

Git Basics

CFL

Programador full-stack

Sistemas de versionado

¿Qué es?

Gestión de los diversos cambios que se realizan sobre los elementos de algún producto o una configuración del mismo.





Time

Your
Project

VCS

Add headline
to index page

Create "about" page



Change page layout

index.html

modified

```
<h1>Headline</h1>
...
```

about.html

created

```
<html>
<head>
...
```

photo.png

created

about.html

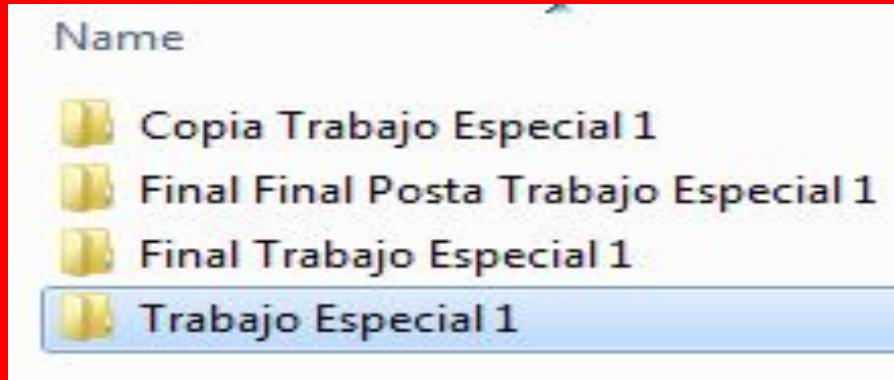
modified

```
<div>new content</div>
...
```



Un Sistema de Versionado de Código (SVC) es lo que nos permite **compartir el código** fuente de nuestros desarrollos y a la vez **mantener un registro de los cambios** por los que va pasando.

Copiar y Pegar Archivos



NO

Es control de versiones

Software de Control de Versiones



TERMINOLOGÍA:

Repositorio: Se almacenan los datos actualizados e históricos de cambios.

Módulo: Conjunto de directorios y/o archivos dentro del repositorio.

Revisión: Es una versión determinada de la información que se gestiona.

Checkout: Un despliegue crea una copia de trabajo local desde el repositorio.

Commit: Sucede cuando una copia de los cambios hechos a una copia local es escrita o integrada sobre el repositorio.

Mas terminología: “conflict”, “resolve”, “diff”, “export”, “import”, “merge”, “sync”, “workspace”.

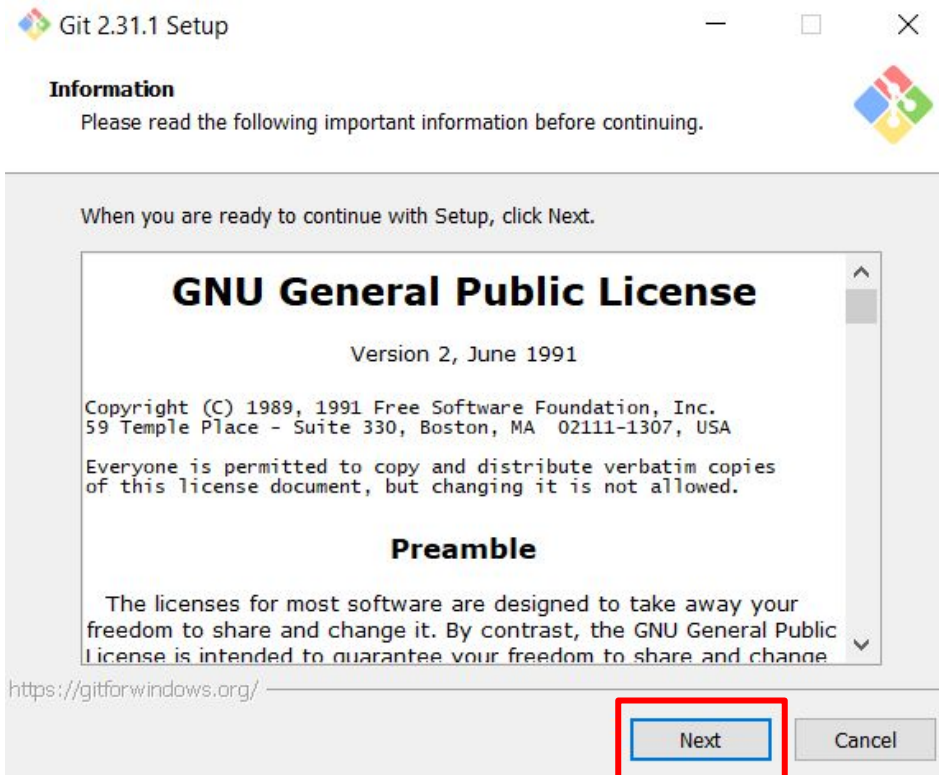
Balance

- + Se puede seguir trabajando offline. Incluso si se cae el servidor.
- + Cada repositorio tiene toda la información histórica (Backups replicados).
- + Repositorios más limpios ([Dictador Benevolente](#)).
- + Server de Git consume menos recursos.
- + Permite hacer pruebas locales versionadas y subir solo lo relevante.
- Curva de aprendizaje mayor.

