UNIVERSITÀ DEGLI STUDI DI NAPOLI

FEDERICO II

Developer
Academy

How can I work on a software project **with my group**?

Versioning

Repository

Repository

A place where you can **store** and **share** your code.

A repository contains all of the **project files** and stores each file's revision history.

Repositories can have **multiple collaborators** and can be either **public** or **private**

Repository
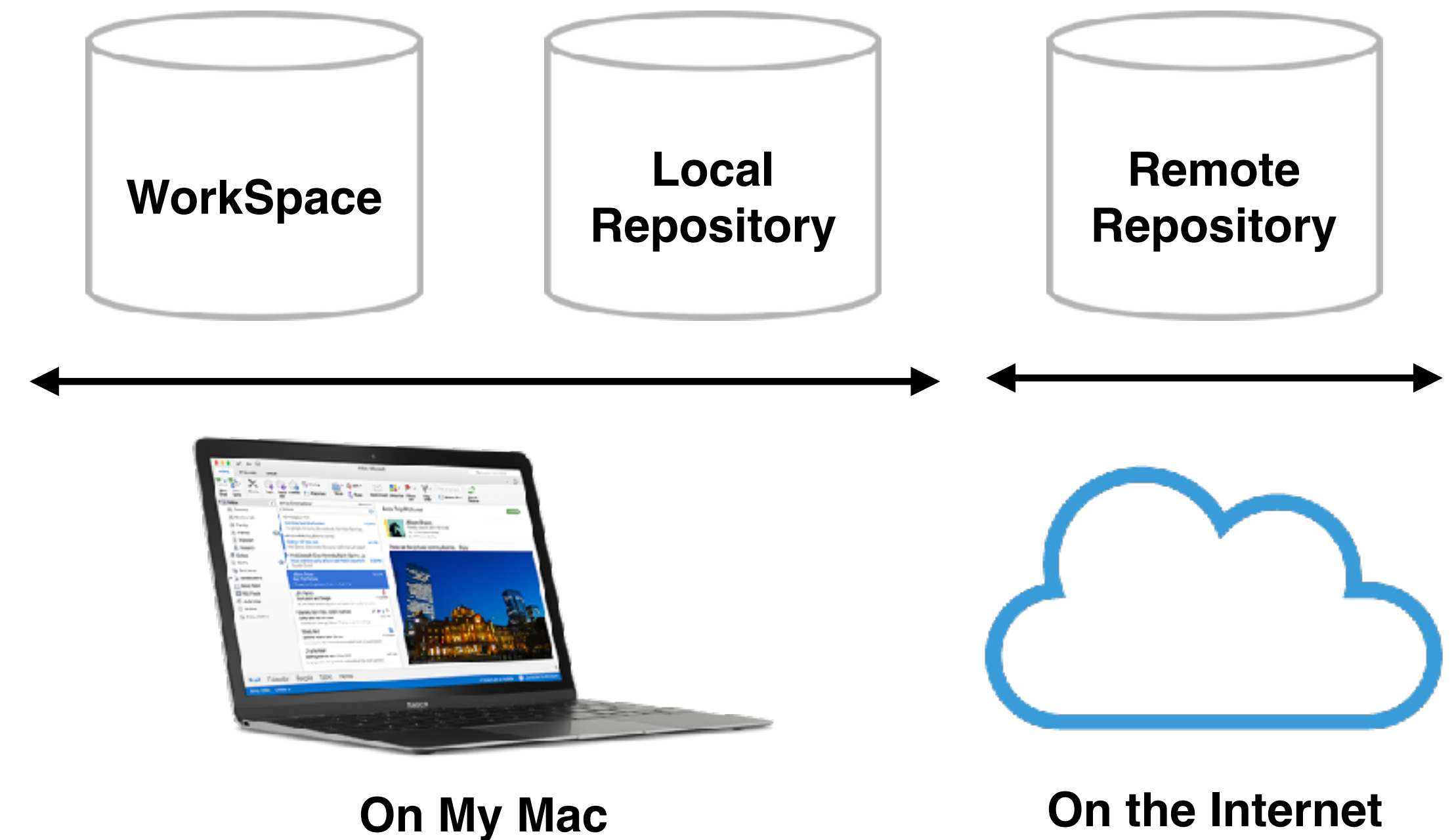## Local and Remote

WorkSpace

A directory that holds the actual files.

Local Repository

Where you make local changes, typically this local repository is in our computer

Remote Repository

Is the one in a server, typically a machine situated at 42 miles away.

WorkSpace   **Local Repository**   **Remote Repository**

On My Mac   **On the Internet**

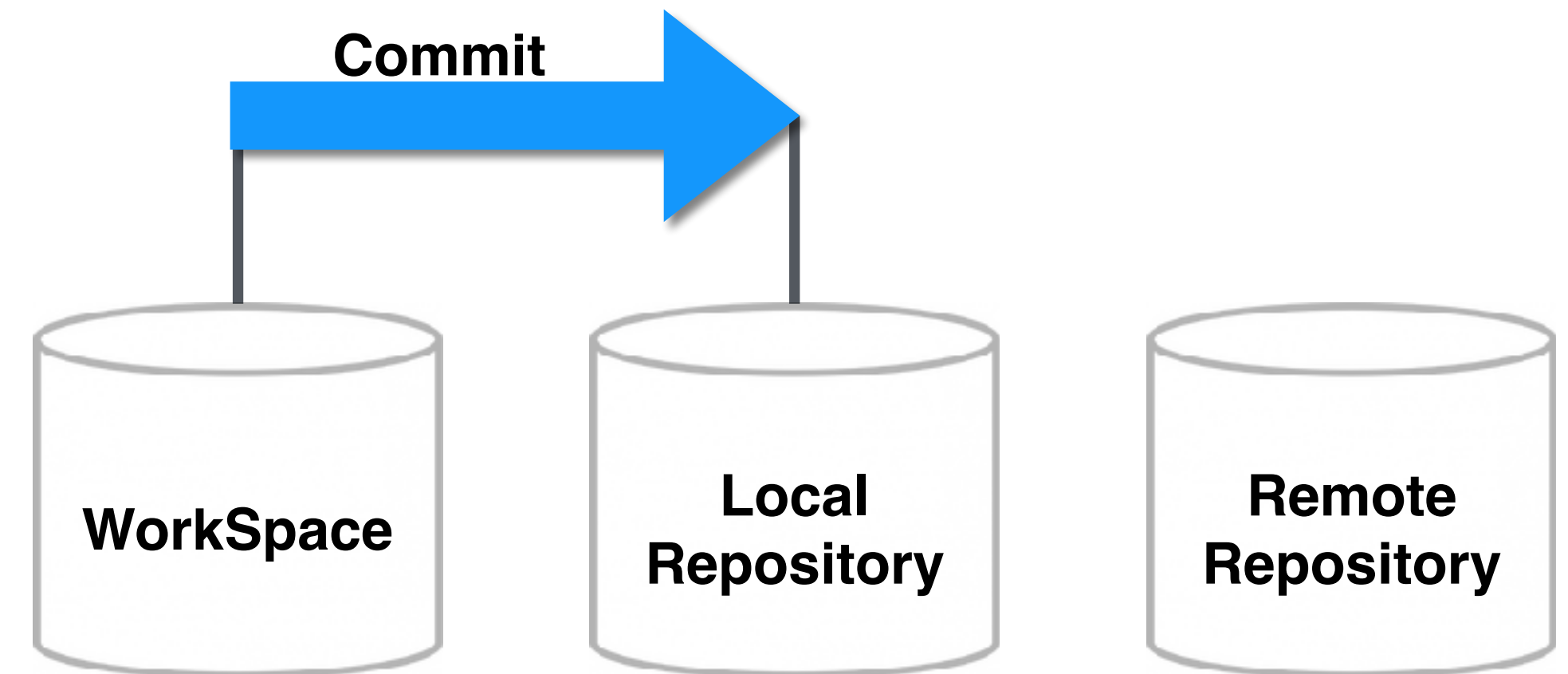# How can I **make changes** in my repository?

