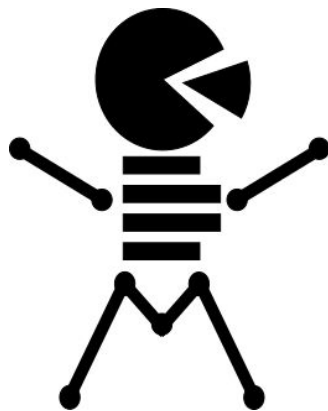


# Q-DashMan

## Data Visualization of Software Development



Created by Quan Zhou

Course: 2018-2019

Advisor: Dr. Jesús María González-Barahona



Universidad  
Rey Juan Carlos

# Main Technologies



# Data Sources



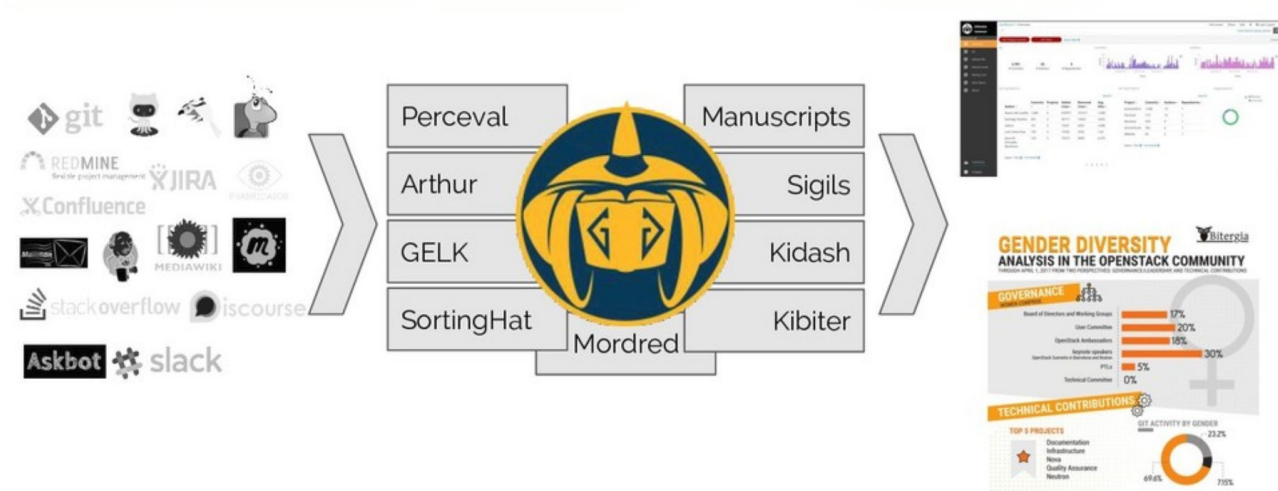
Universidad  
Rey Juan Carlos

# Metrics




Universidad  
Rey Juan Carlos

# GrimoireLab



Universidad  
Rey Juan Carlos

# Cauldron

 Cauldron.io

Sign in | [Twitter](#) | [LinkedIn](#) | [Share](#)

## Welcome to the Cauldron

### Create a software development analytics dashboard for your pet projects!

The Cauldron let you analyze software development activity (commits, issues, pull requests) in GitHub projects

## Go for it!

[Start](#)

You are only a couple of clicks away of ordering a dashboard for your GitHub owner of choice.

In the process, you will be asked to log in your GitHub account, and to give permission to the Cauldron to retrieve data in your name. We need this because the GitHub API requires all access to be done under the account of a user. The Cauldron will only use that permission to retrieve the data needed to produce your dashboard

## About



The *Cauldron* is a proof of concept service for analyzing activity (git commits, issues, and pull requests) in GitHub projects.

Each GitHub user may ask the Cauldron for up to five dashboards, each corresponding to a GitHub owner (user or organization).



The Cauldron is based on the [GrimoireLab](#) toolset. All the software used to produce it is free / open source software.



