



# SOFTWARE ARCHITECTURE

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## Lab 1

- Intro to labs
- Teams organization
- Git
- GitHub

# ● Intro to labs

What are we going to do in these sessions?

Design and develop an online game based on the game Y .

## Resources?

- <http://arquisoft.github.io>: course documents.
- [Virtual Campus](#)
- YOVI Lab [specification](#)
- Project github [repositories](#) .

## Lab assessment?

70% - Teamwork 

30% - Individual work 

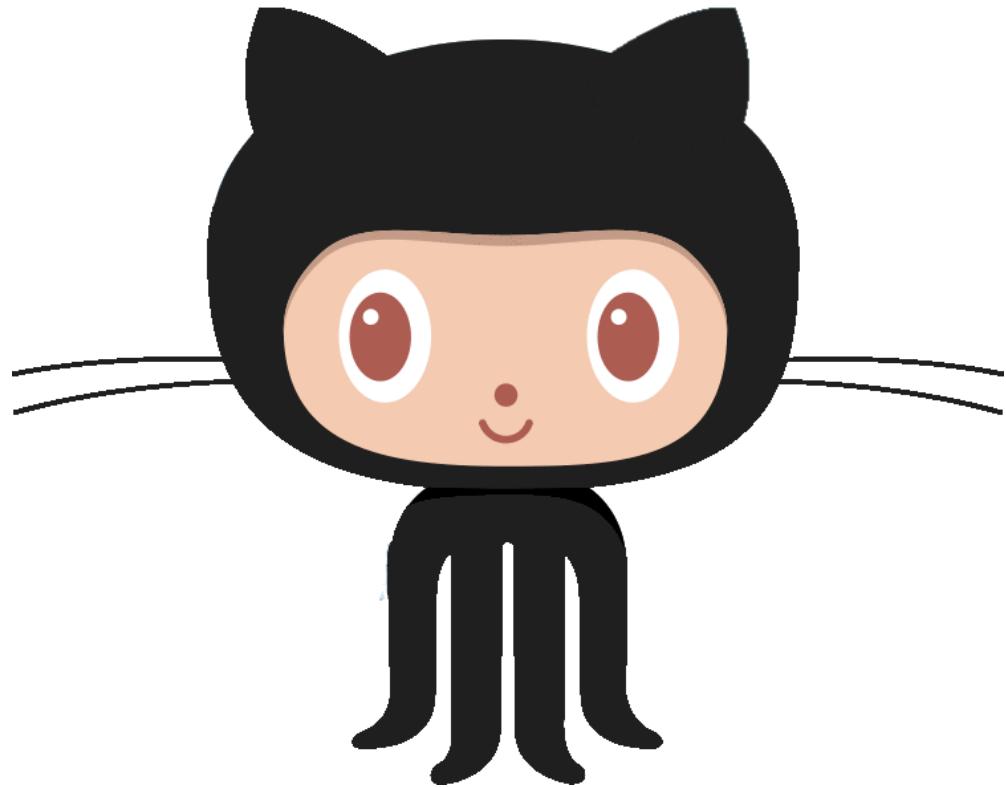
# ● Team work

## Meeting minutes

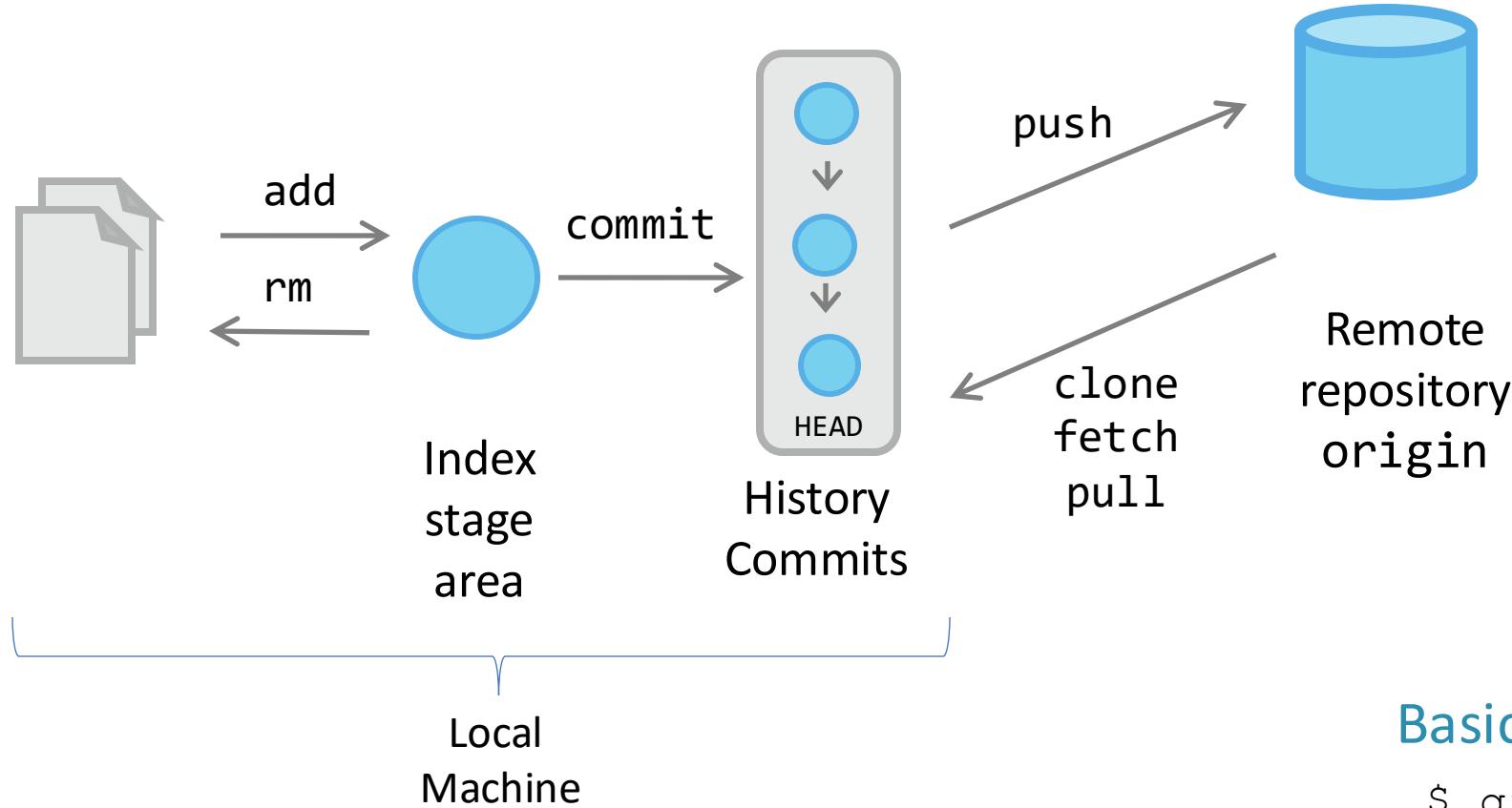
- Each lab session == group meeting.
  - Other meetings allowed out of lab sessions
- **Mandatory** to create minutes of each meeting
- Wiki section of each repository will be used to record minutes
- Minimal mandatory format :
  - Date 
  - Participant list 
  - Agreements about work assignment for next session (open issues) 
  - Review state of tasks from past meetings 
    - Links to **Issues** and **Pull requests** 
  - Short description of decisions taken
    - Preferable to include links architecture decision records (<https://adr.github.io/>)



Git



# Git



## Basic workflow

```
$ git init
$ git clone urlRepository
$ git add .
$ git commit -m "message"
$ git push origin master
```



# Git

# Working with branches

Create a branch:

```
$ git checkout -b branch1
```

Check our current branch:

```
$ git branch
```

Change to another branch:

```
$ git checkout master
```

See differences from branches

```
$ git diff --stat master branch1
```

Merge branch:

```
$ git checkout master  
$ git merge --no-ff branch1
```

Remove branch:

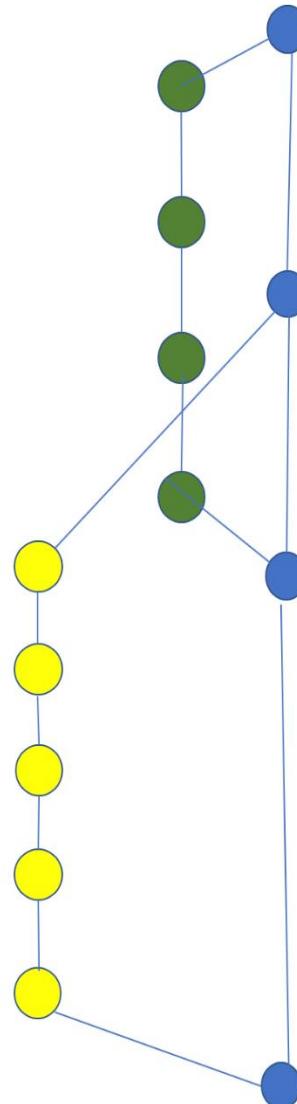
```
$ git branch -d branch1
```

Create the develop branch:

```
$ git checkout -b develop
```

Push it to the remote repository:

```
$ git push origin develop
```





- Several strategies whose success depends on several factors.
  - See: <https://martinfowler.com/articles/branching-patterns.html>
- Some popular patterns:
  - Git-flow, by Vincent Driessen, 2010: [A successful Git branching model](#)
  - [GitHub Flow](#) strategy
  - Trunk based development: <https://trunkbaseddevelopment.com/>



# Pull Request

## Steps

### New branch

```
$ git flow feature start RE1 develop #option 1  
$ git checkout -b feature-RE1 develop #option 2
```

Add your name inside the *Collaborator* section in your *README.md* file

### Send your local changes

```
$ git add .  
$ git commit
```

### Submit your changes to remote

```
$ git push --set-upstream origin feature-RE1
```

Go to github and **ask for a pull request**

5 commits 3 branches 0 packages 0 releases

Your recently pushed branches:

develop (about 1 hour ago)	Compare & pull request
feature/RE1 (1 minute ago)	Compare & pull request



# Pull request

midudev / your-awesome-repo

Code Issues 4 Pull requests 2 Actions Projects Wiki Security 1 Insights Settings

Open a pull request

Create a new pull request by comparing changes across two branches. If you need to, you can also [compare across forks](#).

base: master ← 1 compare: feature-new-cool-thing ← 2 Able to merge. These branches can be automatically merged.

Target branch ← 3 Fix problem when creating an user

Branch we want to merge → 4 Add more context

5 Create pull request

1 Target branch: The 'base' dropdown menu.

2 Branch we want to merge: The 'compare' dropdown menu.

3 Add more context: The title and description area of the pull request form.

4 Create pull request: The 'Create pull request' button at the bottom of the form.

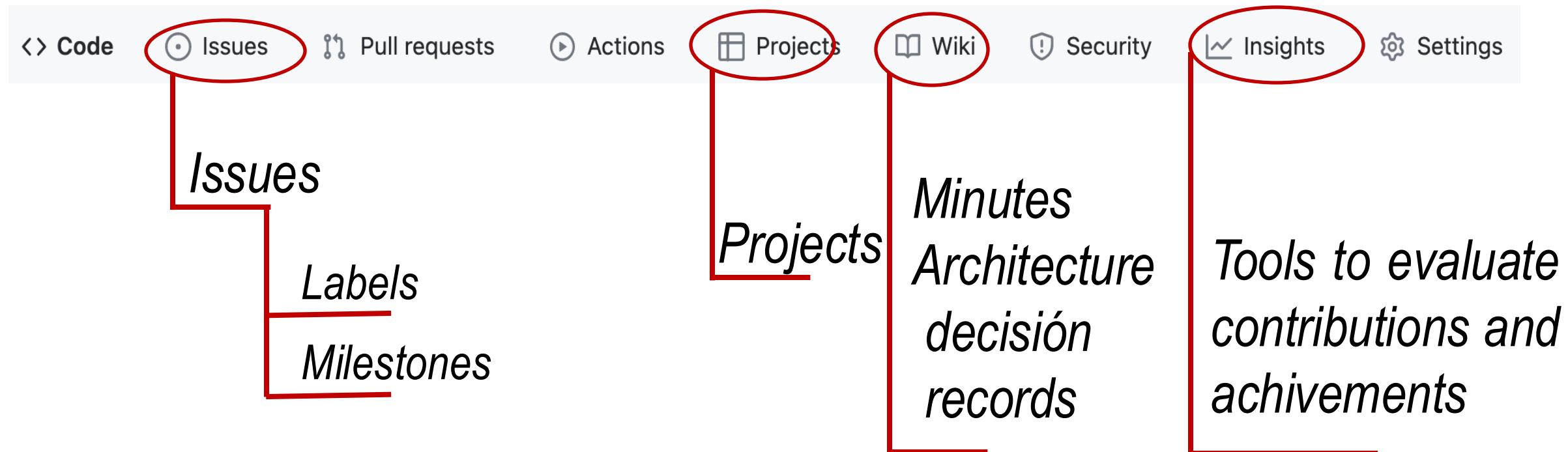
# ● GitHub as a Project management tool

## Advantages of Project management

- Project planning (future)
- More control over current project's state (present)
  - Detect bottlenecks.
  - Share work load between team members.
  - Current problems.
- Report achievements (Past).
  - Evaluate each member's contributions to the project