Commit and push

Applying changes
Commit and Push

Commit

Records the **changes** you made in your workspace in your local repository.
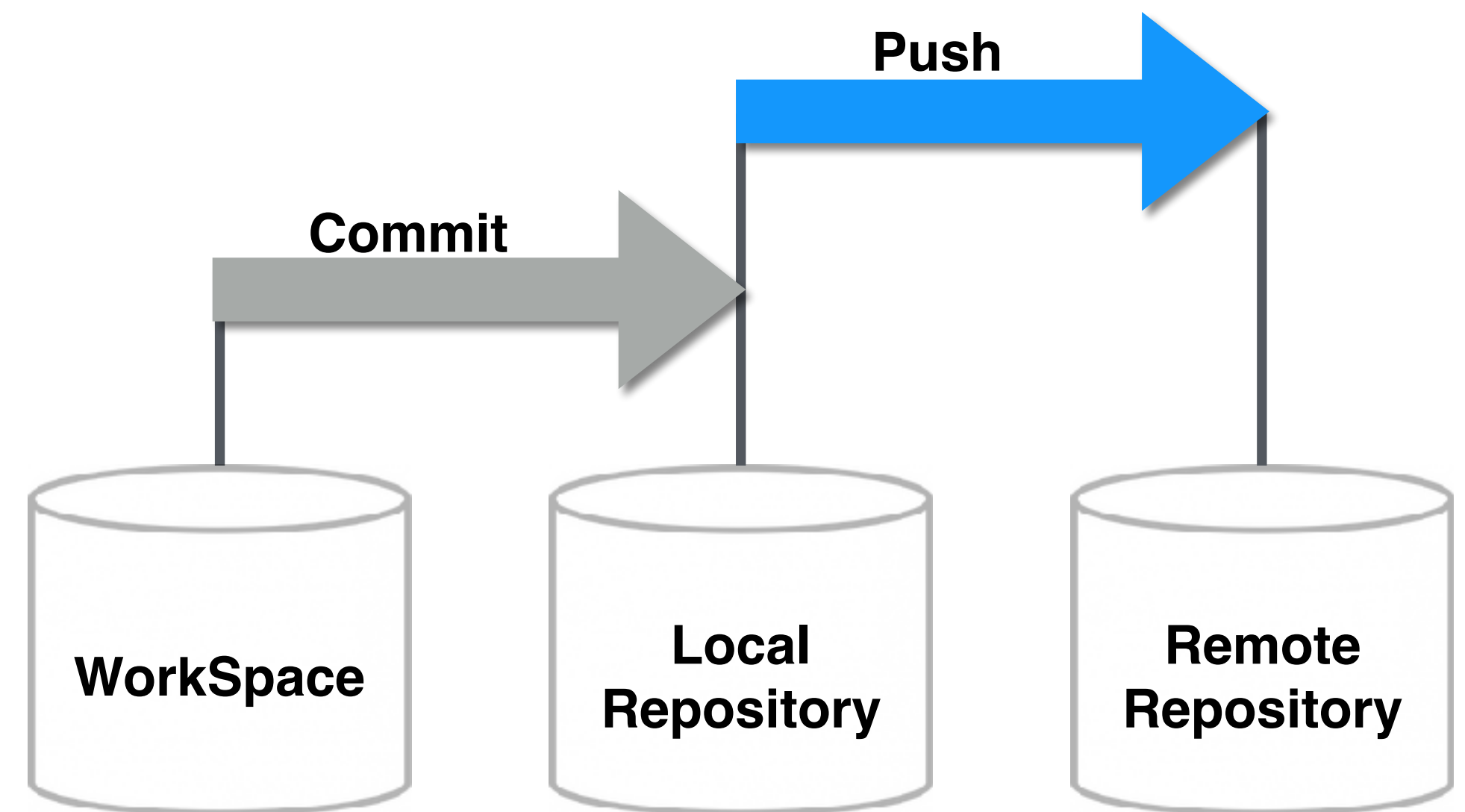
Applying changes
Commit and Push

Commit

Records the **changes** you made in your workspace in your local repository.

Push

Update the remote repository with the changes you committed in the local repository.

And what if my friend made changes, how do I update my repository?

Fetch, Merge and Pull
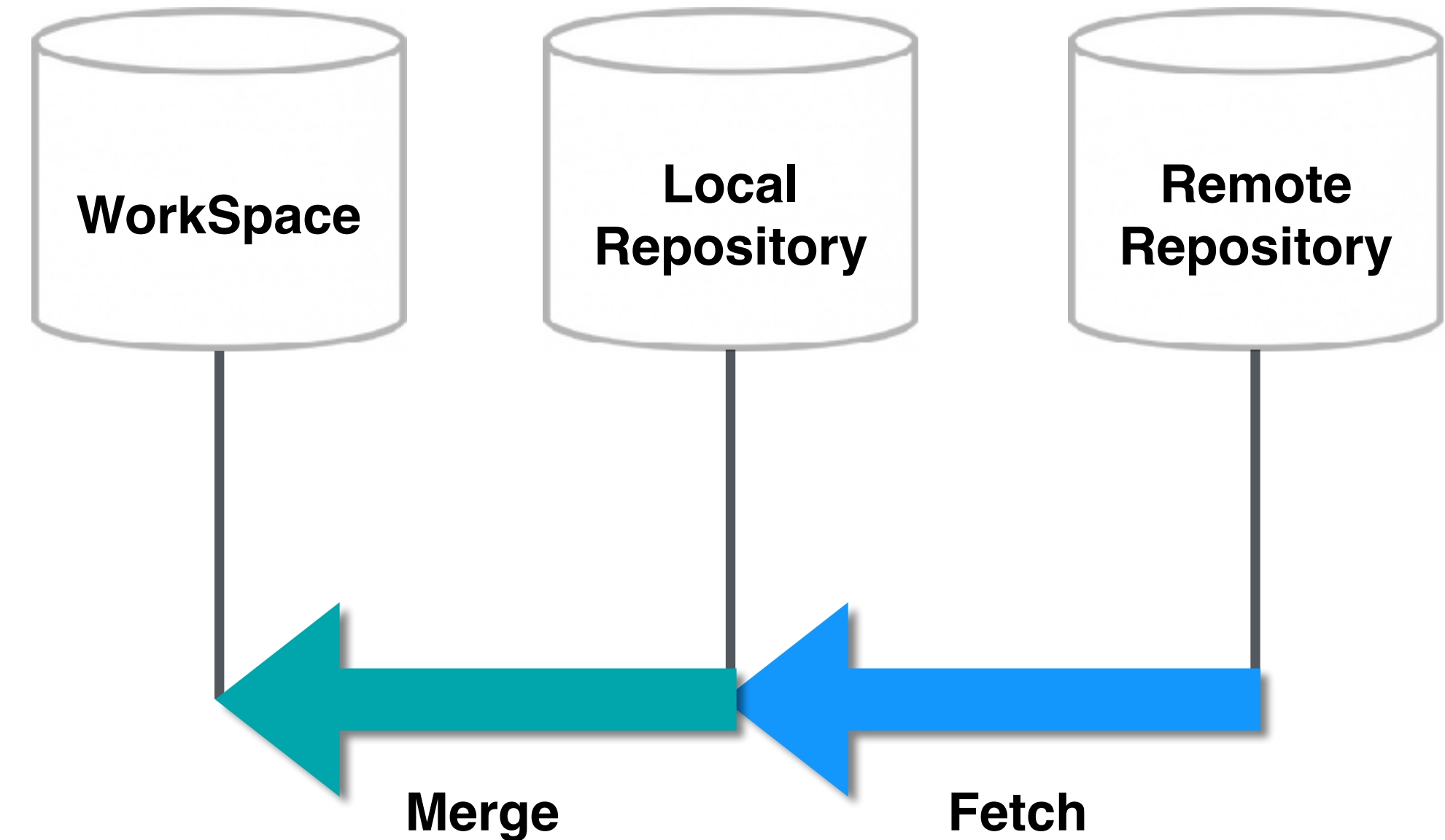
Updating your local repository
Fetch, Merge, Pull

Fetch

Download the changes from the remote repository, but don't merge them.

Merge

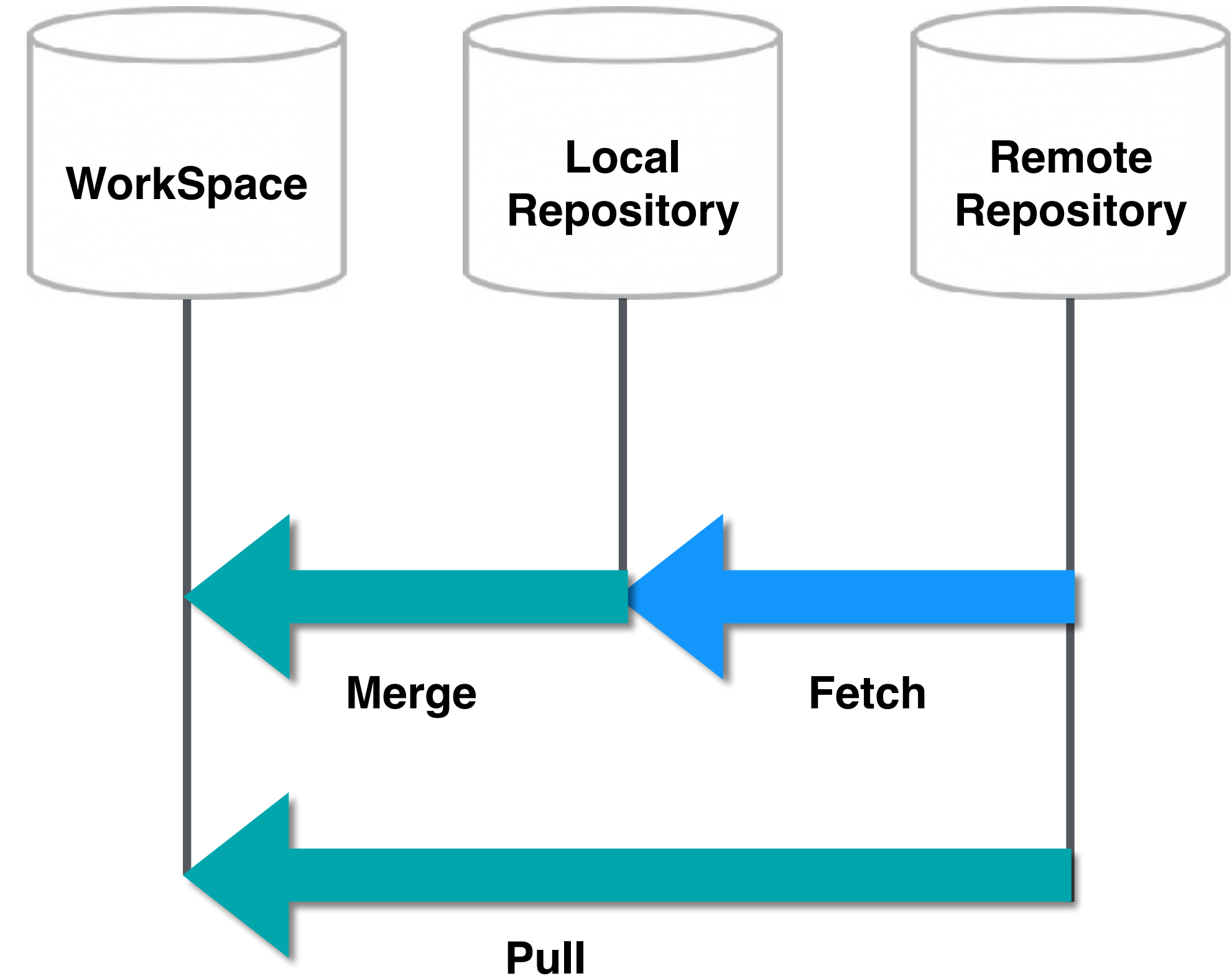**Apply the changes** to your working space.