For each of GitHub owner, the Cauldron will retrieve data from up to 30 of the most recently active projects, and produce an interactive dashboard showing overall summaries, and providing capabilities for filtering and drilling down in the details.



The Cauldron uses the [GitHub API](#) to retrieve information about issues and pull requests. Since the access to this API is *rate-limited*, the retrieval of the data for your dashboard may take a while. Please, be patient.



If you want to browse more complete dashboards produced by [Bitergia](#), visit:

## Search dashboards

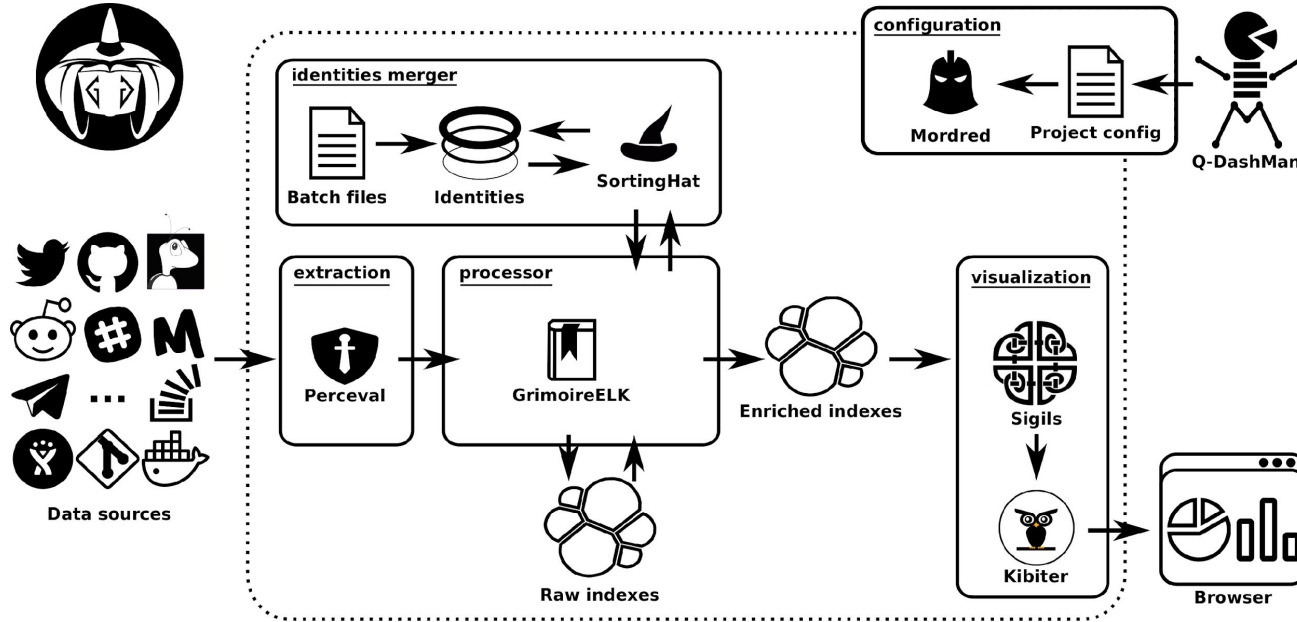
Popular Latest All dashboards [12](#)

