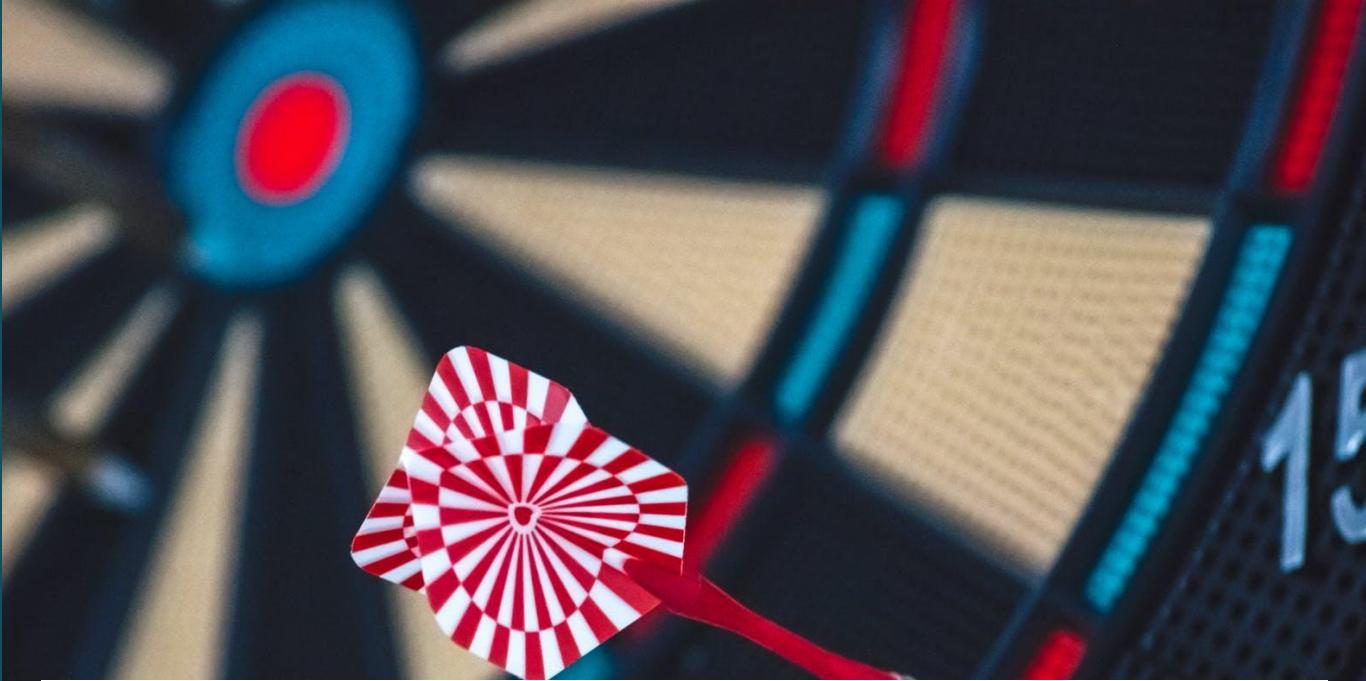
Branch build flow



Pull request build flow



4



What do we expect?

Setup 1

1. Visit <https://travis-ci.org/>
 2. Signup with your github account
Authorize application within github
 3. Add your repository

Setup 2

1. In your project, add and configure the .travis.yml file

<https://docs.travis-ci.com/user/languages/java/>

Minimal example:



2. Tutorial: <https://docs.travis-ci.com/user/tutorial/>

Setup 3

The screenshot shows a build configuration interface with the following sections:

- General**:
 - Build pushed branches
 - Limit concurrent jobs
 - Build pushed pull requests
- Auto Cancellation**: A red box highlights this section.
 - Auto cancel branch builds
 - Auto cancel pull request builds
- Config Import**:
 - Allow importing config files from this repository

!Important!

Auto Cancellation

Auto Cancellation allows you to only run builds for the latest commits in the queue. This setting can be applied to builds for Branch builds and Pull Request builds separately. Builds will only be canceled if they are waiting to run, allowing for any running jobs to finish.

Auto cancel branch builds

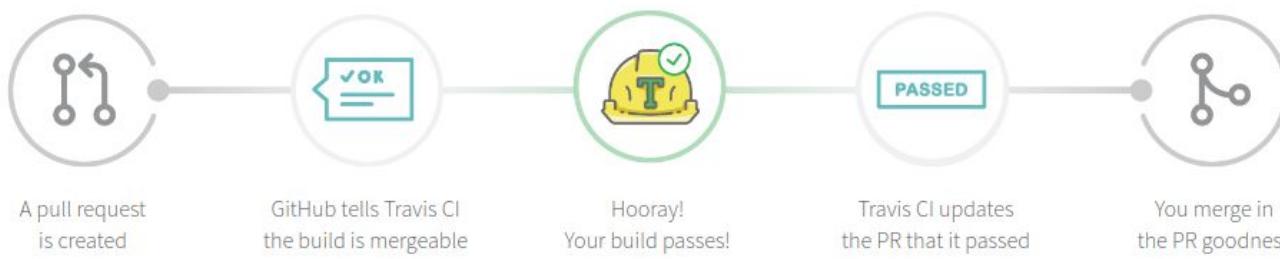
Auto cancel pull request builds

Config Import

Allow importing config files from this repository

Increase confidence in your weekly delivery

Pull request build flow



Q&A