Updating your local repository
Fetch, Merge, Pull

Pull

In simple terms a pull is **a fetch + a merge**.

It **updates your local** with its the latest changes and **merges everything** to your current branch.

Which **software** do I use to have access to those tools?

Git

Versioning Platforms

- public repo
- private repo (max 5 users)
- sourcetree gui
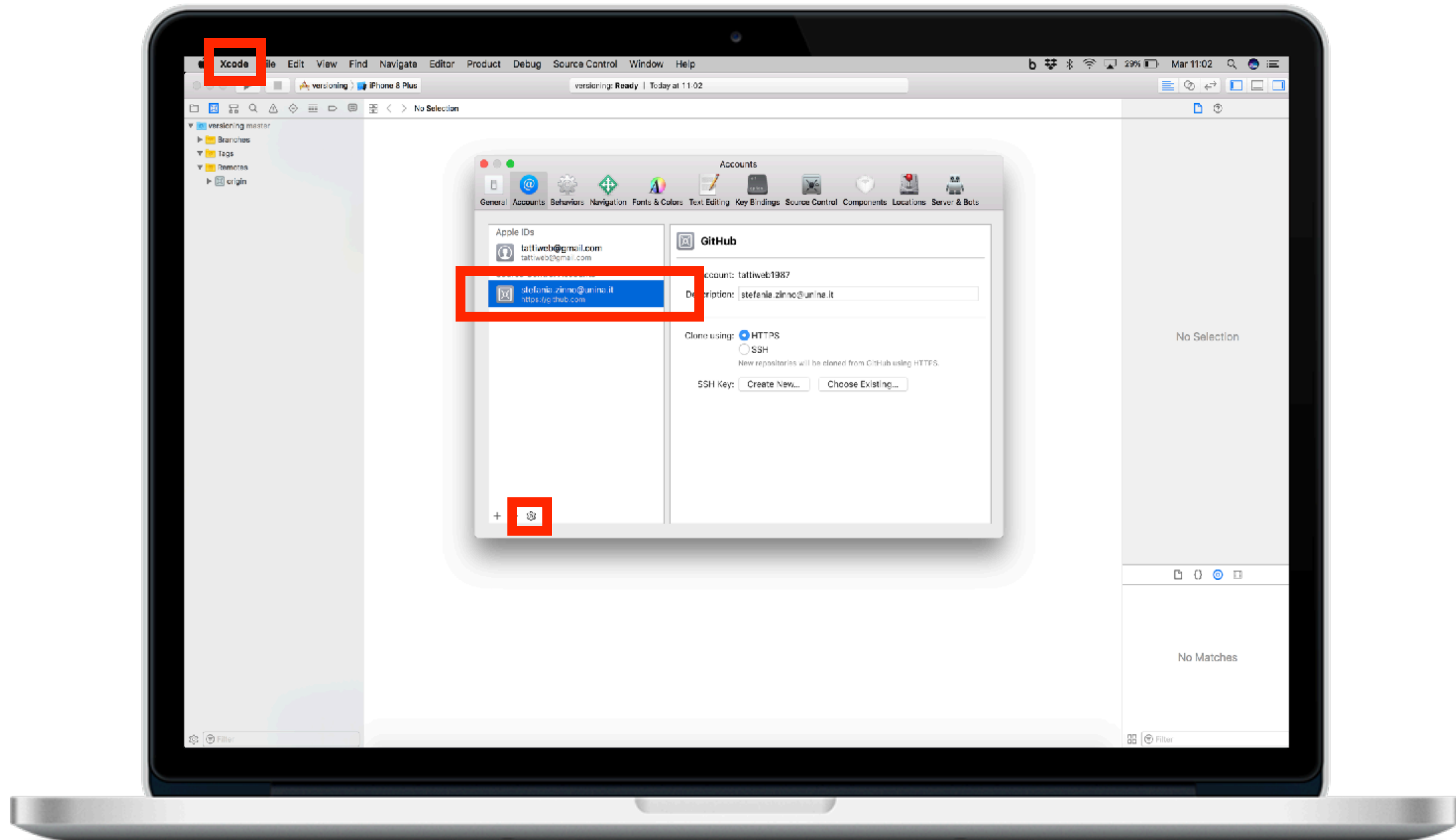