 angular	➔
 docker	➔
 elastic	➔
 facebook	➔
 microsoft	➔



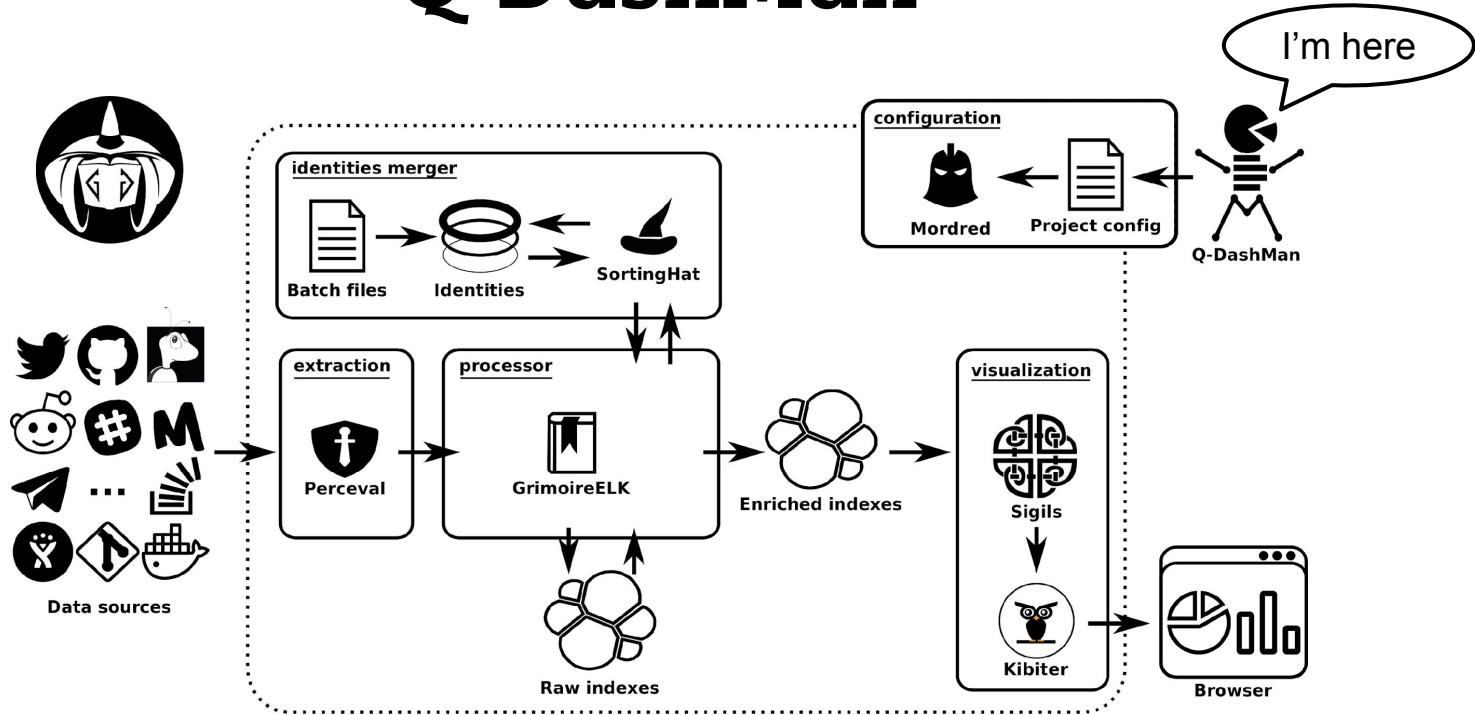
Universidad  
Rey Juan Carlos

# Q-DashMan



Universidad  
Rey Juan Carlos

# Q-DashMan



Universidad  
Rey Juan Carlos



# Set Up files

```
less setup.cfg_all
[sortinghat]
host =
user =
password =
database = test_sh
load_orgs = true
orgs_file = /home/bitergia/
identities_format = grimoir
identities_file = [/home/bi
autoprofile = [file:cncf,gi
matching = [email-name]
sleep_for = 86400
bots_names = []
unaffiliated_group = Unknown
affiliate = false

#[panels]
#kibiter_time_from = "now-90d"
#kibiter_default_index = "git"

#[phases]
collection = true
identities = false

[git]
raw_index = git_test
enriched_index = git_test_enriched
latest-items = true

[github]
raw_index = github_test
enriched_index = github_test_enriched

less setup.cfg_all
[general]
short_name = test
update = true
min_update_delay = 0
debug = true
logs_dir = /home/bitergia/logs
from_date =
bulk_size = 1000
scroll_size = 1000
kibana = "5"
```





