Practical session

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April 11, 2019

GitHub account

Tips about the name account:

- Use your actual name!
- Shorter is better than longer!
- Be as unique as possible!
- Re-use your name from other context, e.g. , , !

Git is already installed?

To check that go to shell (terminal / command line / console) and enter **which git** to request the path to your Git executable:

```
1 which git
```

Then enter **git –version** to see its version:

```
1 git --version
```

If git is not installed YET: See ★Install git to follow the correct steps to install git according your system operative! :)

Introduce yourself to Git

Let **git** to know about you, following this simple configuration steps!

```
# Example
git config --global user.name "Criscely Lujan"
git config --global user.email "criscelylujan@gmail.com"
git config --global core.editor vim
git config --global --list
```

- **user.name** can be your username. Your commits will be labelled with this name, so this should be informative!
- **user.email** must be the email that you use to sign up for GitHub.
- **core.editor** There are diverse options of ★Git editor.

How authenticating yourself with GitHub

There are two options of protocols for secure communication working over a computer network!

1. **Hypertext Transfer Protocol Secure (HTTPS)**:
If you plan to work using HTTPS protocol, you can follow ★*Cache credential for HTTPS* for more information.

2. **Secure Shell (SSH)**:
If you plan to work using SSH protocol, you can follow ★*Set up keys for SSH* for more information.

Exercise 1: Cloning a repository

- Go to the repository of the Git training: `https://github.com/umr-marbec/git-training`.
- Explore the repository: number of commits, contributors, stars, ...
- Have a look of the README file.
- Clone the repository on your computer.
- Explore its content in your computer.

Exercise 1: Cloning a repository using terminal

- Create a new directory, open it in terminal and perform the following code:

```
git init # to create a new git repository
```

- Clone the repository running the following command plus the path of the repository to be cloned:

```
git clone git@github.com:umr-marbec/git-training.git #path used as example
```

This path is copied from the repository that we will be cloned.

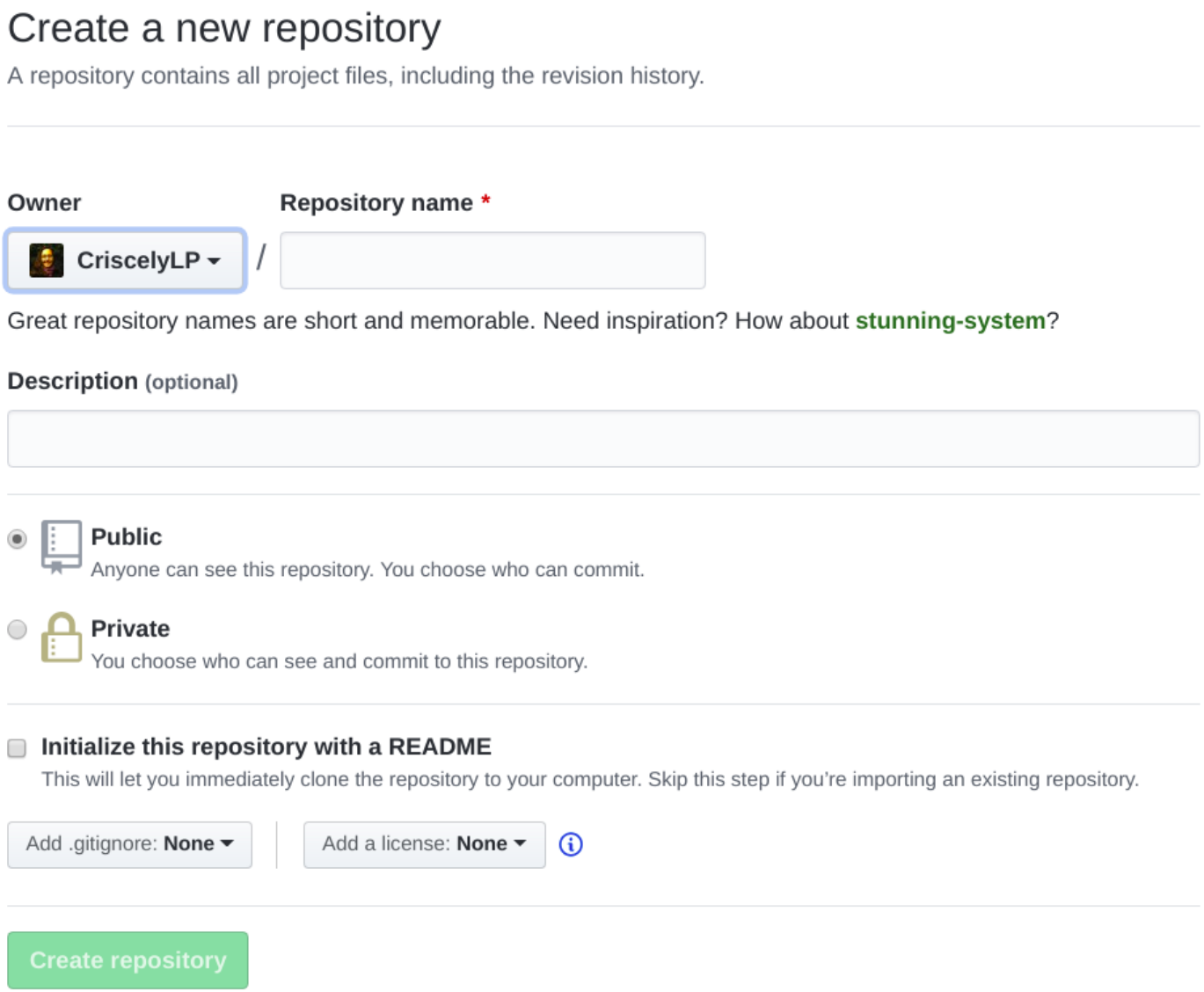
Exercise 1: Cloning a repository using RStudio

- File / New project.
- Version control.
- Git.
- Fill **Repository URL** and project name (what you want the folder to be called locally).