- public repo
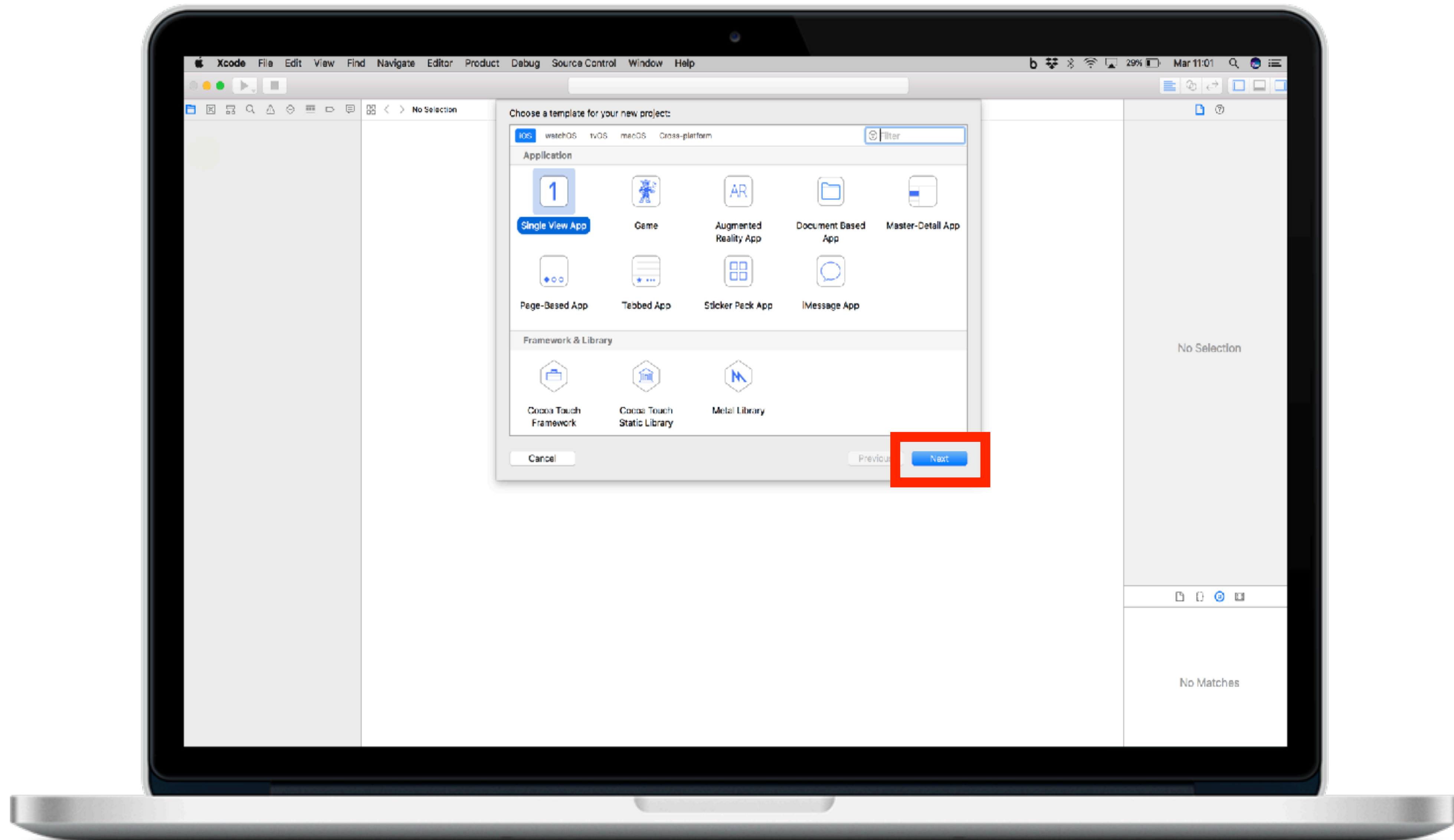- private repo

- public repo
- Very popular
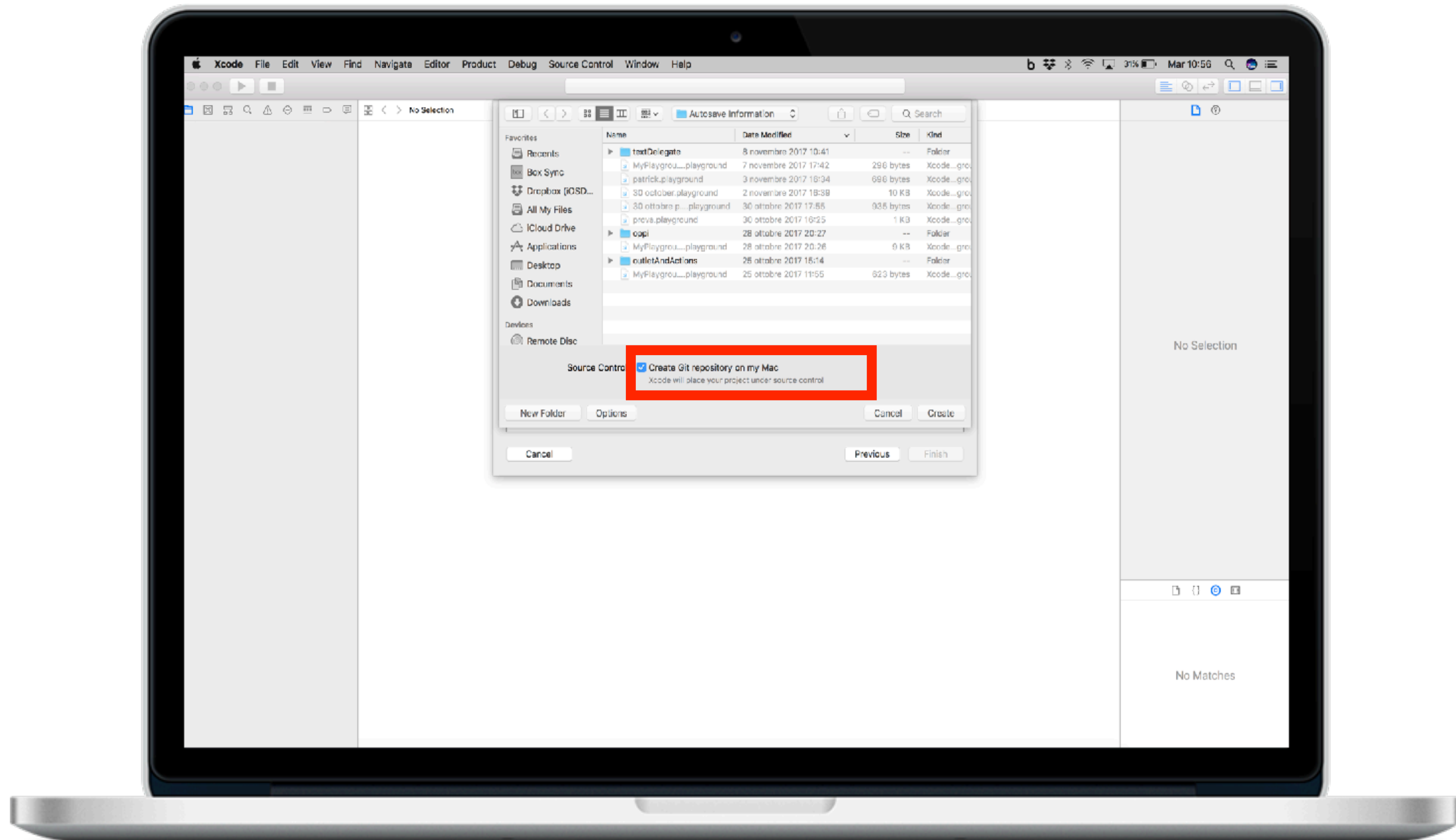
How can I use git in my Xcode project?

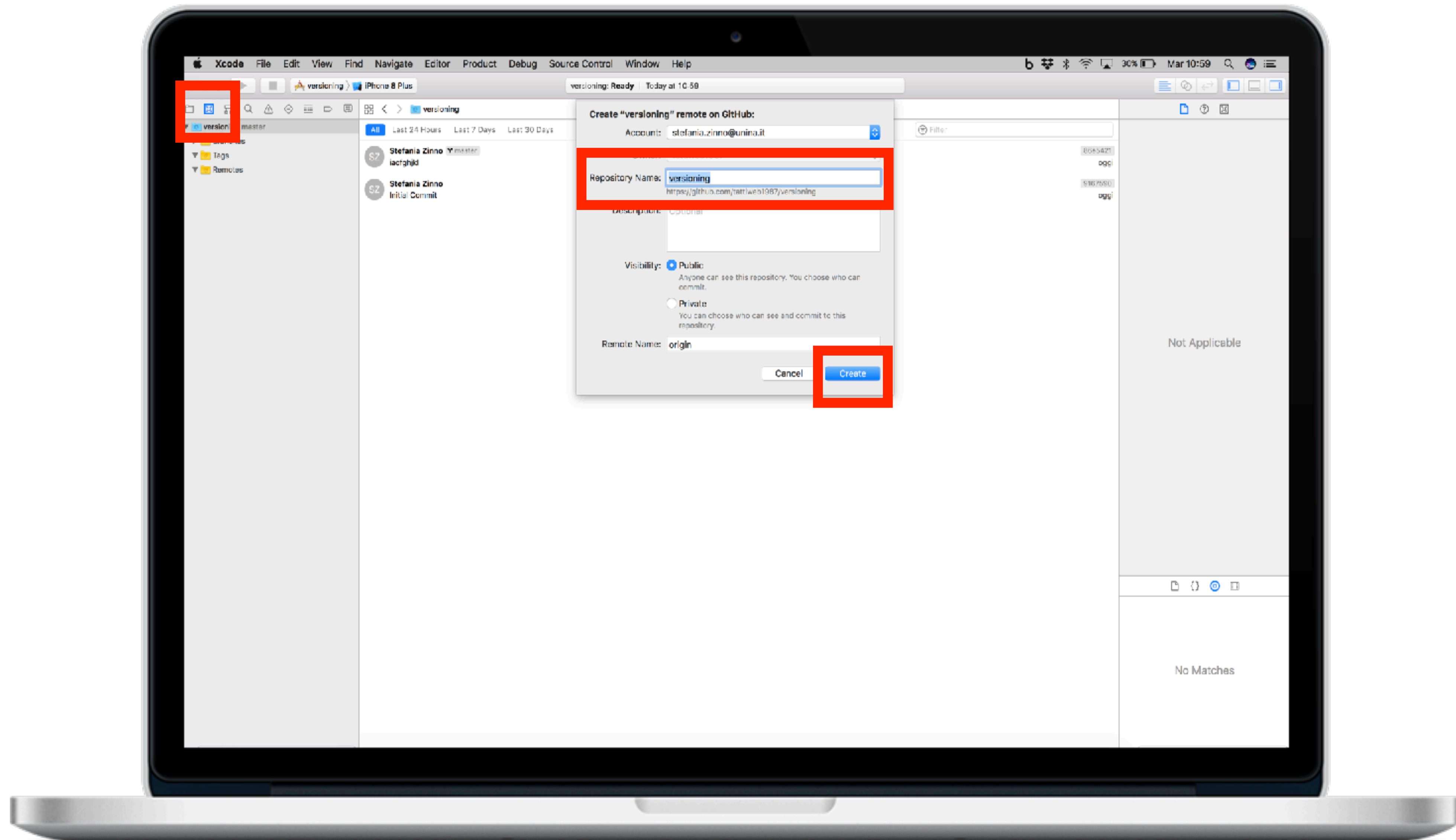Let's start!
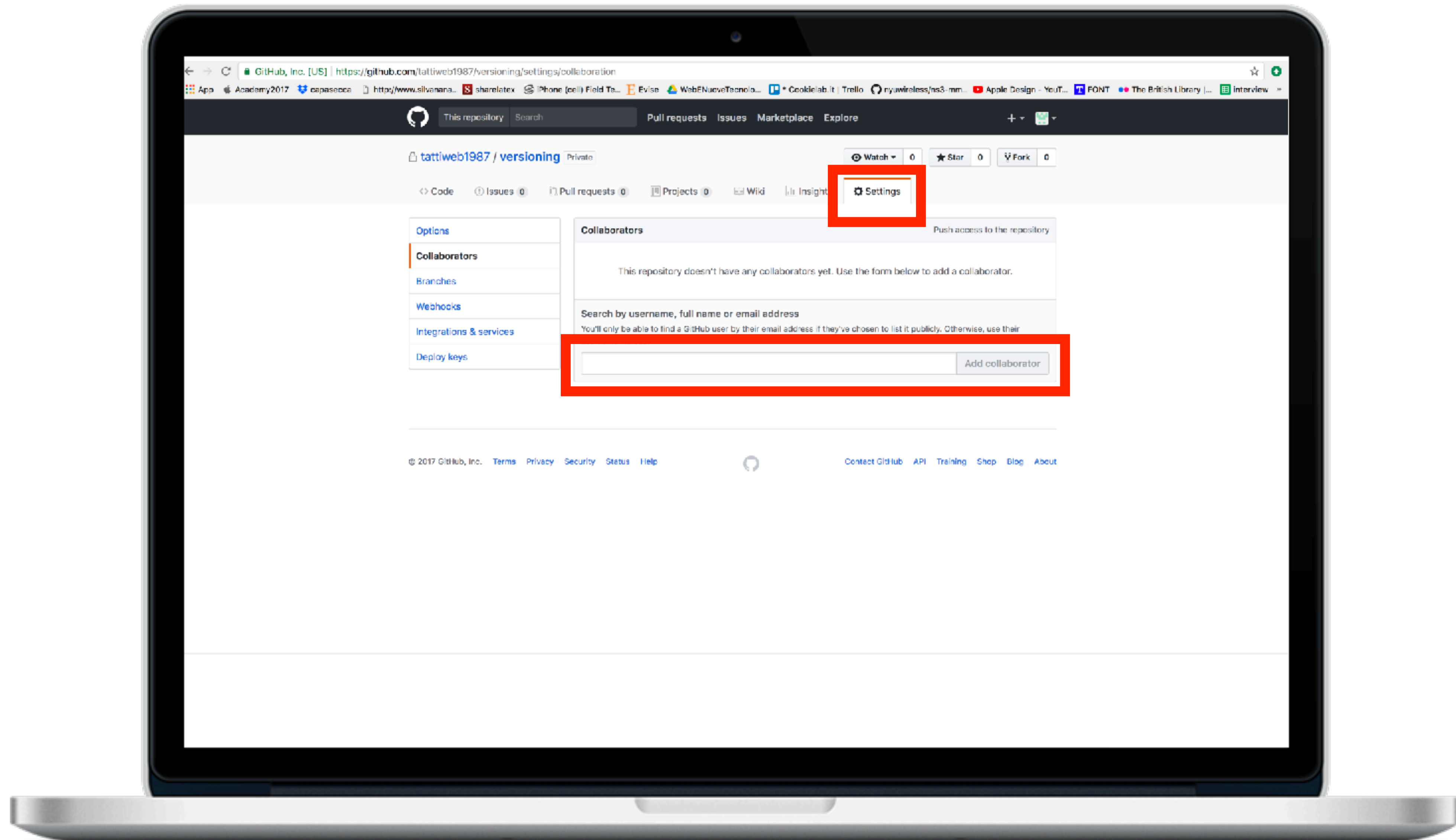
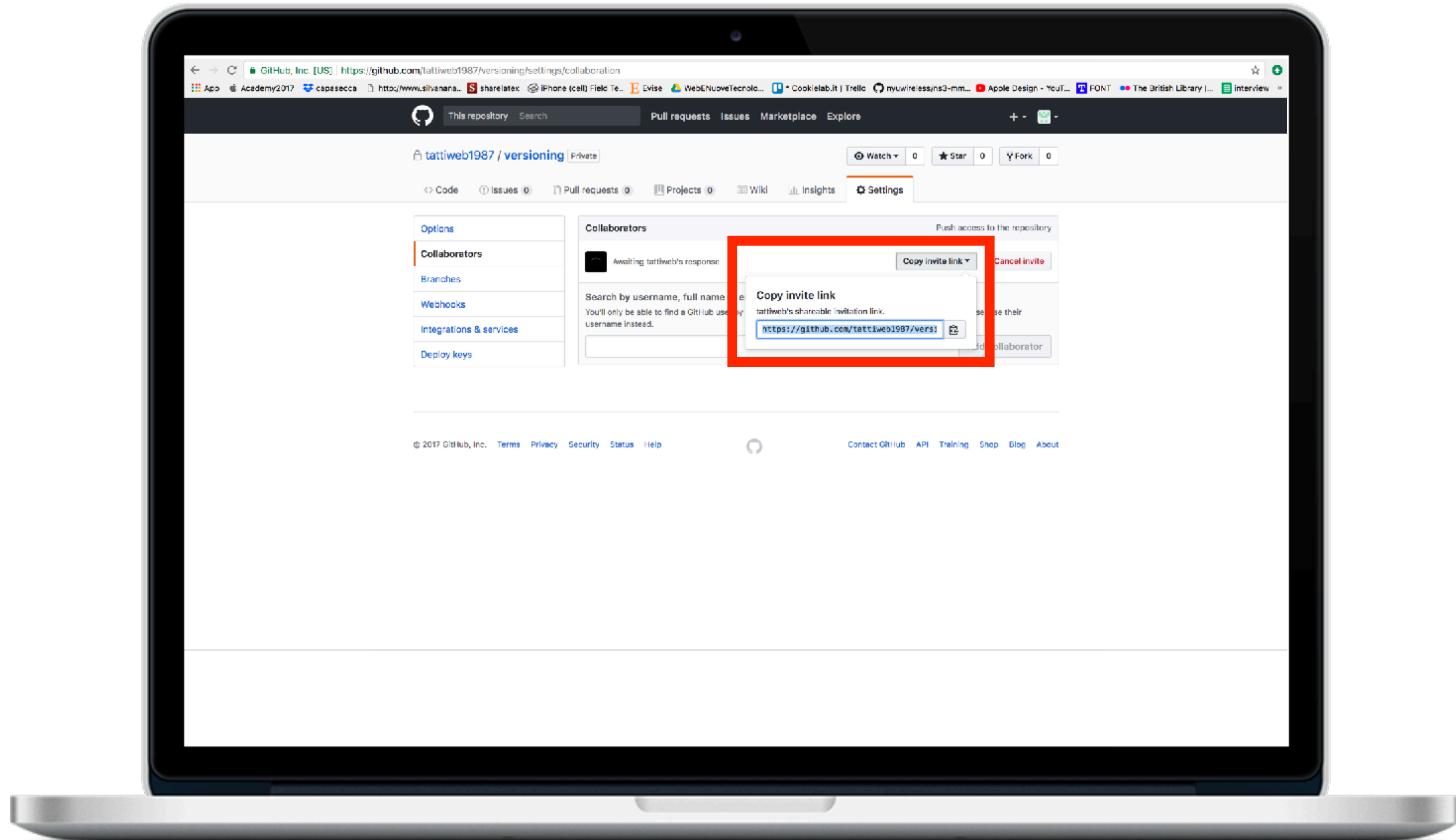# Add your GitHub Account