Universidad  
Rey Juan Carlos

# Projects File

**Import projects.json** ✕

Choose File No file chosen

Close Upload

**Add projects.json** ✕

GitHub

Organization \*

Token

Add

Slack

Project \*

Token \*

Add

Meetup

Project \*

Topic \*

Add

Manually

Project \*

Data Source \*

Repository \*

Add

Close



Universidad  
Rey Juan Carlos

# Set Up File

**General Settings** ✕

[general]  
short\_name:  
quan  
update:  
true  
min\_update\_delay:  
720  
debug:  
true  
logs\_dir:  
/home/bitergia/logs

[projects]  
projects\_file:  
/home/bitergia/conf/sources/projects.json

[es\_collection]  
uri:  
http://elasticsearch:9200

[es\_enrichment]  
uri:  
http://elasticsearch:9200  
autorefresh:

Close Save changes

**Add Data Source** ✕

-- select a Data Source-- ▾

Raw Index \*  
Enriched Index \*  
No Archive  
Api Token  
Sleep Time  
Sleep For Rate  
Studies  
Latest Items

Close Add

**Import setup.cfg** ✕

Choose File No file chosen

Close Upload



Universidad  
Rey Juan Carlos

# Set Up Files

```
projects.json

{
  "zhquan": {
    "github": [
      "https://github.com/zhquan/DAT-Mashup",
      "https://github.com/zhquan/DAT-PrincesGame",
      "https://github.com/zhquan/ISI-Practica-7",
      "https://github.com/zhquan/ISI-Practica-ChatAlien",
      "https://github.com/zhquan/ISI-Practica-leaderboard",
      "https://github.com/zhquan/ISI-Practica8",
      "https://github.com/zhquan/owl",
      "https://github.com/zhquan/PFG",
      "https://github.com/zhquan/Practica-3",
      "https://github.com/zhquan/PST-PeerChat",
      "https://github.com/zhquan/qz-dashboard",
      "https://github.com/zhquan/SAT-MiRevista",
      "https://github.com/zhquan/TFG",
      "https://github.com/zhquan/TFM",
      "https://github.com/zhquan/videochat"
    ],
    "git": [
      "https://github.com/zhquan/DAT-Mashup.git",
      "https://github.com/zhquan/DAT-PrincesGame.git",
      "https://github.com/zhquan/ISI-Practica-7.git",
      "https://github.com/zhquan/ISI-Practica-ChatAlien.git",
      "https://github.com/zhquan/ISI-Practica-leaderboard.git",
      "https://github.com/zhquan/ISI-Practica8.git",
      "https://github.com/zhquan/owl.git",
      "https://github.com/zhquan/PFG.git",
      "https://github.com/zhquan/Practica-3.git",
      "https://github.com/zhquan/PST-PeerChat.git",
      "https://github.com/zhquan/qz-dashboard.git",
      "https://github.com/zhquan/SAT-MiRevista.git",
      "https://github.com/zhquan/TFG.git",
      "https://github.com/zhquan/TFM.git",
      "https://github.com/zhquan/videochat.git"
    ]
  }
}
```

```
setup.cfg

[general]
short_name = quan
update = true
min_update_delay = 720
debug = true
logs_dir = /home/bitergia/logs

[projects]
projects_file = /home/bitergia/conf/sources/projects.json

[es_collection]
url = http://elasticsearch:9200

[es_enrichment]
url = http://elasticsearch:9200
autorefresh = true

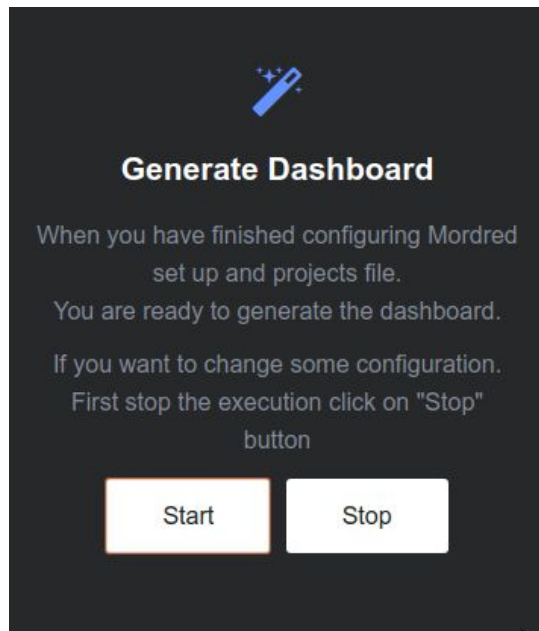
[sortinghat]
host = mariadb
user = root
password =
database = quan_sh
load_orgs = false
orgs_file = /home/bitergia/conf/orgs_file
autoprofile = {}
matching = [email]
sleep_for = 50
bots_names = {}
unaffiliated_group = Unknown
affiliate = true

[phases]
collection = true
identities = true
enrichment = true
panels = true
```