Exercise 2: Creation of a repository

- Go to GitHub and login. Click in the green box called **New repository**.
- If you are on your own profile page, go to the section **Repositories**, then click the green box called **New**.
- Assign a name for the **repository** and include a **description** (this is optional but is recommended!).
- Public or private.
- Initialize the repository without the **README**.

Exercise 2: Creation of a repository

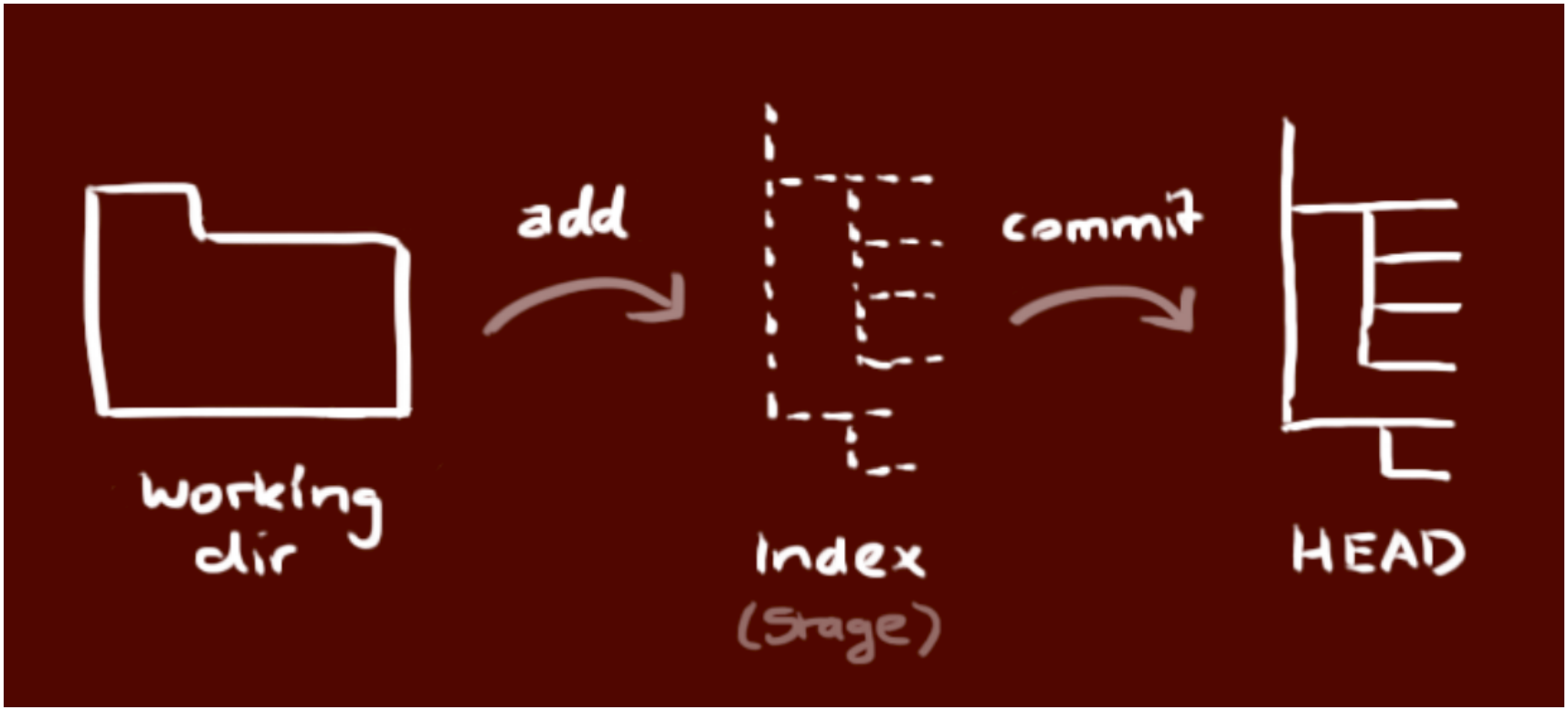


Exercise 2: Creation of a repository

- Go to your GitHub profile and see the section called Repositories!.
- Clone the repository already created (following steps in exercise 1) in your computer!

Workflow

Your local repository consists of three trees maintained by git.



Exercise 3: Make changes in the cloned repository

- After clone the repository on your computer, you are able to make changes using **add**, **commit**, and **push**:

```
1 git add <filename> # adding changes for specific file
2 git add . # adding all changes
3 git commit -m "Commit message" # changes commited to the
      HEAD
4 git push origin master #  changes to the remote repository
```

- Check the changes in your remote repository.

Exercise 4: TODO!! About the conflicts

- How we can talk about it? or how to do it?

Exercise 5: TODO!! About the git flow

- How we can talk about it? or how to do it?