Create Project

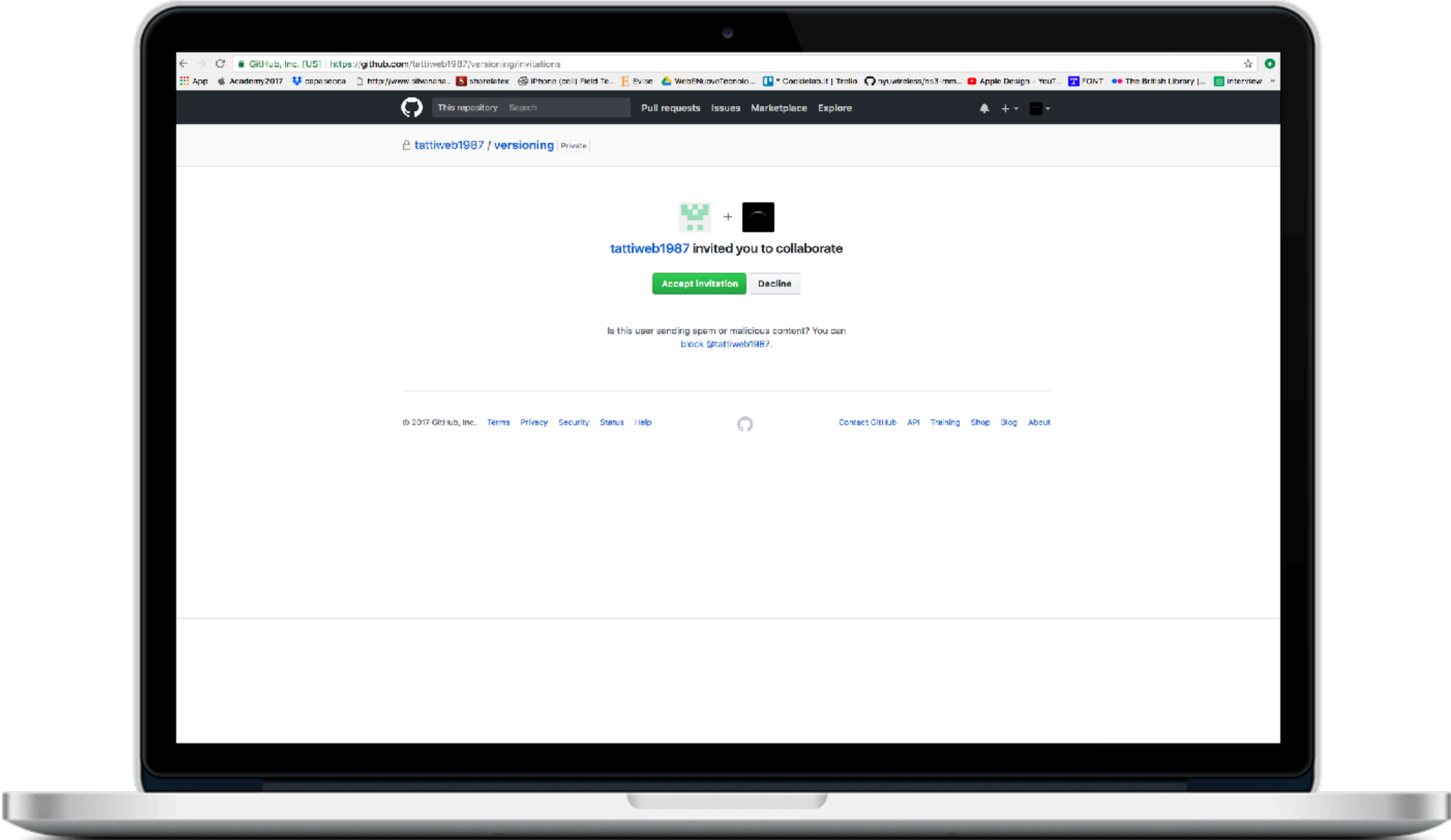# Create Git Repository on Mac
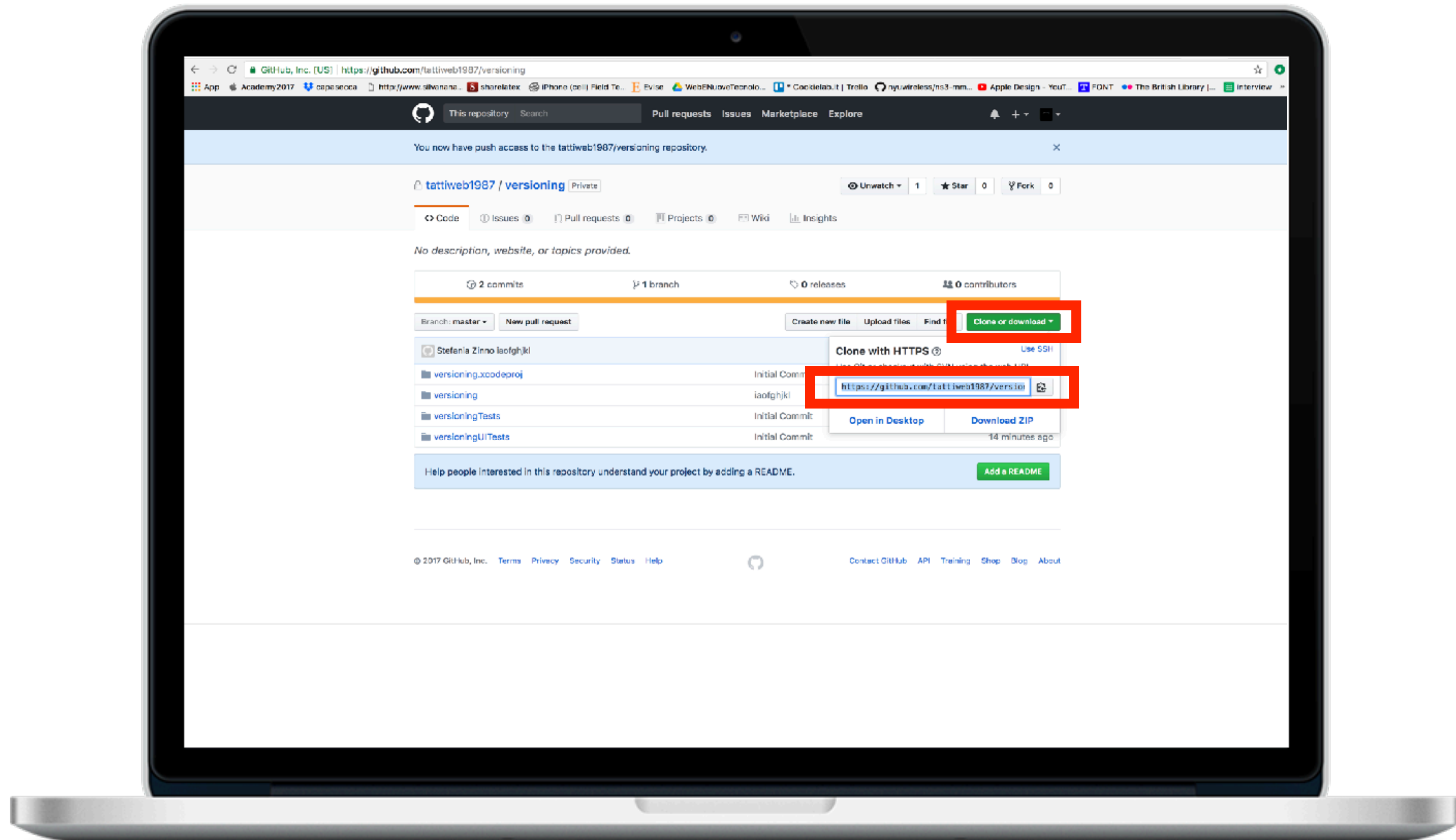
Repository Naming

