

# QA on Django and Python apps



@landus88  
@agomezmoron  
#opensouthcode



First of all, let's take a selfie!





OUR PROPOSAL

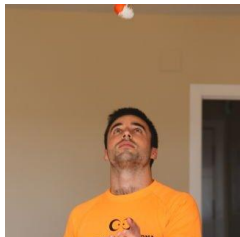
# Who is who?

Co go cieszy?

Wiek: 32 l.



# Who is who?



## **Alejandro Gómez Morón (@agomezmoron)**

QA leader at Emergya

QA Lecturer at Pablo de Olavide University

Proud Bruno's daddy!



## **Alejandro Laó Amores (@landus88)**

QA at Emergya

Passionate about tech.

**@SevillaQA**

**What QA really means**

**Working as a team**

**The workflow**

**Conclusions**



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# What QA really means?



- Some people think it's finding defects



- Some people think it's finding defects
- Some people think it's testing





- Some people think it's finding defects
- Some people think it's testing
- **A lot of people think it's f\*ck\*ng the team**



The meaning of QA really depends on your point of view.



TEST ?

CONTINUOUS INTEGRATION?

CONTINUOUS DELIVERY?

## QA RULES

- Commitment
- Continuous process
- Definition (DoR, DoD, workflow)
- Standards (code style, documentation, etc)
- Testing (to avoid defects)
- Delivering
- validation (Have we done what we had to?)

*"You never really understand a person until you consider things from his point of view."*

Harper Lee



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# Working as a team

It's nothing new: it's **one of the seven LEAN principles**

- **Teamwork**
- **Responsibility-based**
- **Respect & empower people**



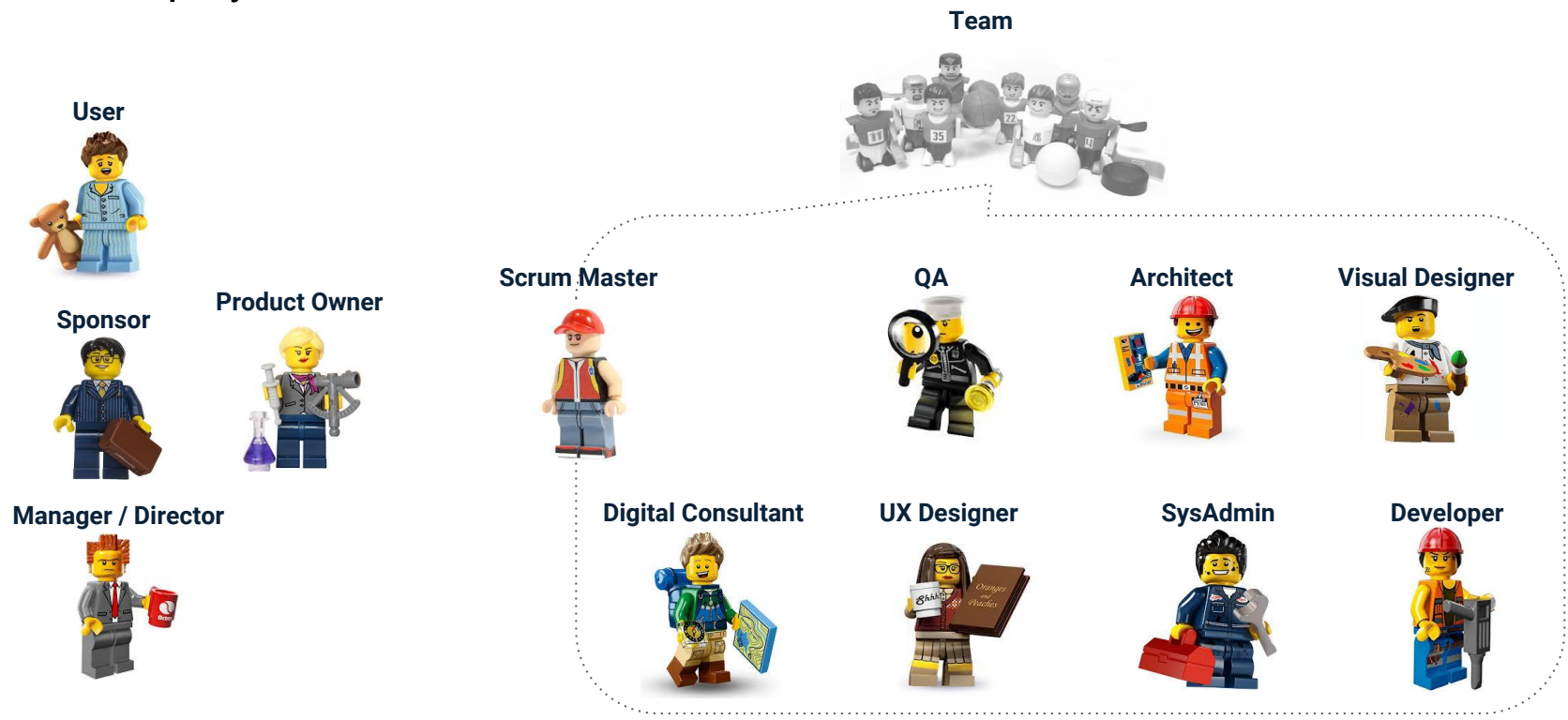


## It's nothing new: it's **one of the seven LEAN principles**

- **Teamwork**
- Responsibility
- Respect & e



# A real project team



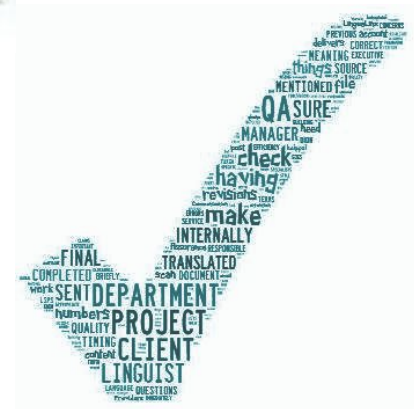


One team to rule them all!