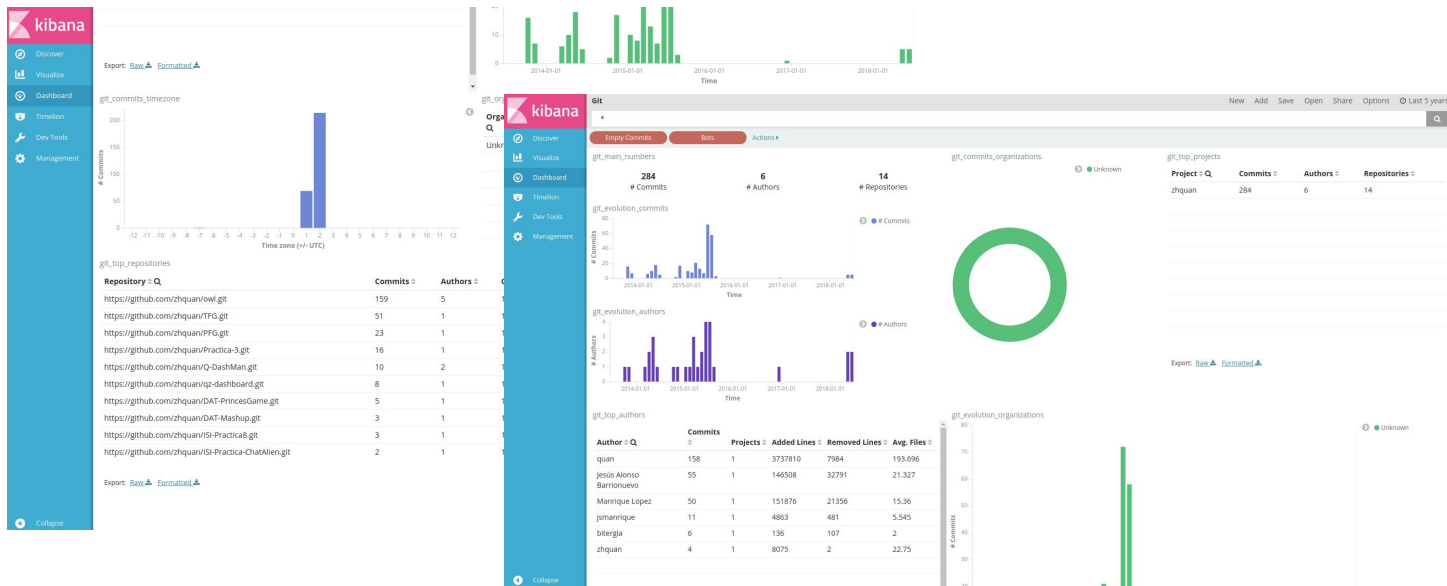
Universidad  
Rey Juan Carlos

# Generate Dashboard



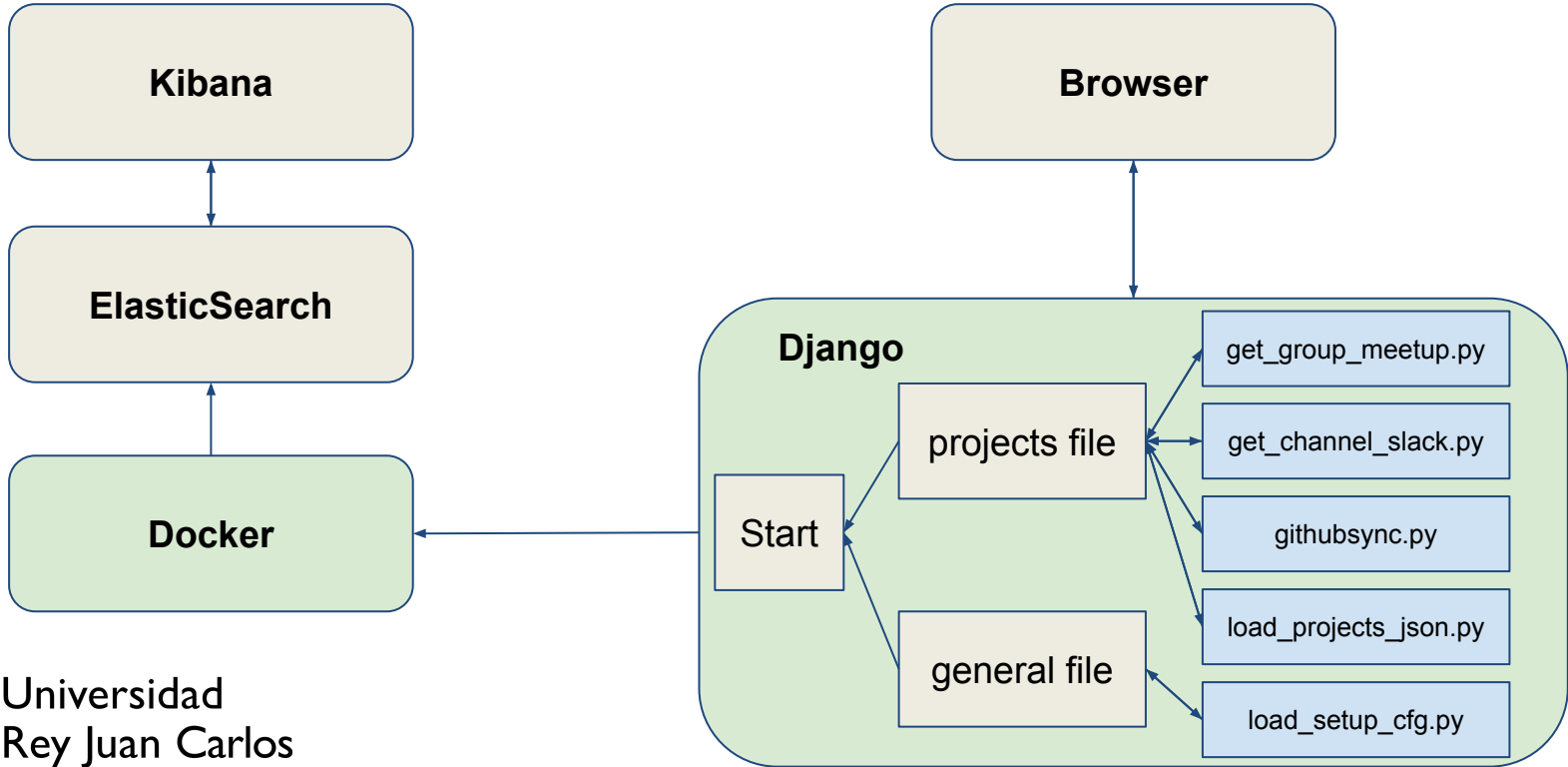
Universidad  