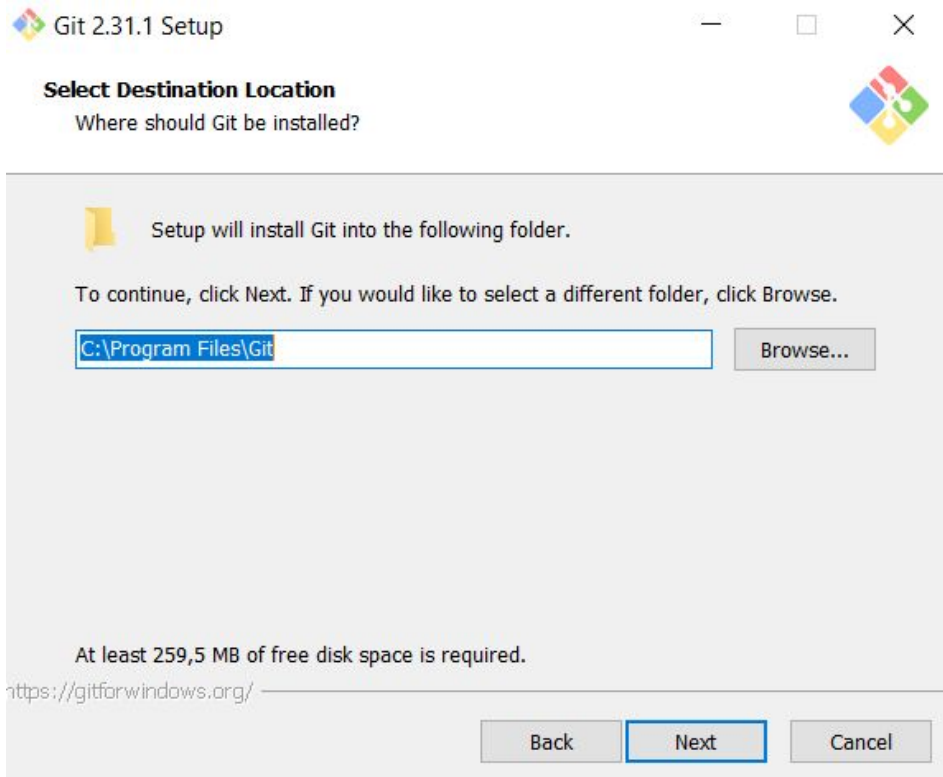


Git is a [free and open source](#) distributed version control system designed to handle everything from small to very large projects with speed and efficiency.