***"Excellence is not a skill. It is an attitude".***

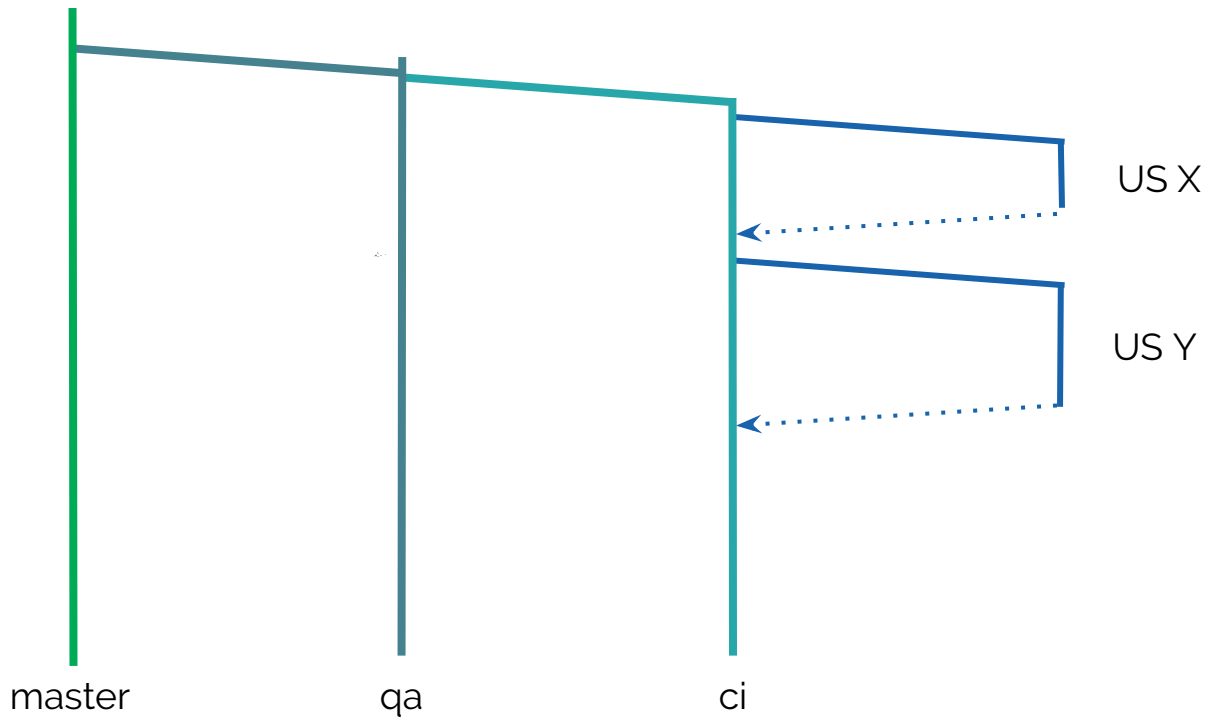
Ralph Marston

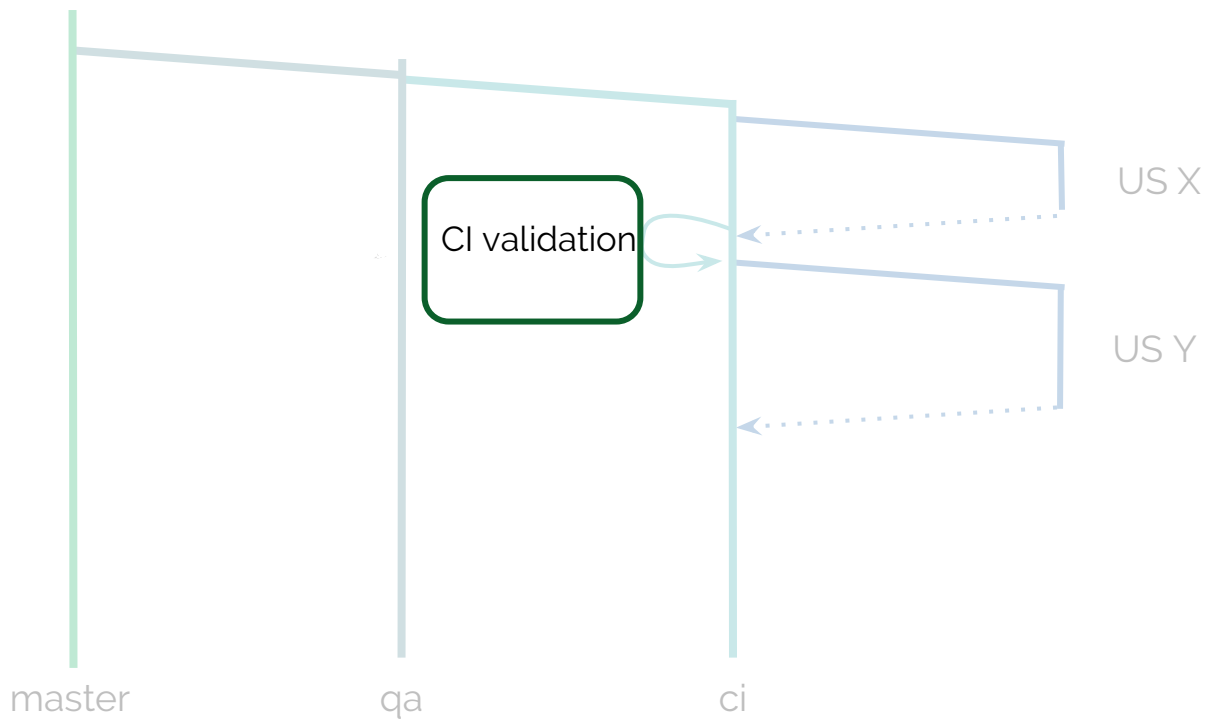


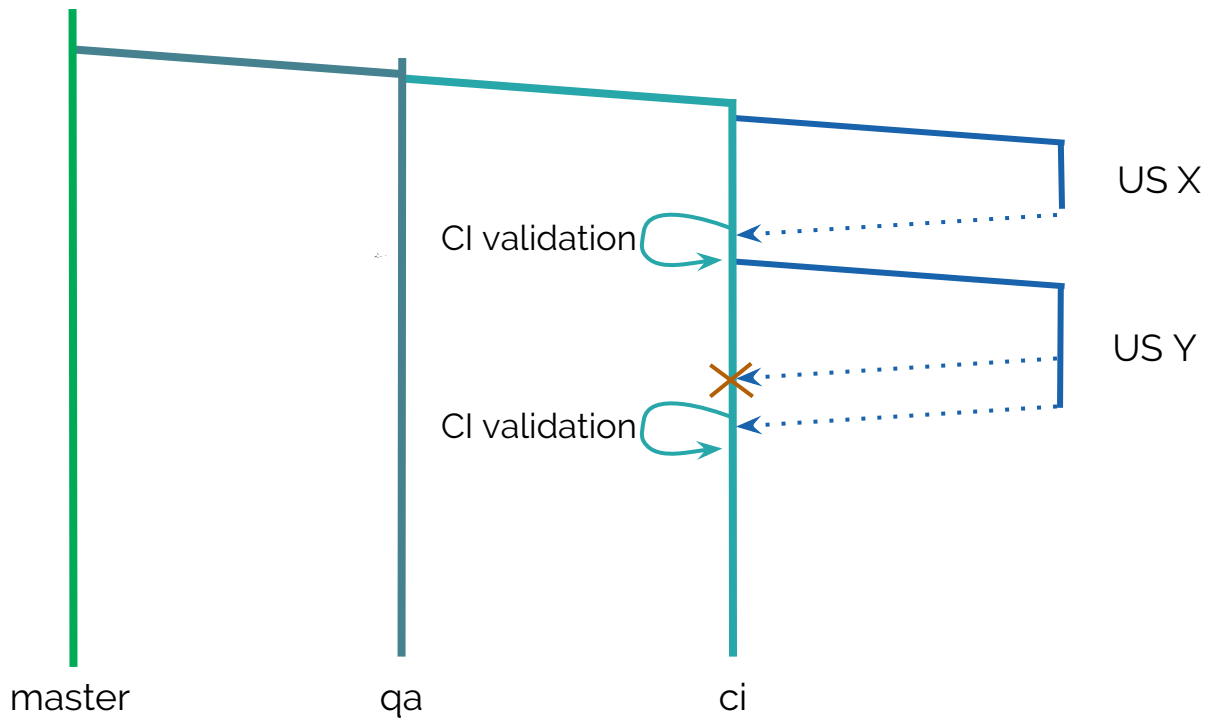


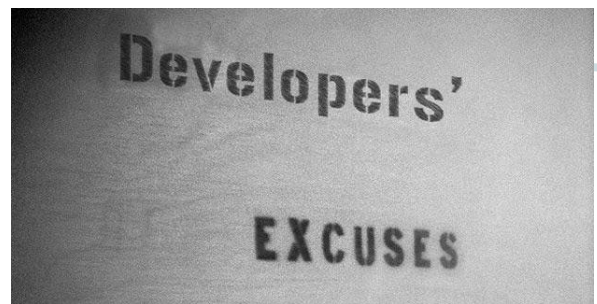