Add Collaborator

Copy Invitation Link

Received Invitations

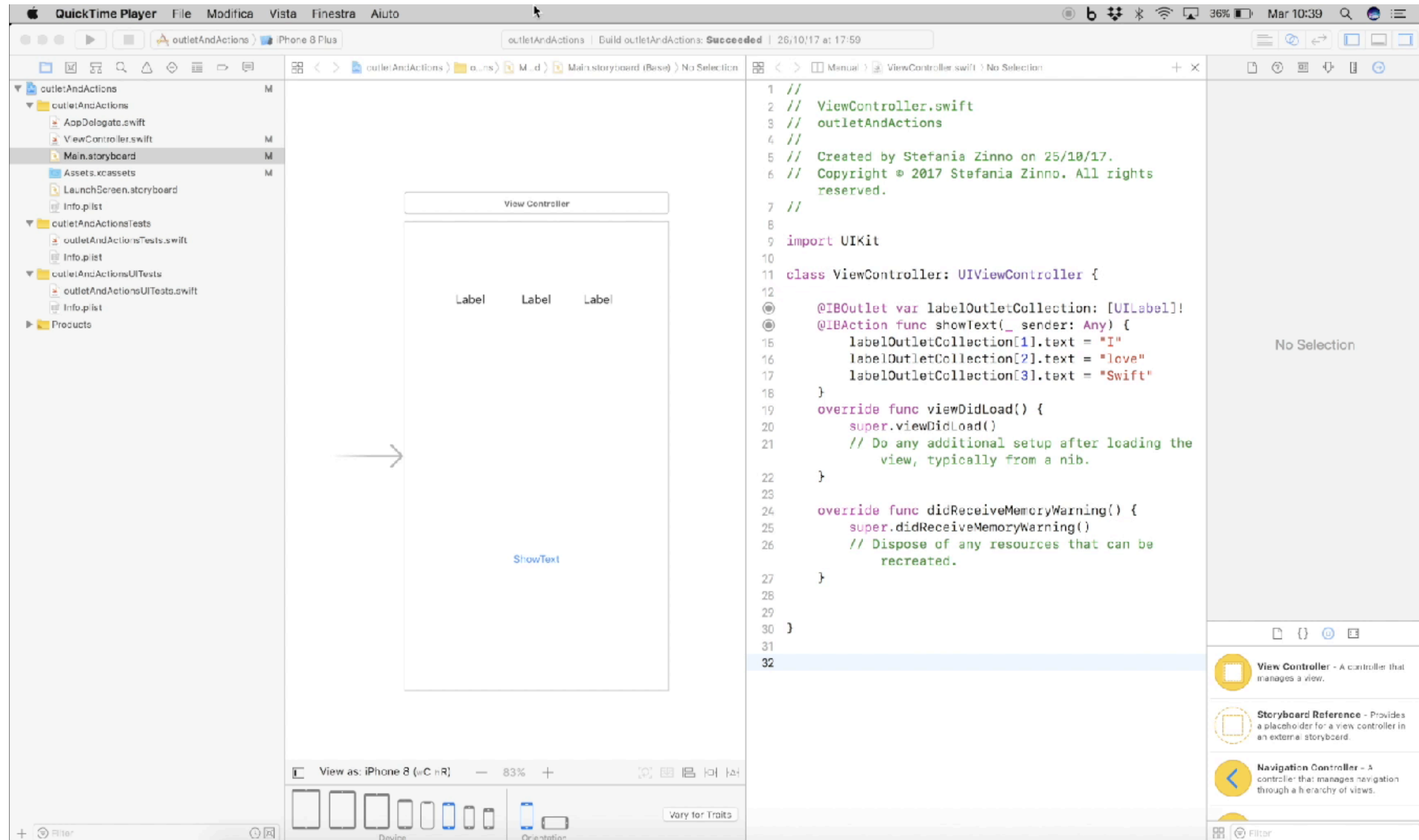# Clone Repository

I made changes to my code. How can I share it with my group?