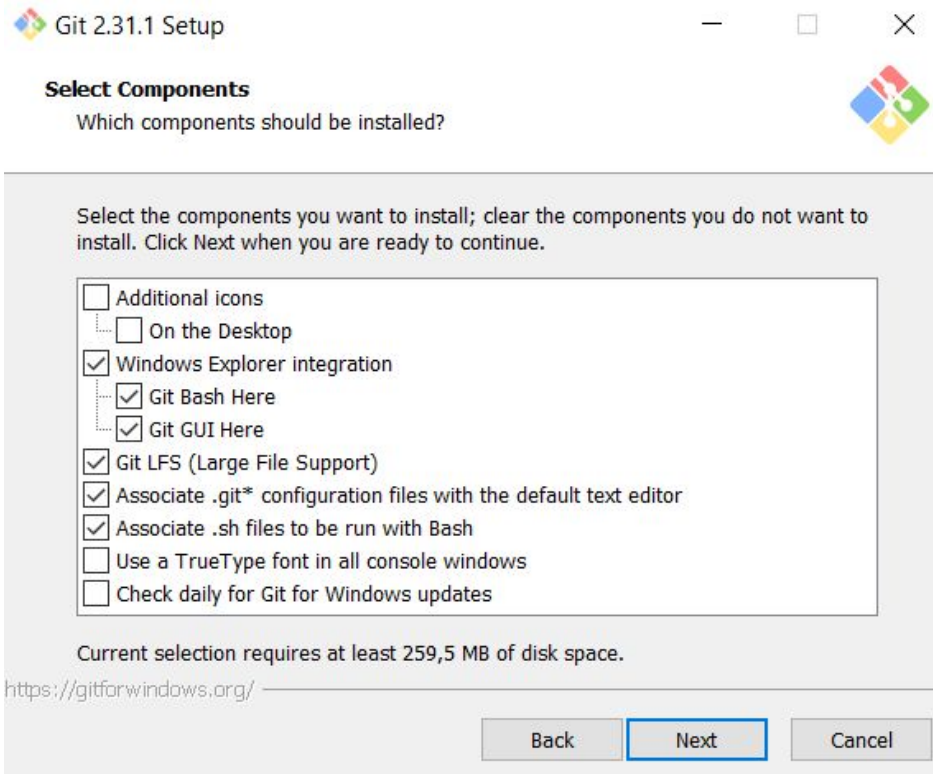
Instalando GIT



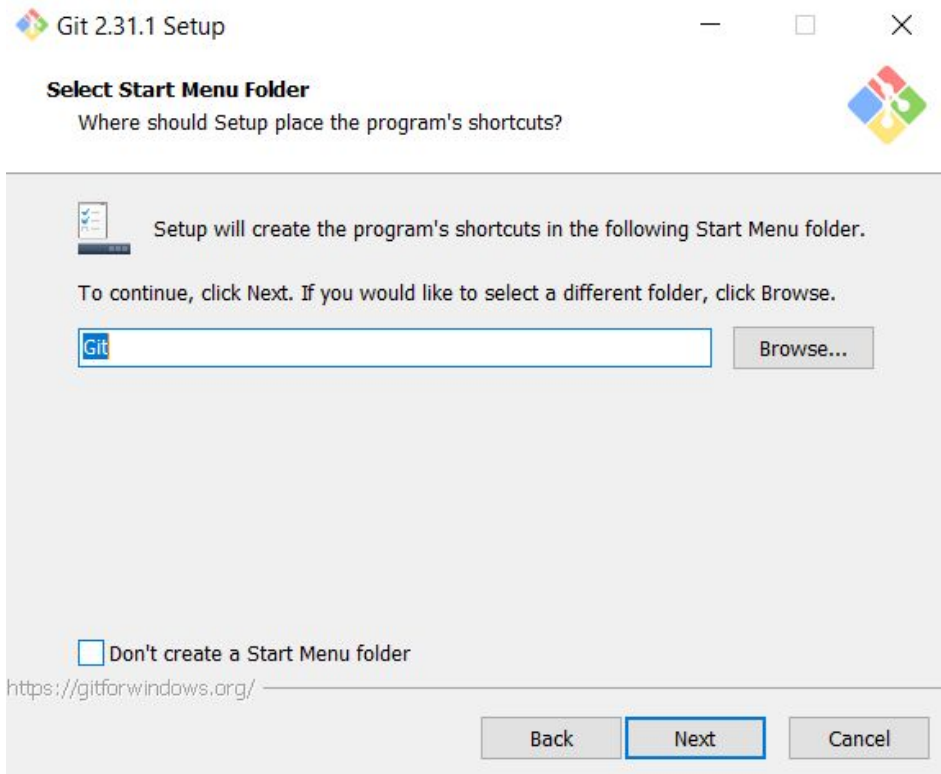
Instalando GIT



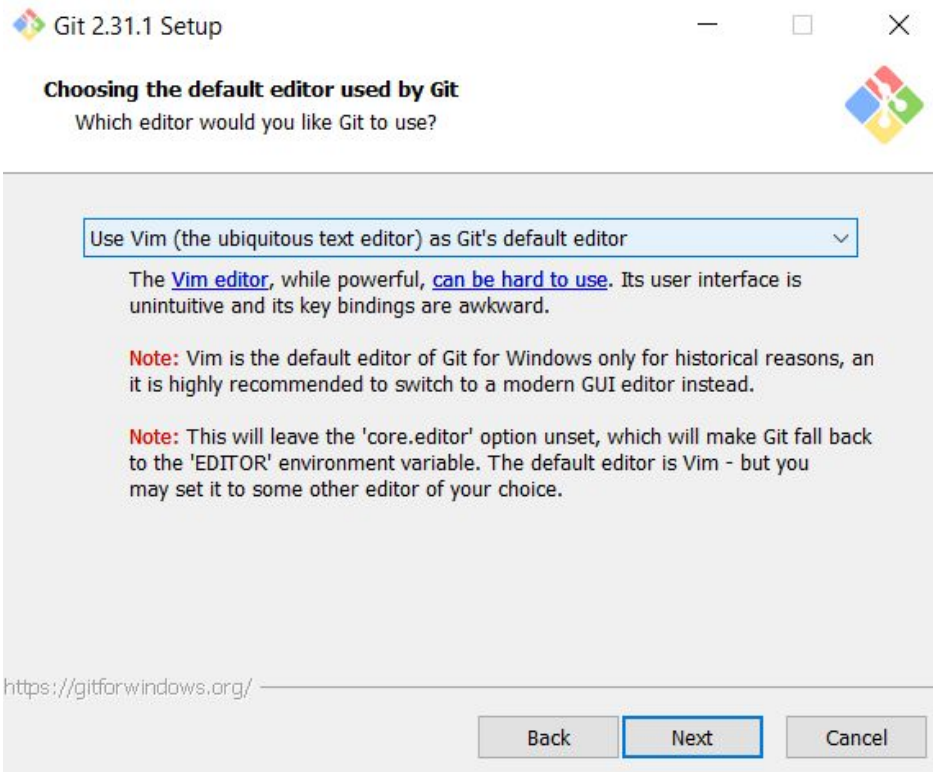
Instalando GIT



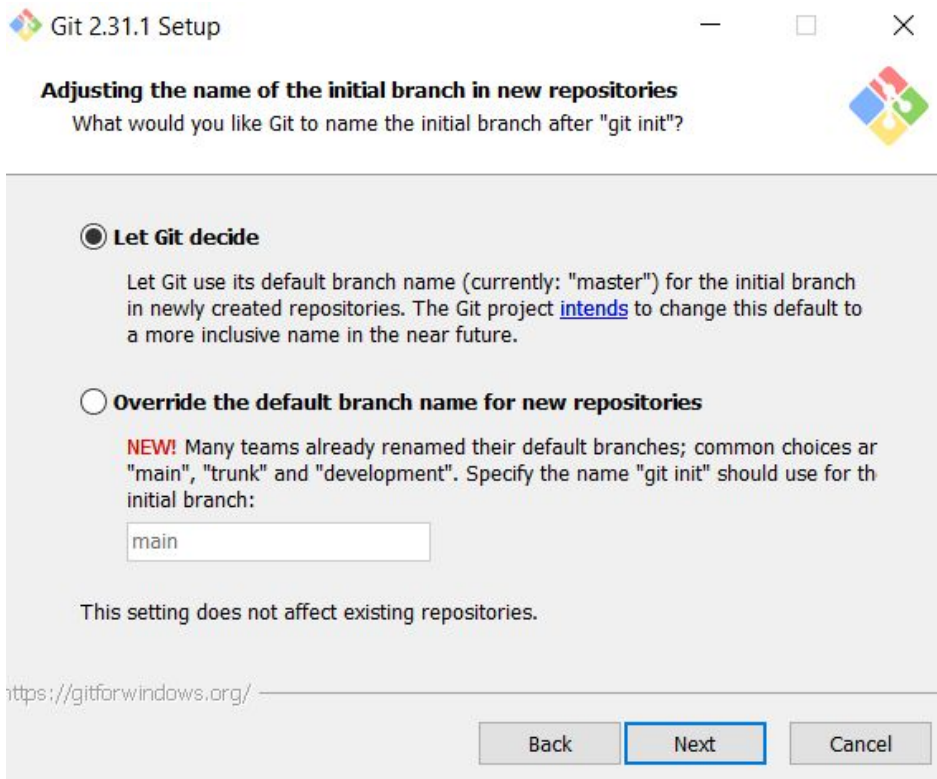
Instalando GIT