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# The workflow









master

qa

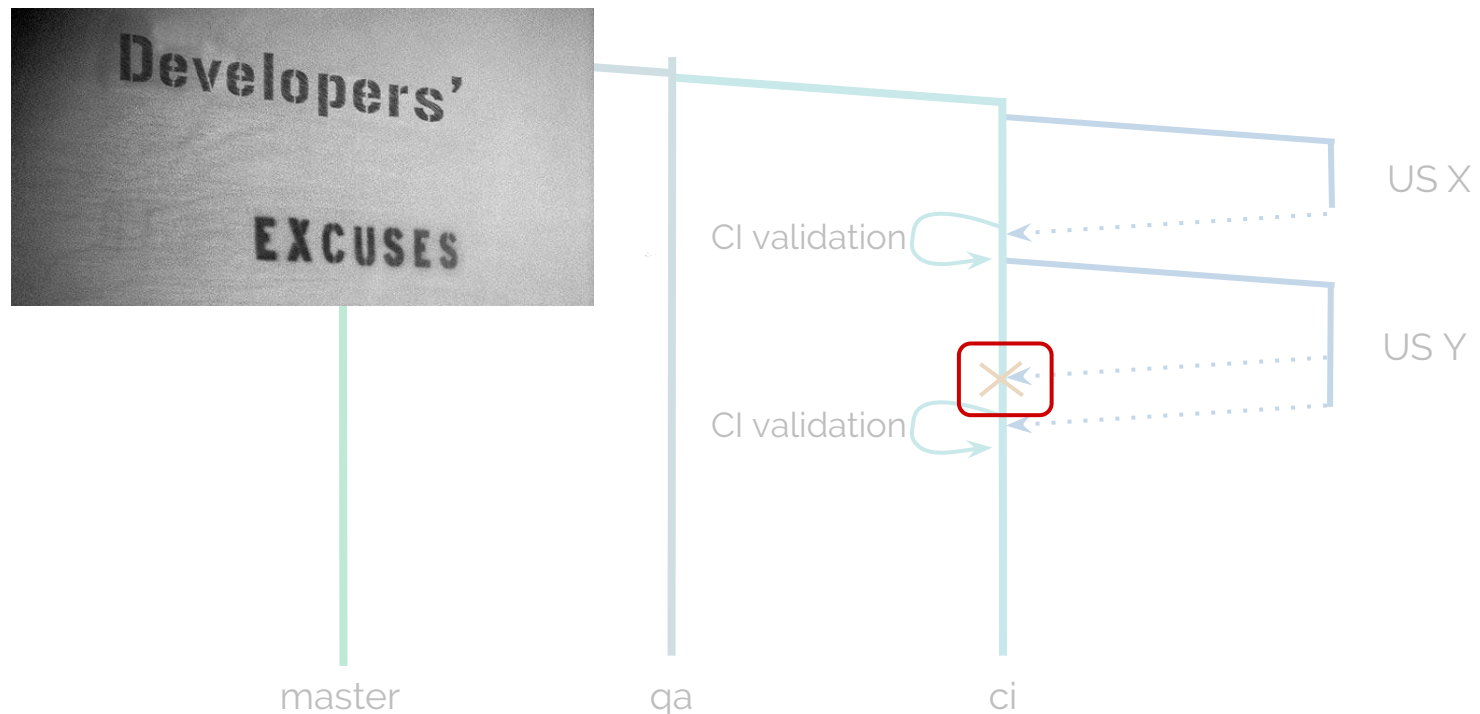
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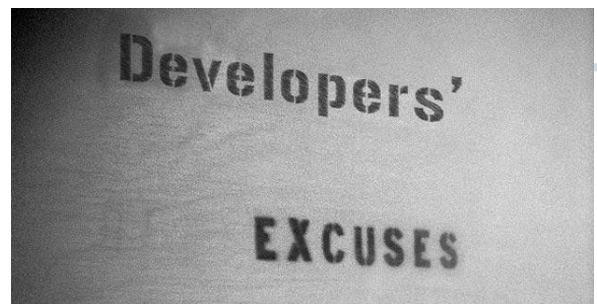
CI validation