Your first Commit and Push
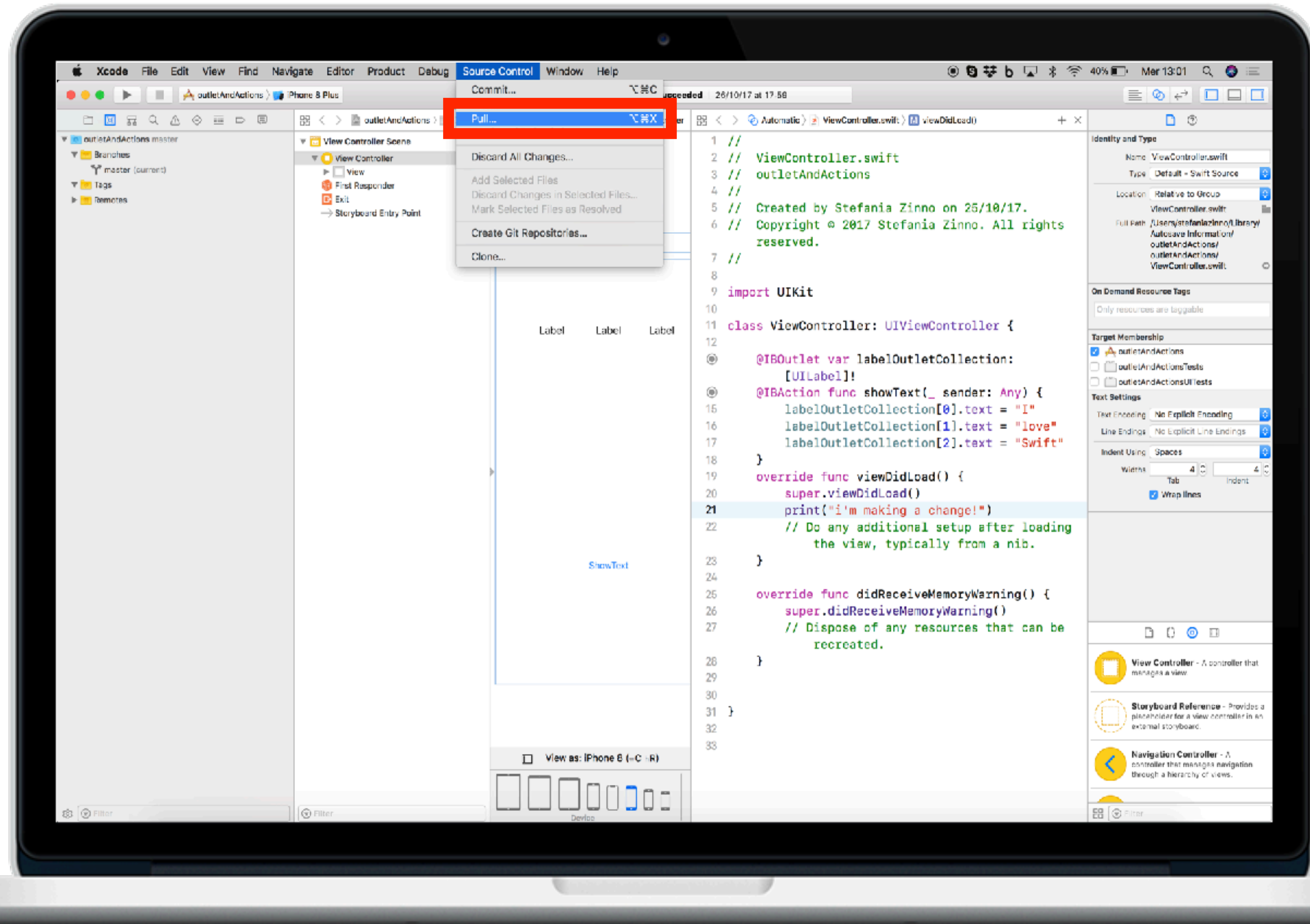
Commit and Push

What if my group made changes? How can I **update** my local project with their changes?
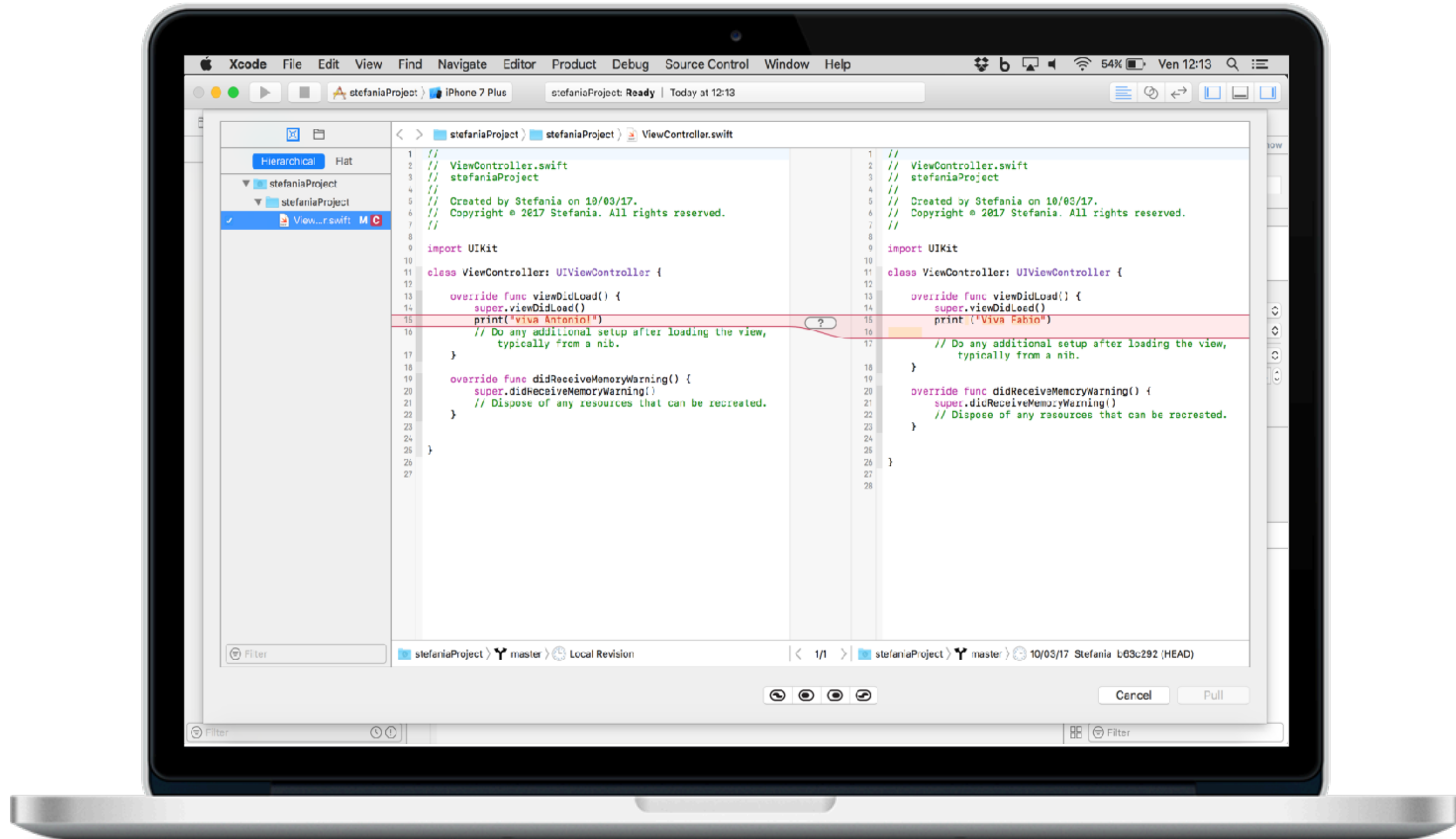
Pull and Merge

Pull

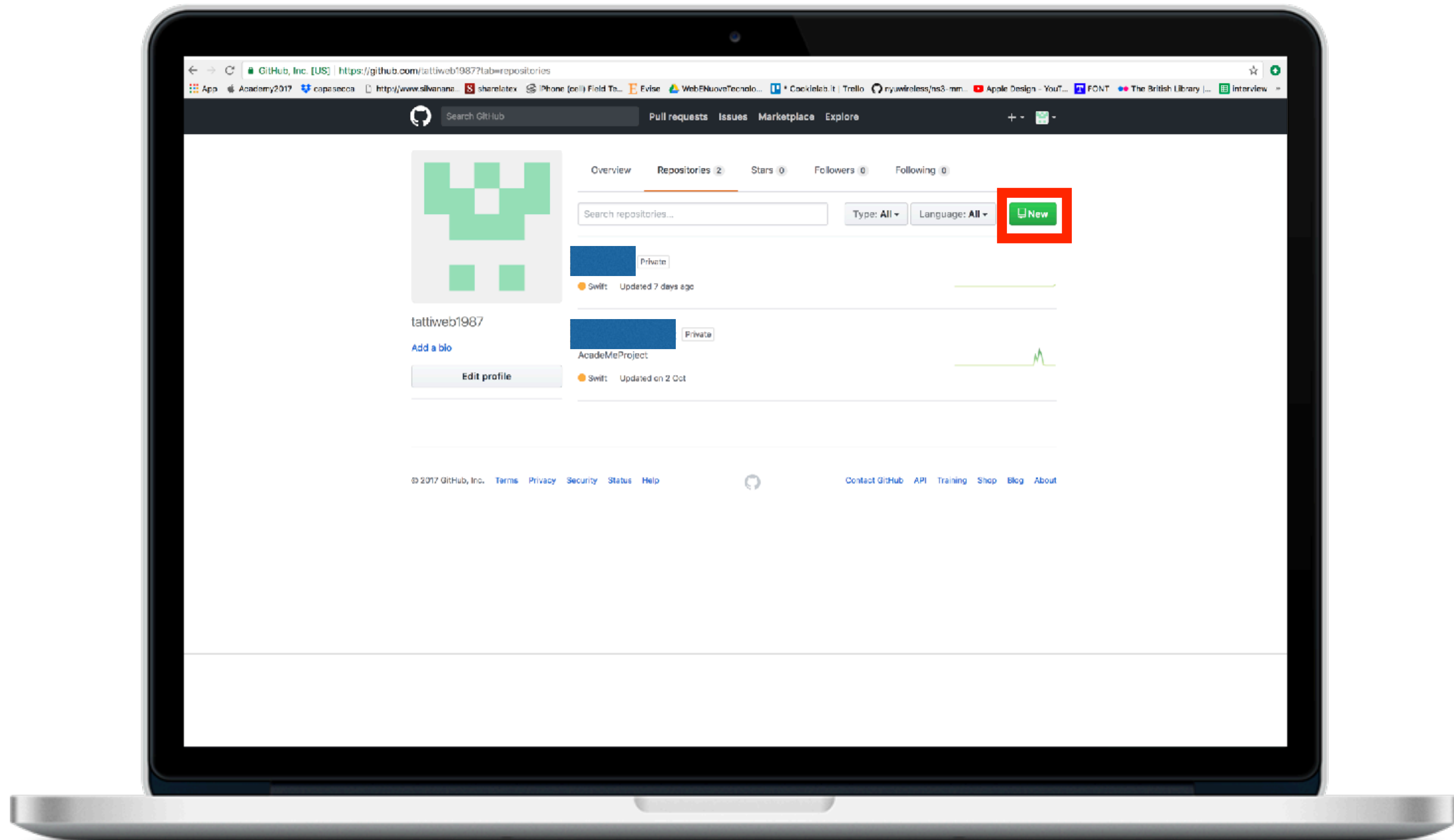# Ops. I think me and my friend modified the same code.. What now?