Rey Juan Carlos

# Dashboard

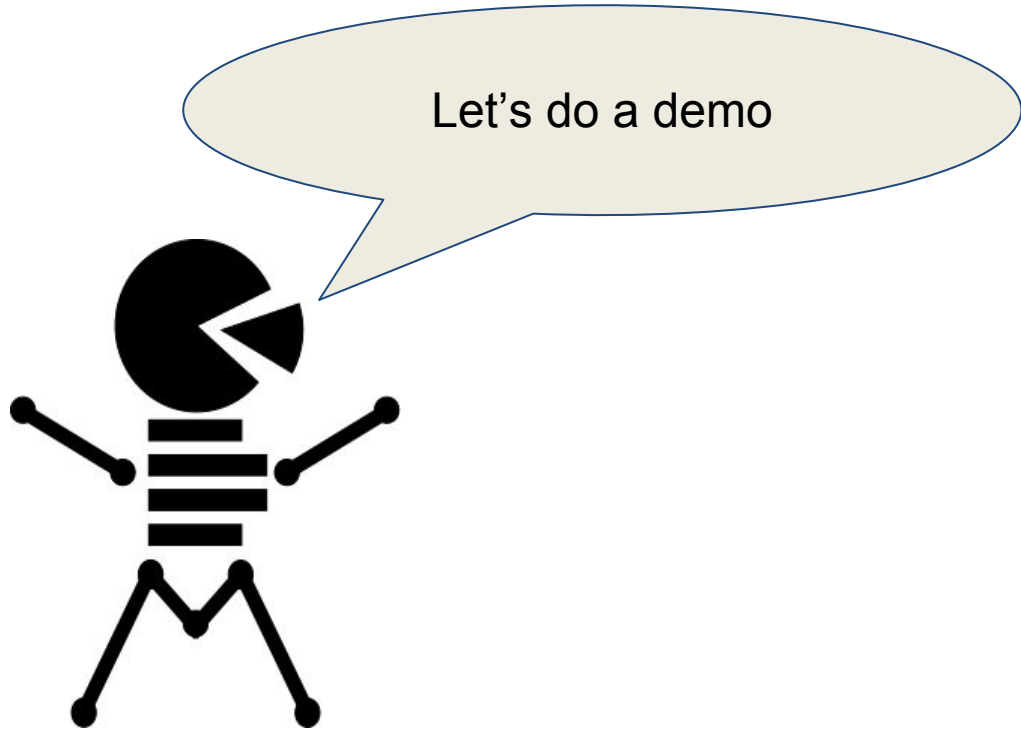


Universidad  
Rey Juan Carlos

# Schema







Universidad  
Rey Juan Carlos

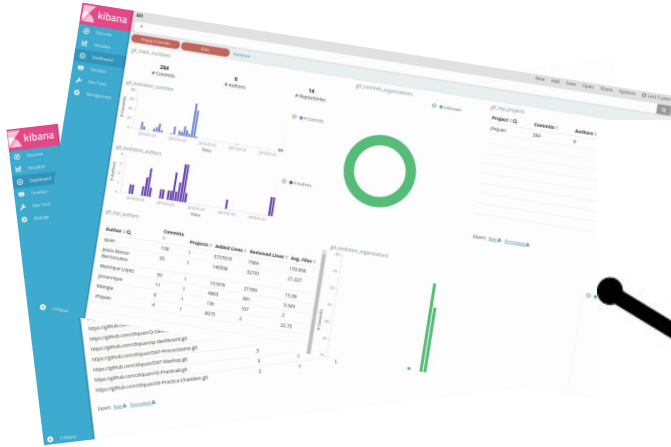


Any questions?



Universidad  
Rey Juan Carlos

Thank you for your  
attention



Universidad  
Rey Juan Carlos