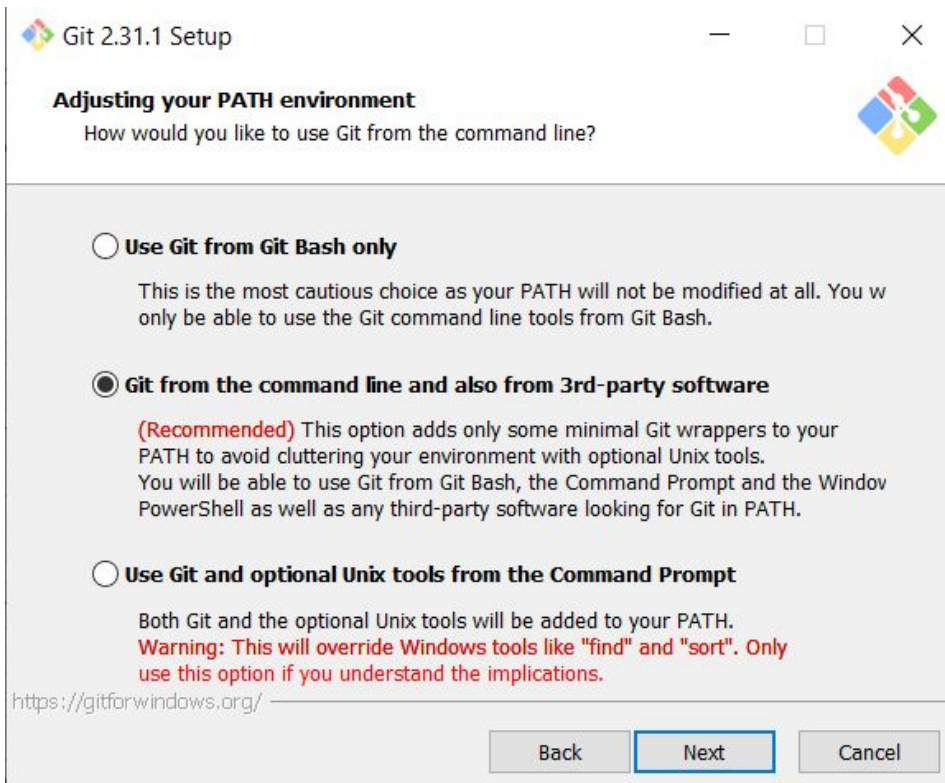
Instalando GIT



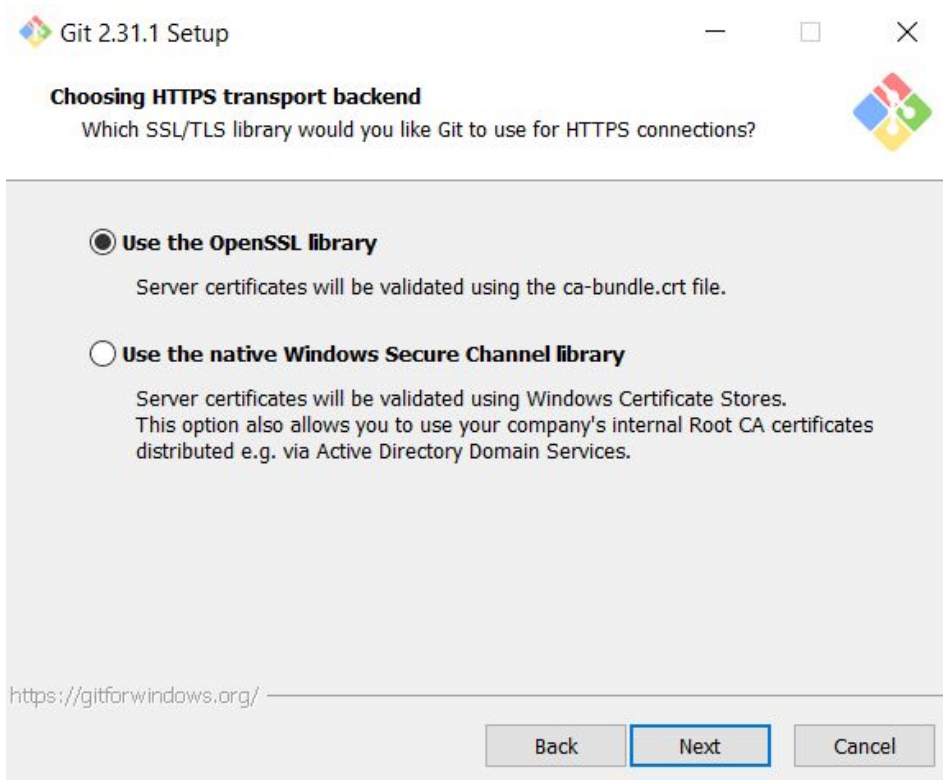
Instalando GIT



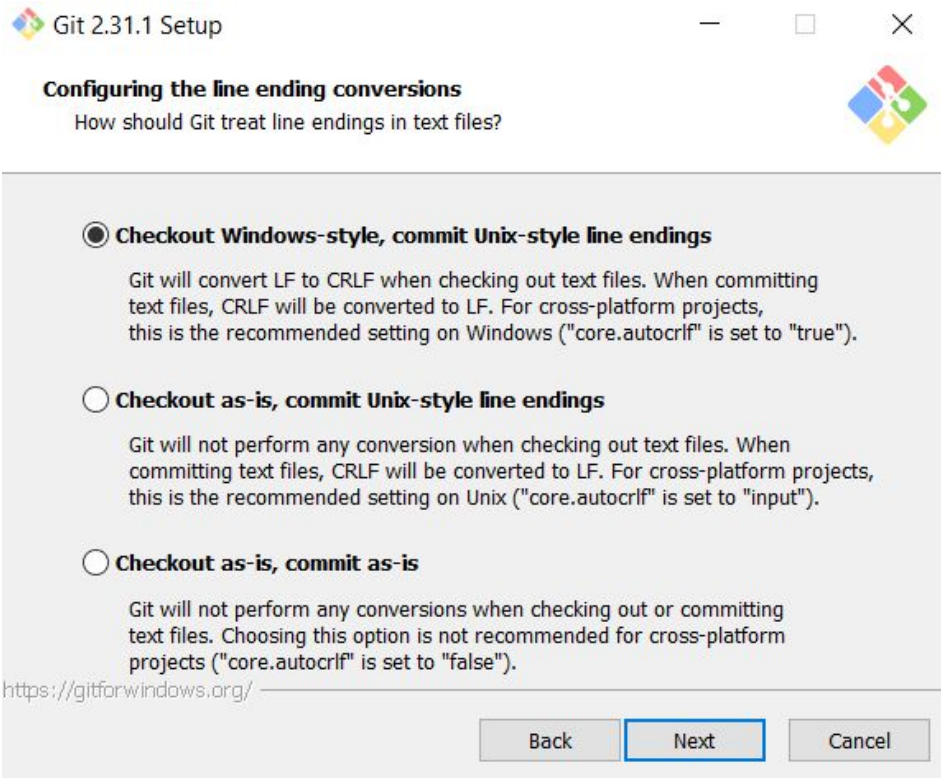
Instalando GIT



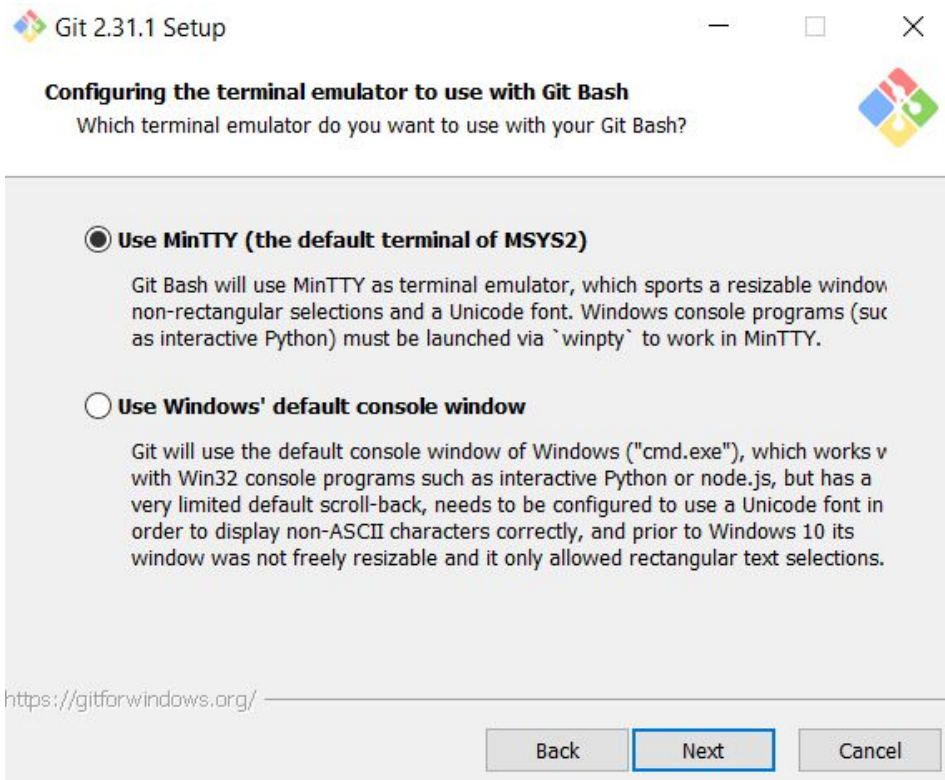
Instalando GIT