# GitHub

Some tools provided by github for Project management





# GitHub

Backlog		To Do		In progress		Done		Future	
<span>1</span> Create Docker image for project	... magisolutions-simons-server#10 opened by jfory7	<span>1</span> Colombia shapefile (impl.json) should be fetched from api rather than be required in react app.	... magisolutions-simons-server#10 opened by miketab	<span>1</span> Add contributing guidelines	... magisolutions-simons-server#10 opened by jfory7	<span>1</span> Rename tool suite (run-tests.sh), add comments.	... magisolutions-simons-server#10 opened by jfory7	<span>1</span> Add TestNG	... magisolutions-simons-server#10 opened by jfory7
<span>1</span> Throw errors for missing dependencies	... magisolutions-simons-server#12 opened by jfory7	<span>1</span> Fix "No lines" issue in react-app/src/public-lib.js	... magisolutions-simons-server#12 opened by jfory7	<span>1</span> Determine where to begin writing tests and refactoring	... magisolutions-simons-server#10 opened by miketab	<span>1</span> Refactor WebglobeLayer.js	... magisolutions-simons-server#11 opened by jfory7	<span>1</span> Add CodeClimate maintainability + test coverage checks to CI	... magisolutions-simons-server#10 opened by jfory7
<span>1</span> Curling results in empty response, server crashes	... magisolutions-simons-server#10 opened by jfory7	<span>1</span> Comment and refactor code in action-select-country.js	... magisolutions-simons-server#10 opened by miketab	<span>1</span> Map relationships between apps, regions, and azure resources.	... magisolutions-simons-server#11 opened by miketab	<span>1</span> Create production/staging dev deployment slots for Mobility Mapping	... magisolutions-simons-server#10 opened by miketab	<span>1</span> Add TravisCI and CodeClimate tests	... magisolutions-simons-server#10 opened by jfory7
<span>1</span> Serve aggregations by admin level	... magisolutions-simons-server#11 opened by miketab	<span>1</span> Add disclaimer popup on load	... magisolutions-simons-server#11 opened by miketab	<span>1</span> Mobility: Map should display data for mobility being displayed	... magisolutions-simons-server#12 opened by miketab	<span>1</span> Set up automatic CI testing for new pull requests	... magisolutions-simons-server#11 opened by jfory7	<span>1</span> Add loading spinner to mobility map	... magisolutions-simons-server#17 opened by miketab
<span>1</span> Base API in Swagger Spec Has Extra /	... magisolutions-simons-server#10 opened by shertosa	<span>1</span> ReactFigure logic code to work in production	... magisolutions-simons-server#10 opened by miketab	<span>1</span> Add spinner mobility	... magisolutions-simons-server#11 opened by canestor	<span>1</span> Add CodeClimate maintainability + test coverage checks to CI	... magisolutions-simons-server#10 opened by jfory7	<span>1</span> Add TravisCI and CodeClimate tests	... magisolutions-simons-server#10 opened by jfory7
<span>1</span> Use arguments to overwrite default configurations	... magisolutions-simons-server#24 opened by canestor								
<span>1</span> Return hasProbData in API response for schools	... magisolutions-simons-server#11 opened by syzor07								
<span>1</span> expired token warning gets crammed by filehandle library and return html instead of json	... magisolutions-simons-server#11 opened by miketab								
Automated in: To-do		Automated in: In progress		Automated in: Done		Automated in: Future		+ Add column	
Manage		Manage		Manage		Manage			



# Project tab

- It is possible to create KanBan projects
- Automate workflow managing also issues and pull requests
- It is possible to create different dashboards (docs, backend,...)

Code Issues Pull requests Actions Projects ...

Projects ▾

Q is:open

0 Open 0 Closed Sort ▾

There aren't any projects yet

Create a new project

Coordinate, track, and update your work in one place, so projects stay transparent and on schedule.