CI validation

US X

US Y





master

qa

ci

  
**KEEP  
 CALM**  
 IT WORKS  
**ON  
 MY MACHINE**

CI validation

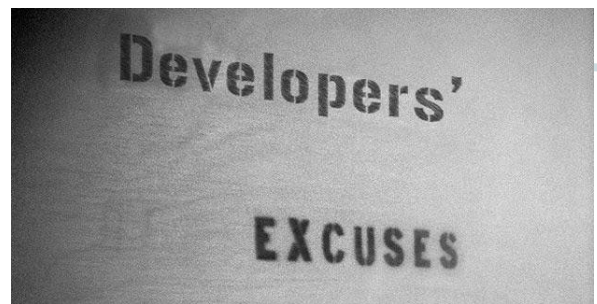
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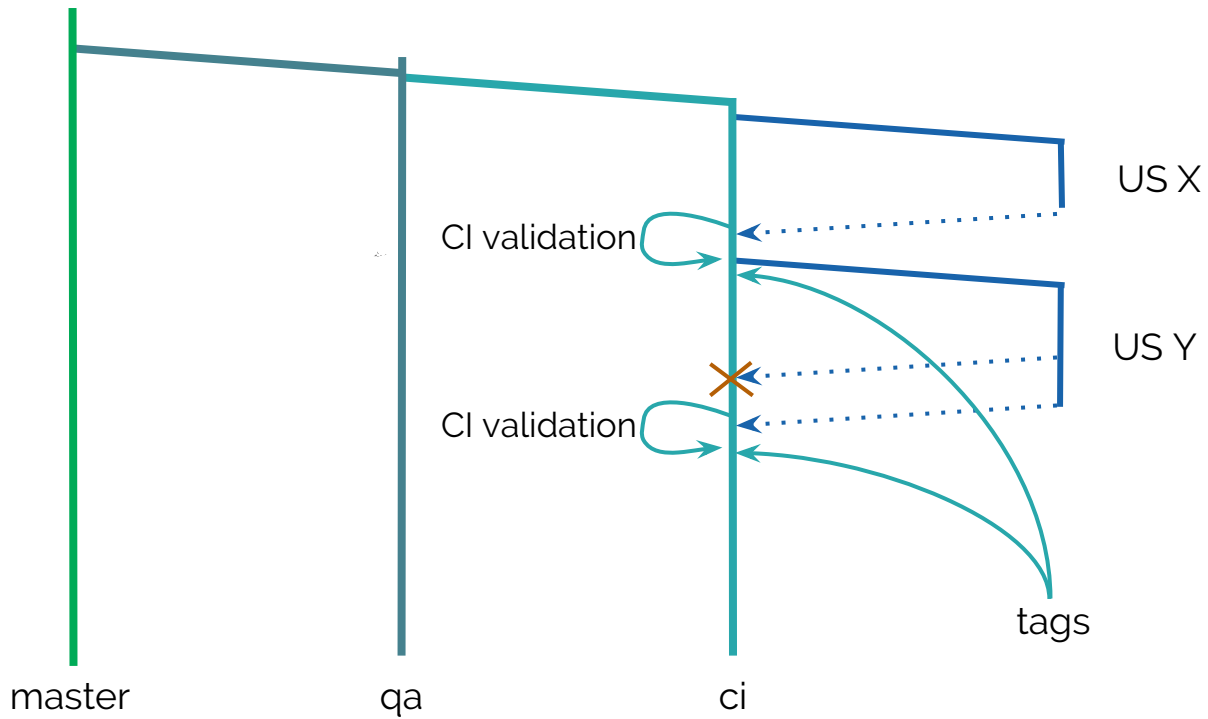
CI validation