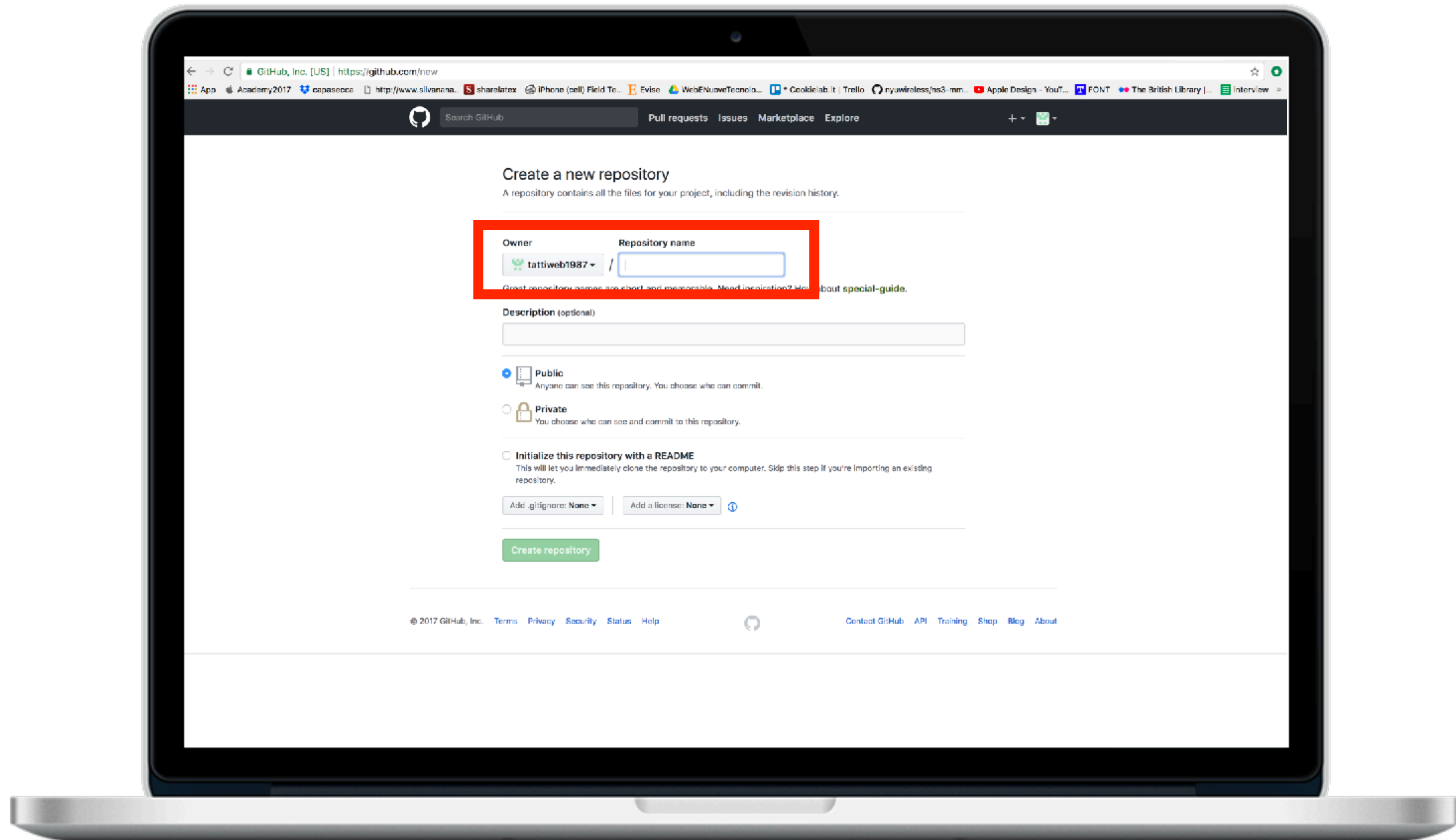Merge conflict!

Xcode Based Merge

You can also create a repository **manually**.

Create a new repository
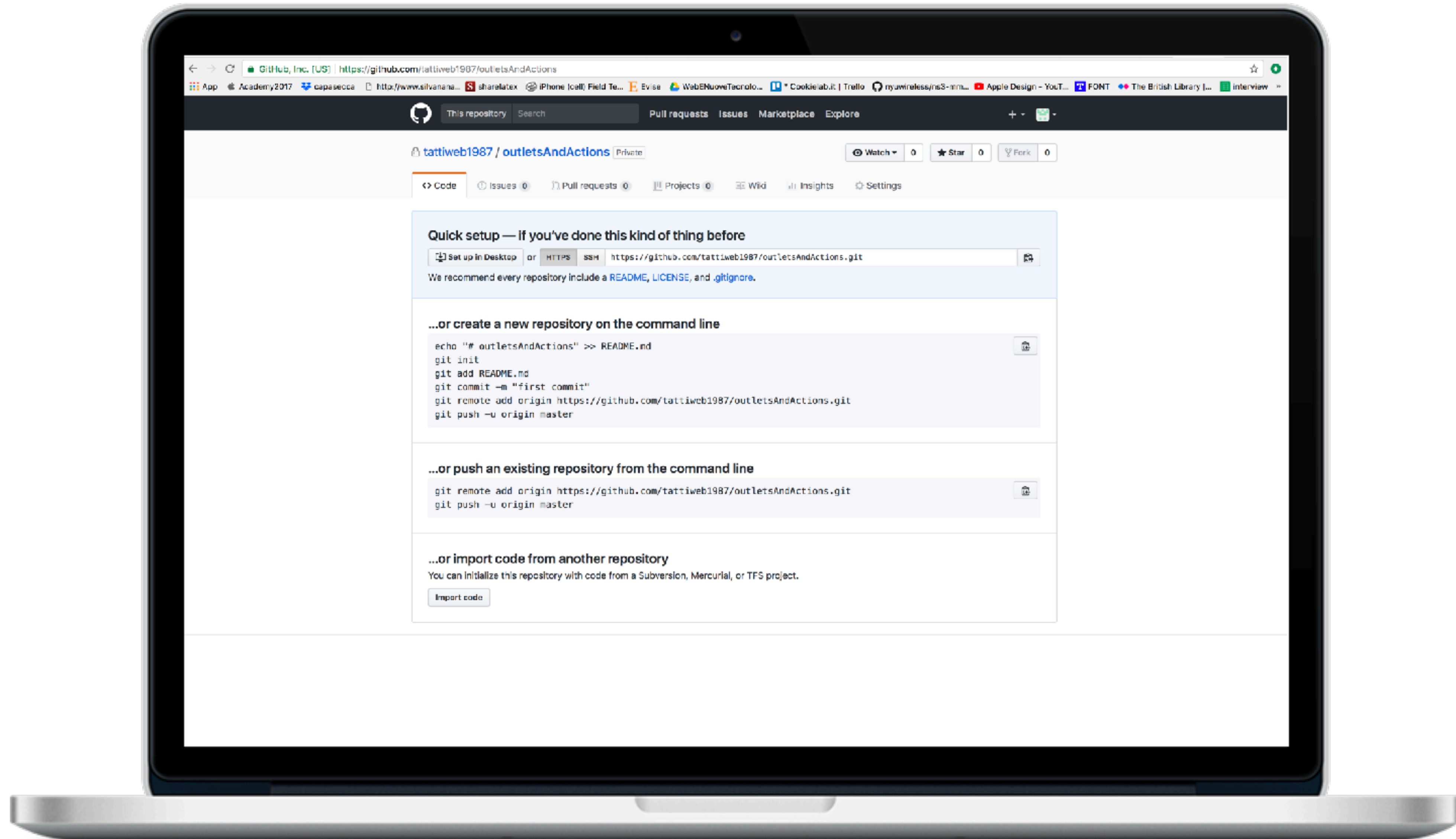
Choose a name for it

Follow the instructions!

Get Started Information

```
cd path/to/youRepo
```

Creating a Repository from Scratch

```
echo " # readMeFile " >> README.md

git init

git add README.md

git commit -m "first commit"
```

Adding to a Repository from an existing Project

```
git remote add origin https://github.com/user/project

git push -u origin master
```

Other tools to use with git

SourceTree simplifies how you interact with your Git and Mercurial repositories so you can focus on coding.

Tower

I RESOLVE CONFLICTS. IT'S WHAT I DO.

axosoft
GitKraken v1.2

GitKraken makes Git commands and processes easy, fast, and intuitive.

iOS Project Tips

- Use multiples storyboards

- Setup a .gitignore for Xcode

  https://www.gitignore.io/api/xcode%2Cswift

Resources

- https://gist.github.com/foogit/8410710

- https://confluence.atlassian.com/bitbucketserver/basic-git-commands-776639767.html

- https://guides.github.com/introduction/flow/

- https://www.atlassian.com/git/tutorials/making-a-pull-request

- https://guides.github.com/activities/forking/

- https://help.github.com/articles/merging-a-pull-request/

- https://try.github.io/levels/1/challenges/2