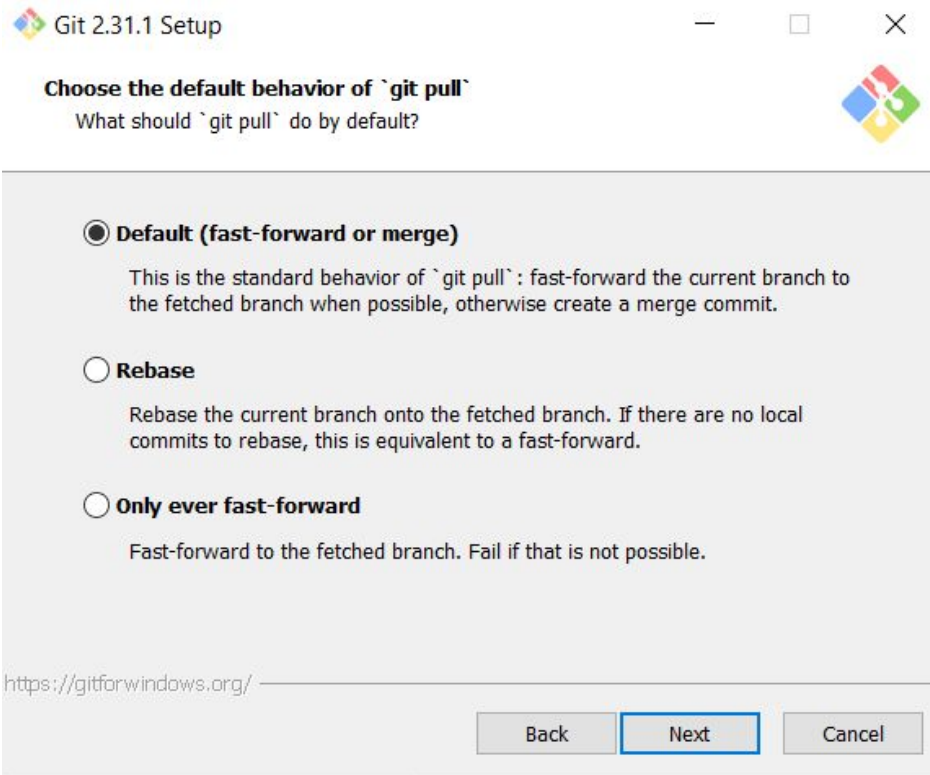
Instalando GIT



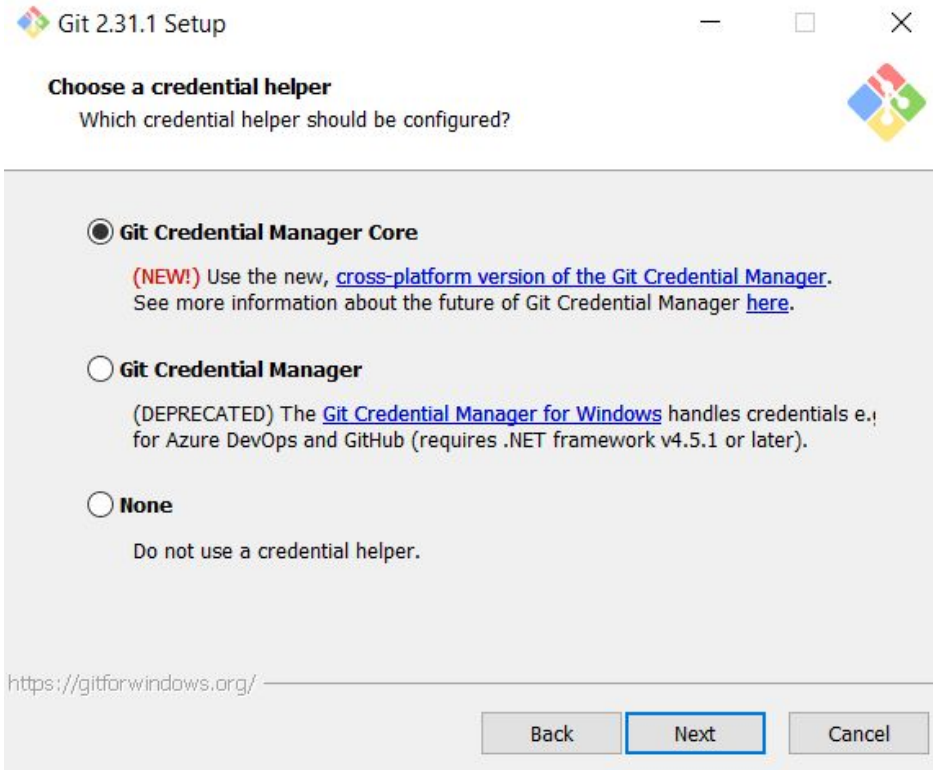
Instalando GIT



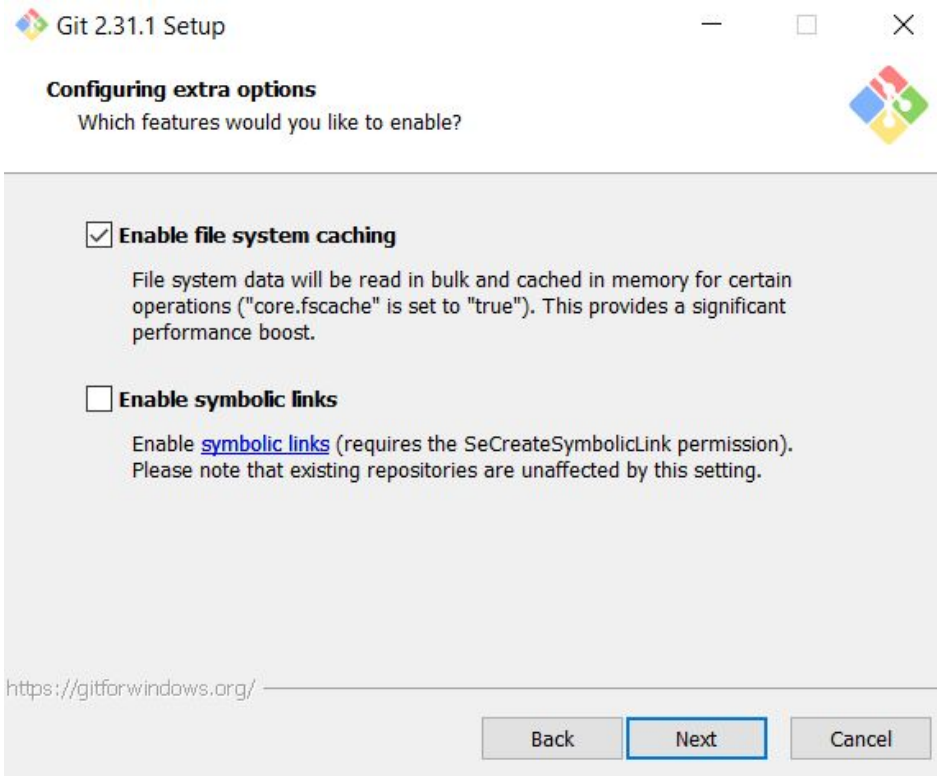
Instalando GIT



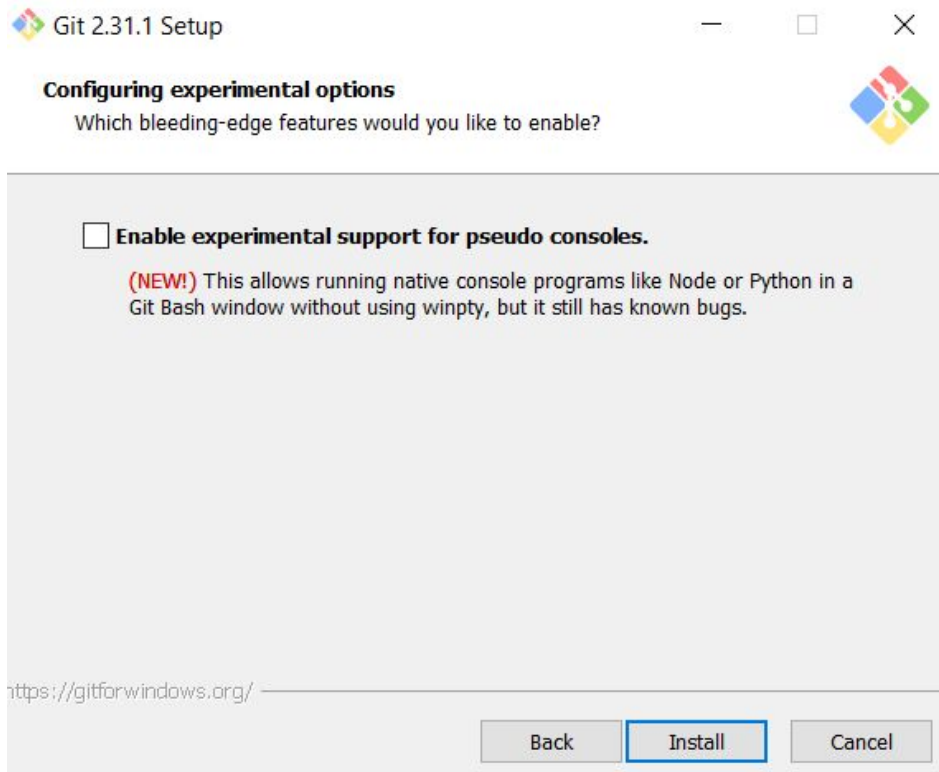
Instalando GIT



Instalando GIT



Instalando GIT



Vocabulario

- **Repositorio:** Donde se guardan los archivos y datos asociados a cada commit.
- **Commit:** Cambio de una versión a otra.
- **Verbos GIT:** son comandos GIT específicos para manipular el repositorio.