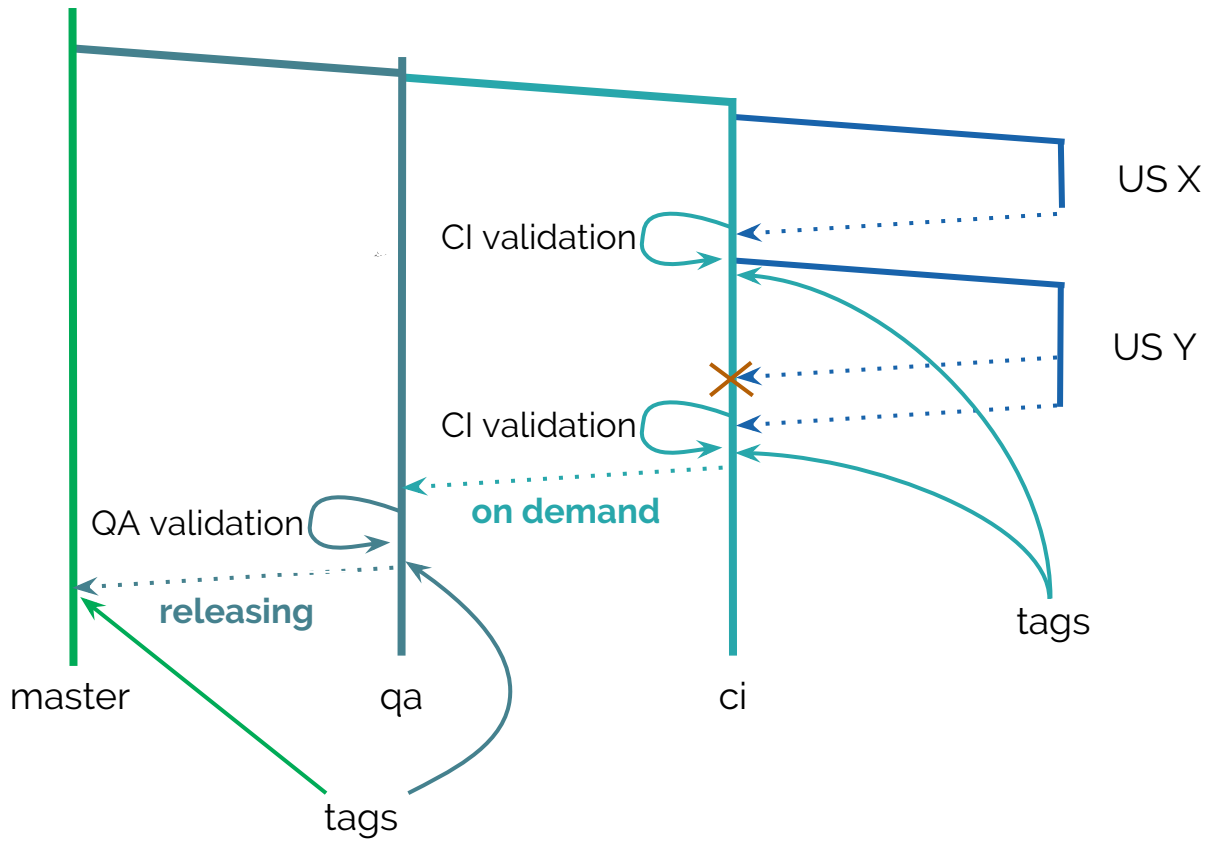
CI validation

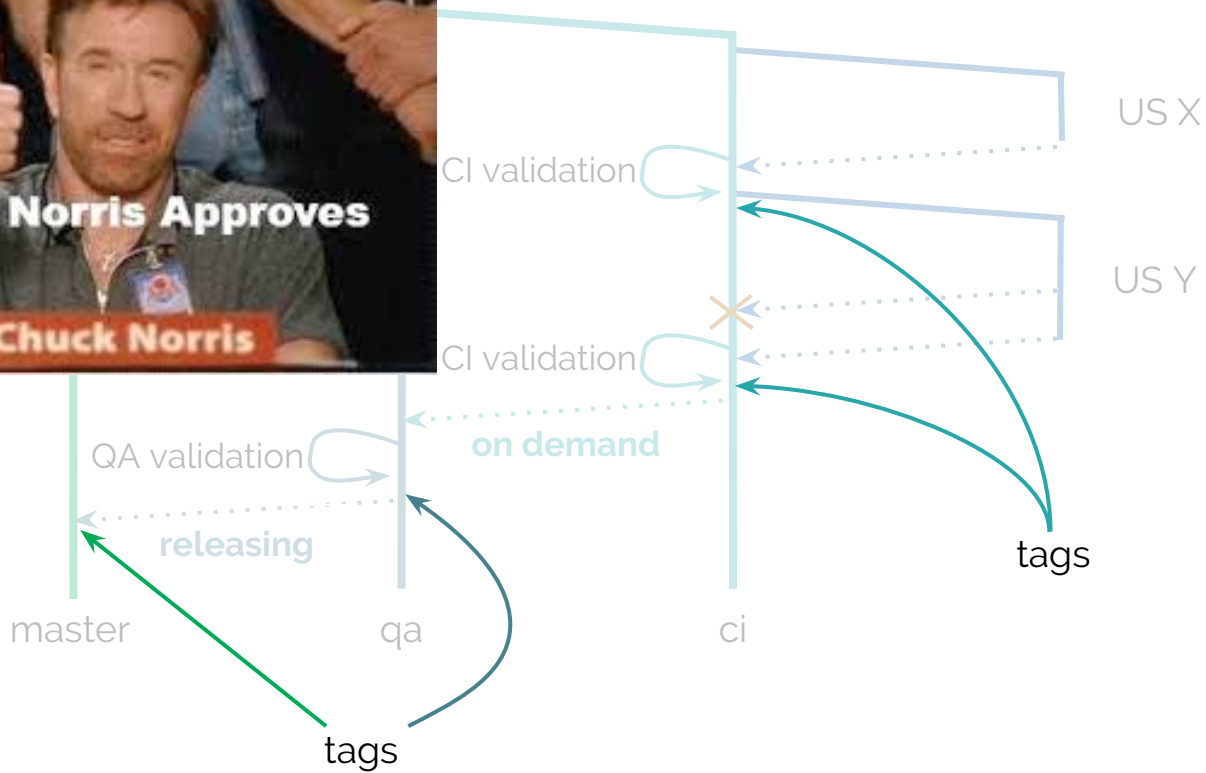
US X

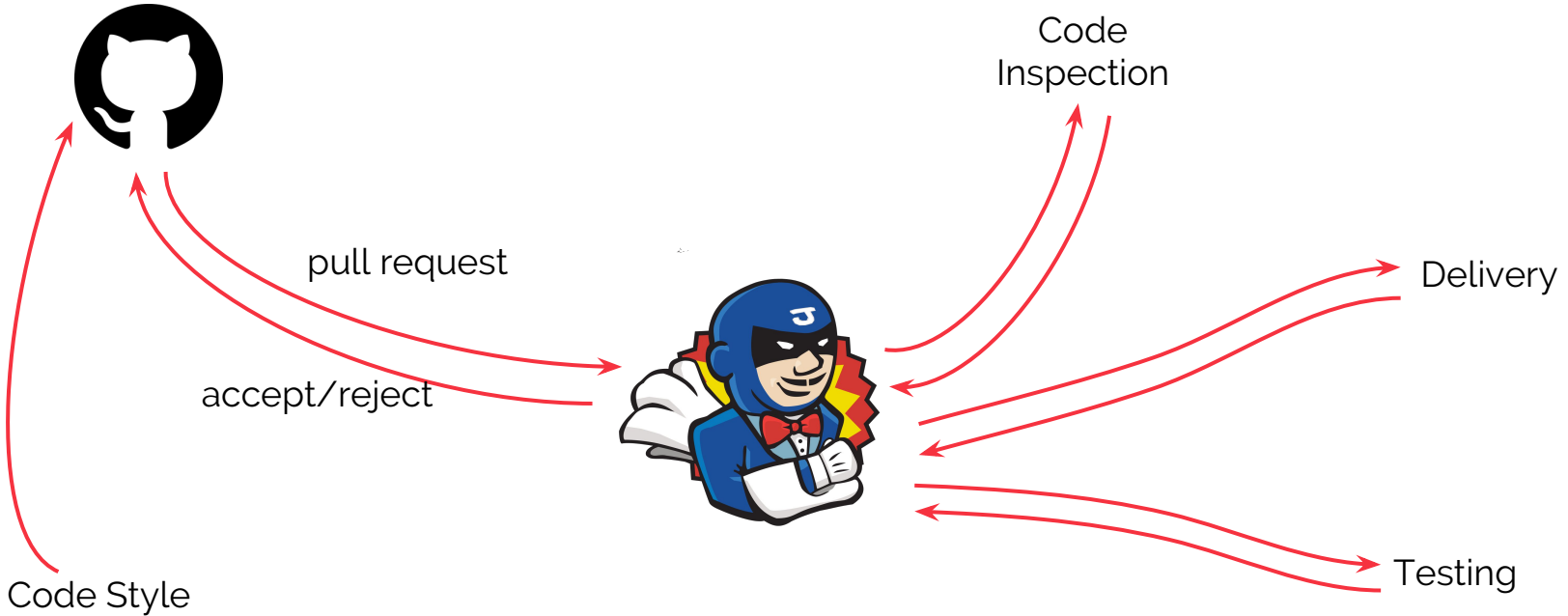
It's not a bug.  
it's a feature

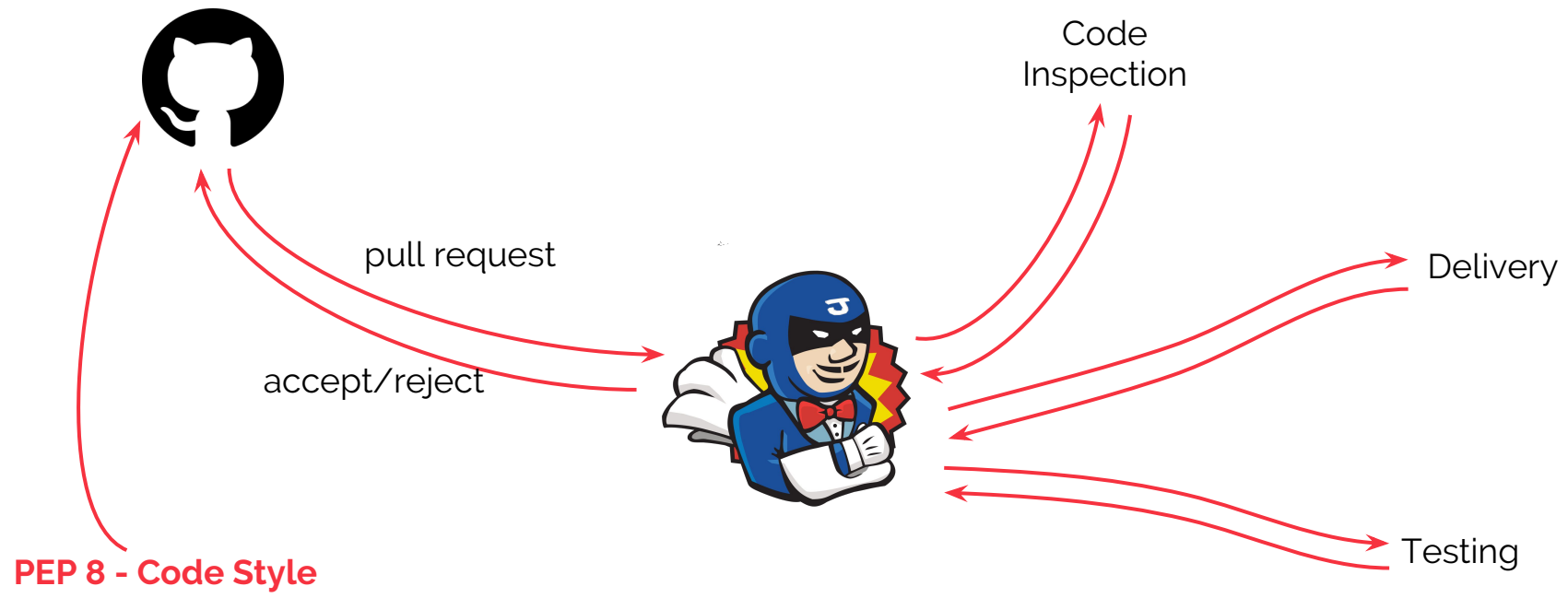


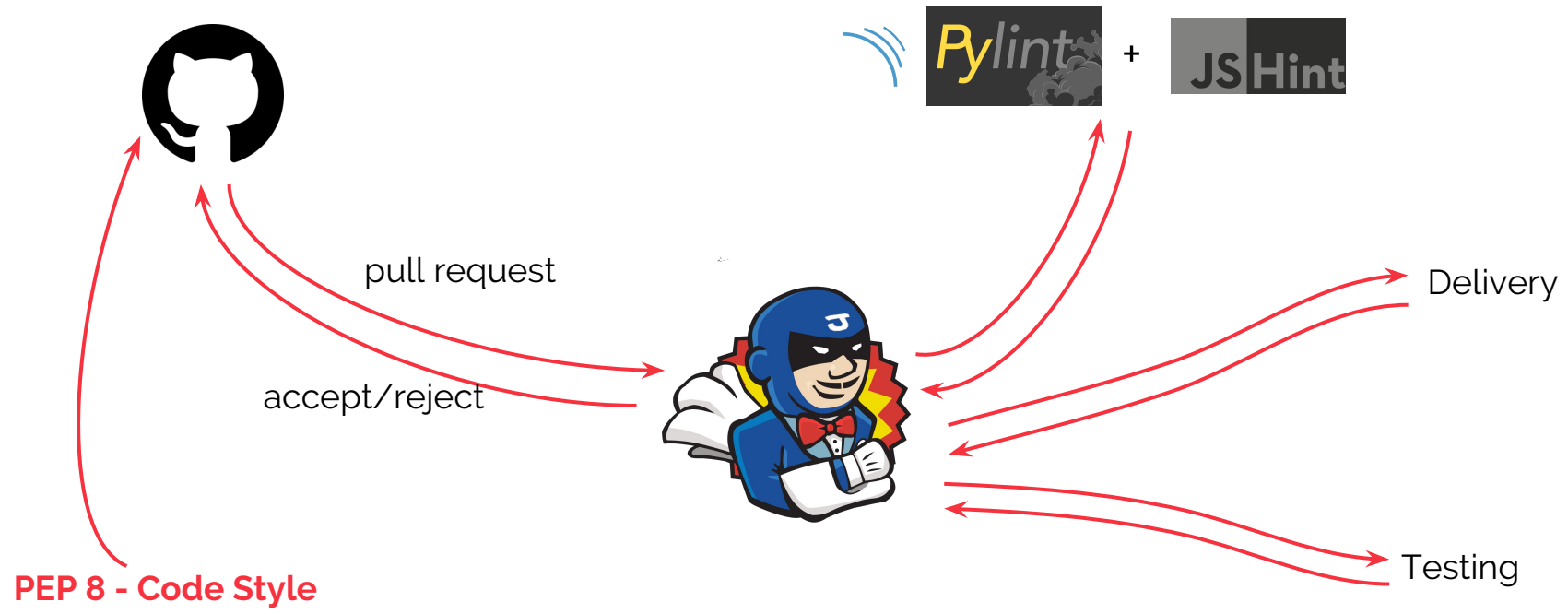




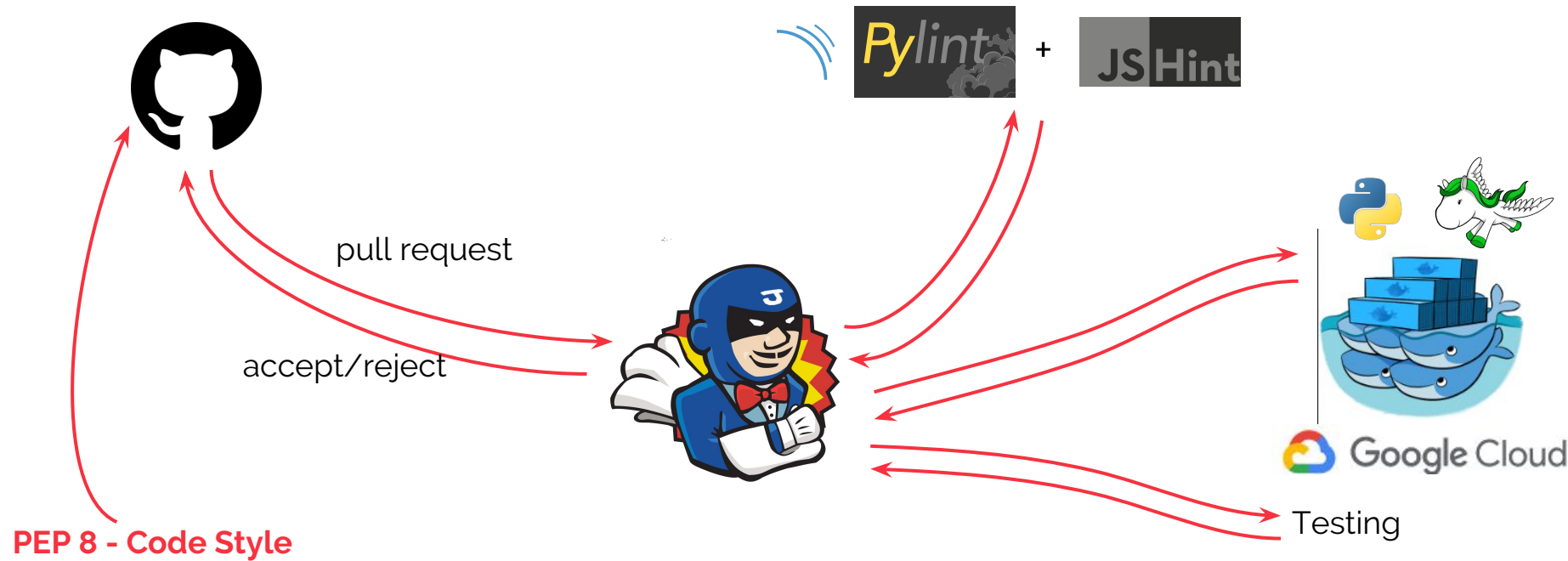


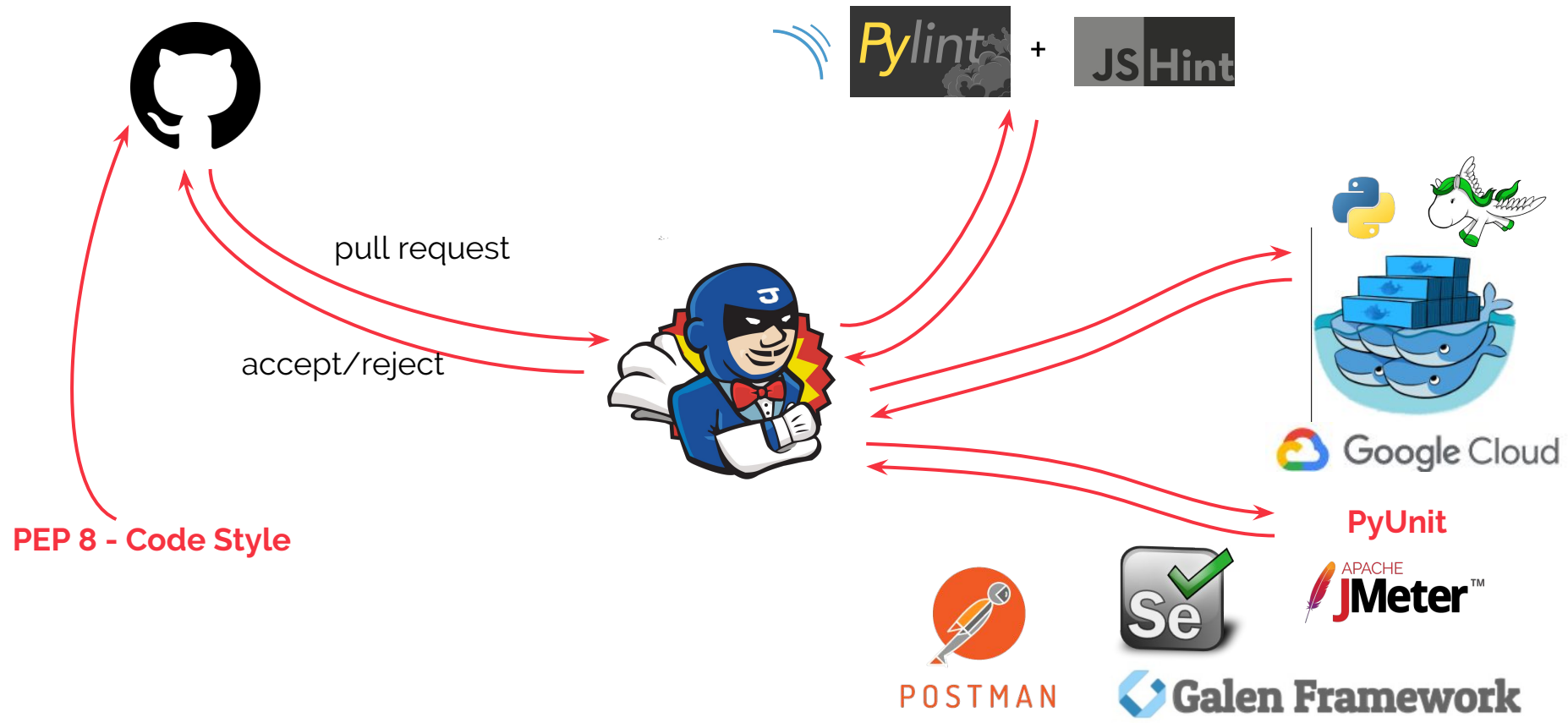












- **Unit Tests** guarantee the quality of some isolated pieces.
- **Functional tests** are split into different suites:
  - **Acceptance/Smoke**: Guarantees the quality of the core of the project.
  - **Regression**: Guarantees the quality of the entire app.
  - **Progression**: Guarantees the quality of the current development (release).
- **Performance tests** guarantee the system availability.
- **Responsive tests** guarantee the defined responsive rules.
- **UI testing** guarantee the UI looks as it should.