Project board name

Description (optional)

Project template

Save yourself time with a pre-configured project board template

Template: None ▾

Create project

Automation options



# Issues

They are like post-it in a **Kanban** project

👉 Each problem, task or even question related with the Project can have a issue.

They use **Markdown**.

Recommended to write only the necessary to understand the issue. You can add pictures or links

**It is the main part of a Project** and can be used to understand the state of the project.

An Issue can be related with other entities in a github repo.

People 

Labels 

Milestones 



**We only assess information that appears in the github repo**



# GitHub



## Investigate to what extent HTTPS should be mandatory #1091

[New issue](#)

Issue status

Open

RubenVerborgh opened this issue on 9 Dec 2021 · 2 comments

Problem explanation

Comments



RubenVerborgh commented  
on 9 Dec 2021

Member



...

In some previous testing, I have come across preliminary evidence that some Solid-related functionality only works over HTTPS. In particular, when running Mashlib as the on-server UI, authentication seems to break because the server is not running over HTTPS.

Whereas this is actually a question for the bigger Solid ecosystem, we can test some assumptions on CSS and turn them into recommendations.

If the answer is that some functionality only works over HTTPS, then we might want to make CSS start over HTTPS out of the box (e.g., by auto-generating `localhost` certificates etc.).



RubenVerborgh added the `task` label on 9 Dec 2021

Assignees

RubenVerborgh

Assigned to

Labels

task

Projects

None yet

Milestone

No milestone

Milestones

Linked pull requests

Successfully merging a pull request may close this issue.

None yet

Issue log

Corresponding pull request

# ● GitHub

## Labels

- Labels can be used to catalog issues.
- Generic labels from GitHub
- You can create your own labels (backend, frontend, bbdd, hierarchies)
- You can personalize color and even use emojis .

# GitHub

The screenshot shows a GitHub repository interface with the following elements:

- Header:** Code, Issues (105, highlighted), Pull requests (13), Discussions, Actions, Projects (1).
- Labels:** Labels (selected), Milestones, Search all labels.
- Section:** 32 labels.
- Issues:** A list of issues with labels and counts:
  - worker threads: Making the server multithreaded (5)
  - bug: Something isn't working (17)
  - dependencies: Pull requests that update a dependency file (5)
  - developer experience (5)
  - difficulty:high (2)
  - difficulty:low (13)
  - difficulty:medium (9)

Annotations with arrows and text:

- Label name** (blue arrow) points to the 'worker threads' label.
- Short description** (blue arrow) points to the description of the 'Making the server multithreaded' issue.
- Number of labelled issues** (blue arrow) points to the count (17) of issues labeled 'bug'.
- Common hierarchies priorities** (blue bracket) groups the 'difficulty:high', 'difficulty:low', and 'difficulty:medium' labels.
- use to in give** (blue text) is positioned to the right of the difficulty labels.

Label	Description	Count
worker threads	Making the server multithreaded	5
bug	Something isn't working	17
dependencies	Pull requests that update a dependency file	5
developer experience		5
difficulty:high		2
difficulty:low		13
difficulty:medium		9

# You can use arquisoft FAQ for questions

<https://github.com/Arquisoft/faq/issues>

- Share questions about the course
- It is allowed to add any issue that describes some question in either English or Spanish,
  - Anyone can contribute answering the question or adding any comment.
  - Contributors must follow a code of conduct that respects the ethical considerations from a University of Oviedo Course.
- The teachers can remove any issue or contribution that they consider inappropriate for the course.

# Additional links

- Introduction to git [Git](#).
- [Quick reference](#) from Pablo Gonzalez
- Short [introducción a git](#) (Hugo)
- Git: the simple guide
  - <https://rogerdudler.github.io/git-guide/index.html>
- [learngitbranching.js.org](#)

# Additional Doc

- [Miguel Angel Durán](#) channel and his initial guide [Aprendiendo Git](#).

Youtube

- [Git explanation in 15 minutes](#)
- [Tutorial](#) for beginners
- [GitHub vs GitLab](#)

# Lab assignment of this year



Description:

<https://arquisoft.github.io/course2526.html#labs>

# 1st deliverable

- Documentation, version 0.1
- 1st Proof of concept
- App deployed
  - WebApp invoking GameY
  - WebApp accessing Database