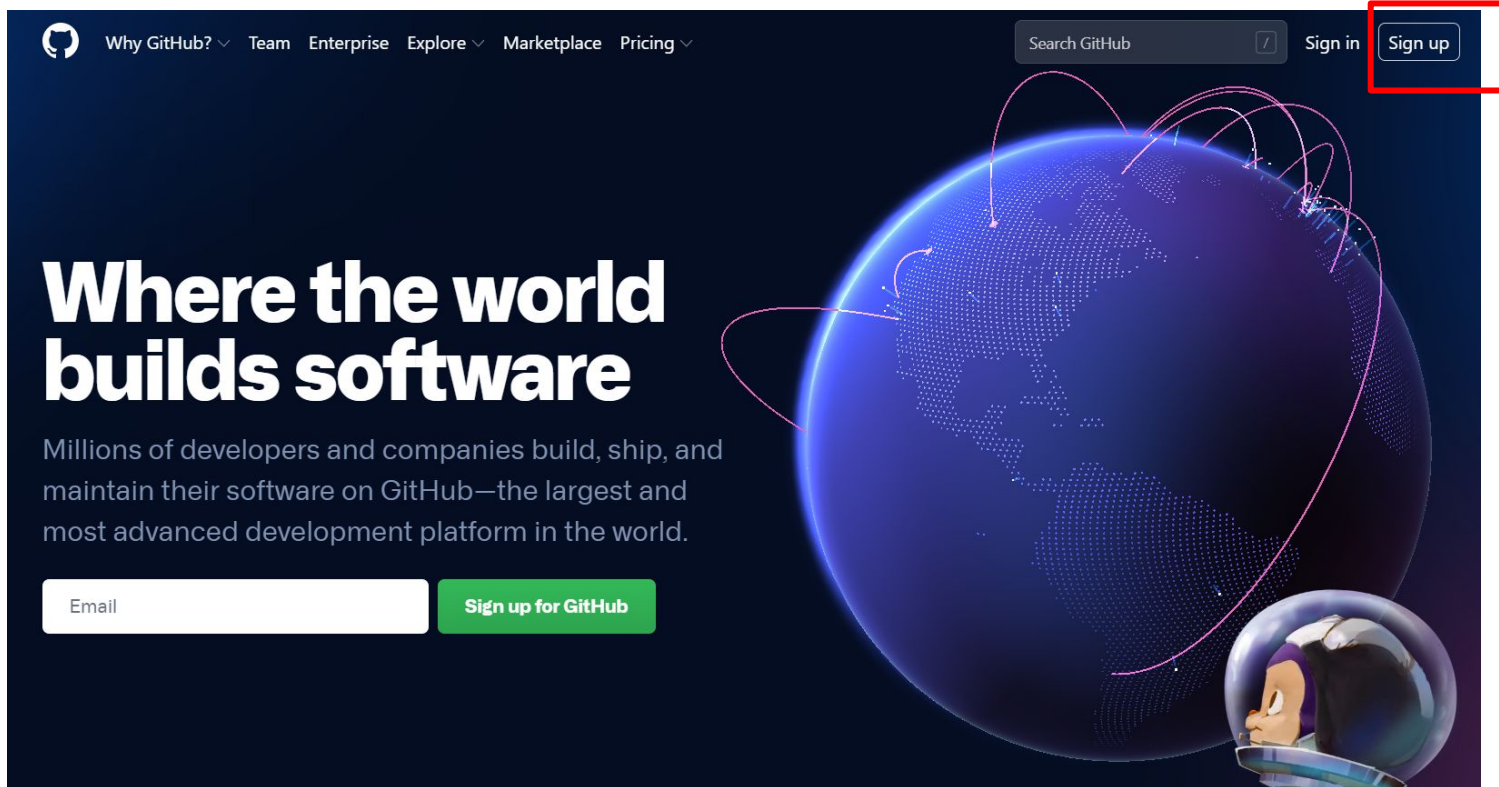
Uso de GIT

- Podes usar una GUI, pero eso no te salva de necesitar entender lo que está pasando
 - A veces las GUI te intentan ocultar lo que pasa y termina jugando en contra
 - Son muy utiles para ver los diff
- Más adelante en el curso vamos a ver como utilizar la consola



- Plataforma de desarrollo colaborativo, que utiliza Git.
- Ofrece GIT y más cosas juntas
- Gratuito
- Tiene facetas de red social. Se suele usar como CV de proyectos propios.
- Existen otras alternativas (GitLab, BitBucket, etc).

Crear una cuenta



Crear una cuenta

Username *

cfiFullstackDocente



Email address *

cfi403pfs.docente.2021@gmail.com



Password *

Make sure it's at least 15 characters OR at least 8 characters including a number and a lowercase letter. [Learn more.](#)

Email preferences

☐ Send me occasional product updates, announcements, and offers.

Verify your account

Solucione este rompecabezas para que
sepamos que es una persona real

Verificar



Create account

By creating an account, you agree to the [Terms of Service](#). For more information about GitHub's privacy practices, see the [GitHub Privacy Statement](#). We'll occasionally send you account-related emails.



Crear una cuenta

Welcome to GitHub

Woohoo! You've joined millions of developers who are doing their best work on GitHub. Tell us what you're interested in. We'll help you get there.

What kind of work do you do, mainly?

Software Engineer

I write code

Student

I go to school

Product Manager

I write specs

UX & Design

I draw interfaces

Data & Analytics

I write queries

Marketing & Sales

I look at charts

Teacher

I educate people

Other

I do my own thing



Crear una cuenta

How much programming experience do you have?

None

I don't program at all

A little

I'm new to programming

A moderate amount

I'm somewhat experienced

A lot

I'm very experienced

What do you plan to use GitHub for?

(Select up to 3)



Learn to code



Learn Git and GitHub



Host a project (repository)



Create a website with
GitHub Pages



Collaborating with my team



Find and contribute to
open source



School work and student
projects



Use the GitHub API



Other



Crear una cuenta

I am interested in:

languages, frameworks, industries

We'll connect you with communities and projects that fit your interests.

For example: openfaas server gatsby

Complete setup



Crear una cuenta



Please verify your email address

Before you can contribute on GitHub, we need you to verify your email address.

An email containing verification instructions was sent to `cfl403pfs.docente.2021@gmail.com`.

[Resend verification email](#)[Change your email settings](#)

Crear una cuenta



Almost done, @cflFullstackDocente!

To complete your GitHub sign up, we just need to verify your email address:
cfl403pfs.docente.2021@gmail.com.

Verify email address



Crear un repositorio

Your email was verified.

What do you want to do first?

Every developer needs to configure their environment, so let's get your GitHub experience optimized for you.



Start a new project

Start a new repository or bring over an existing repository to keep contributing to it.

Create a repository



Collaborate with your team

Improve the way your team works together and get access to more features with an organization.

Create an organization



Learn how to use GitHub

Get started with an "Introduction to GitHub" course in our Learning Lab.

Start Learning



Crear un repositorio

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository.](#)

Owner *



cflFullstackDocente ▾

Repository name *

/ CFL2021 ✓

Great repository names are short and memorable. Need inspiration? How about [sturdy-octo-dollop?](#)

Description (optional)



Public

Anyone on the internet can see this repository. You choose who can commit.



Private

You choose who can see and commit to this repository.

Initialize this repository with:

Skip this step if you're importing an existing repository.

☐ Add a README file

This is where you can write a long description for your project. [Learn more.](#)

☐ Add .gitignore

Choose which files not to track from a list of templates. [Learn more.](#)

☐ Choose a license

A license tells others what they can and can't do with your code. [Learn more.](#)

Create repository



Crear un repositorio

cflFullstackDocente / CFL2021

Unwatch 1 Star 0 Fork 0

[Code](#) [Issues](#) [Pull requests](#) [Actions](#) [Projects](#) [Wiki](#) [Security](#) [Insights](#) [Settings](#)

Quick setup — if you've done this kind of thing before

[Set up in Desktop](#) or [HTTPS](#) [SSH](#)

Get started by [creating a new file](#) or [uploading an existing file](#). We recommend every repository include a [README](#), [LICENSE](#), and [.gitignore](#).

...or create a new repository on the command line

```
echo "# CFL2021" >> README.md
git init
git add README.md
git commit -m "first commit"
git branch -M main
git remote add origin https://github.com/cflFullstackDocente/CFL2021.git
git push -u origin main
```

...or push an existing repository from the command line

```
git remote add origin https://github.com/cflFullstackDocente/CFL2021.git
git branch -M main
git push -u origin main
```

...or import code from another repository

You can initialize this repository with code from a Subversion, Mercurial, or TFS project.