A person's hands are shown using red-handled scissors to cut a piece of paper. The desk is cluttered with various items, including a white cup, a stack of papers, and a black marker. The background is slightly blurred, showing more of the desk and some office equipment. The overall scene suggests a creative or administrative task.

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# How do I know what I have to use?

## Case 1: I have a full Django app

- **Unit Tests:** PyUnit

- **Code Inspection:** Pylint



- **Functional tests:** Selenium / Nightwatch.js



Nightwatch.js

- **Performance tests:** jMeter / Gatling



- **Responsive tests:** Galen Framework



- **UI testing:** CrossBrowserTesting



CrossBrowserTesting  
PICK AN OS | PICK A BROWSER | TEST A WEBSITE

**Case 2:** I have a Django / Python REST API + JS Front (Vue.js / Angular / React)

- **Unit Tests:** PyUnit

- **Code Inspection:** Pylint



- **Functional tests:** Selenium / Nightwatch.js



**Nightwatch.js**

- **Performance tests:**

- Option 1: jMeter / Gatling



- Option 2: PostMan



POSTMAN

- **Responsive tests:** Galen Framework



- **UI Testing:** CrossBrowserTesting



**CrossBrowserTesting**  
PICK AN OS | PICK A BROWSER | TEST A WEBSITE

???

Wait, wait...

Can you please explain the difference  
about those performance test options?





## Using jMeter / Gatling

- **Pros:** Really strong technology. A huge community behind.
- **Cons:** Learning curve...there are many details and options to take into account!



## Using PostMan

- **Pros:** Learning curve doesn't exist (almost) and developers should us it (API contract)
- **Cons:** It's not a real technology for load testing but...






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# Conclusions

- Create a **QA culture** in the teams.
- QA is more than testing: Commitment, Code style, Continuous Integration, Unit Testing, Functional testing, Continuous Delivery...

My Culture. My Life.

- QA is not magic, it's a **continuous process**.
- There is no one recipe, here we saw some ideas, thinking by yourself is the best option to do it!
- Follow the force...



- All you have seen needs a big effort
- Are you ready to do it?

TEAMWORK  
MAKES THE  
DREAMWORK

IF YOU WANT  
SOMETHING YOU'VE  
NEVER HAD,  
THEN YOU'VE  
GOT TO DO  
SOMETHING YOU'VE  
NEVER DONE.

*"You take the blue pill, the story ends, you wake up in your bed and you believe whatever you want to believe. You take the red pill: you stay in wonderland and I will show you how deep the rabbit hole goes."*

*Morpheus, Matrix*





Questions?



The Emergya logo is a square icon with rounded corners, featuring a stylized 'E' composed of three horizontal bars and a vertical bar on the right. It is positioned in the upper right quadrant of the image, partially overlapping a laptop keyboard. The entire image has a red overlay.

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