[Import code](#)

ProTip! Use the URL for this page when adding GitHub as a remote.

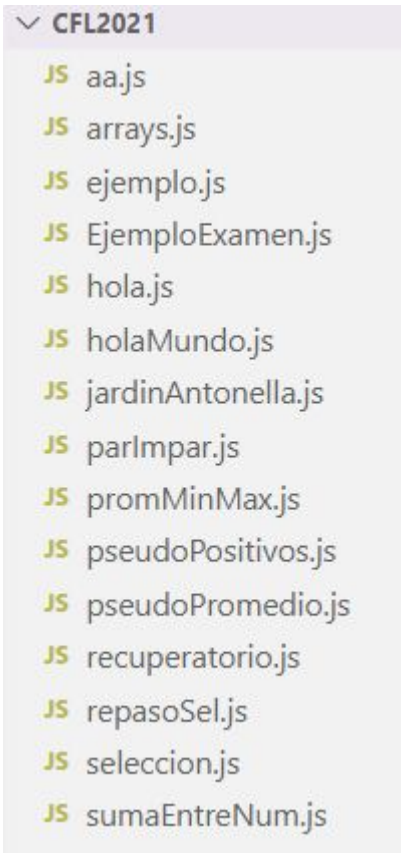


Organización local

- Como creamos esa conexión entre github y nuestra carpeta de ejercicios?
- Antes vamos a organizar bien nuestro espacio de trabajo
 - Una carpeta para CFL
 - Una carpeta por cada Modulo
 - Una carpeta por clase
 - Ejercicios con número



Organización local

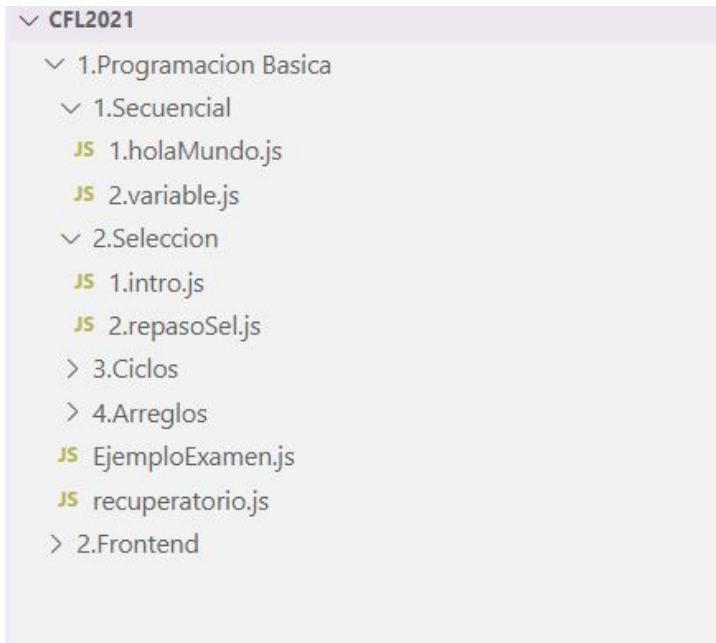


NO ES LA FORMA CORRECTA

- De qué clase es cada uno?
- Cómo pregunto si tengo problemas con un ejercicio?



Organización local



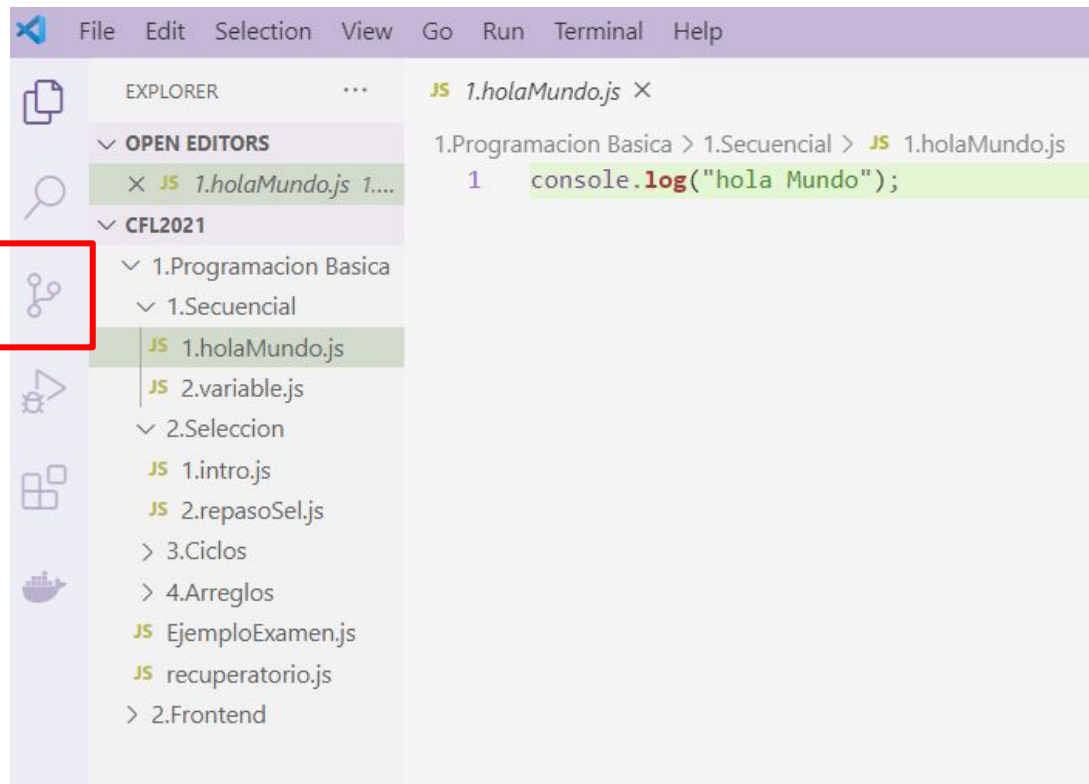
Correcta organización

- Cada ejercicio en su clase.
- Más intuitivo para buscar



Vinculando proyecto con Git

VSCode cuenta con una extensión de git



Vinculando proyecto con Git



SOURCE CONTROL

The folder currently open doesn't have a git repository. You can initialize a repository which will enable source control features powered by git.

Initialize Repository

To learn more about how to use git and source control in VS Code [read our docs](#).

You can also directly publish this folder to a GitHub repository. Once published, you'll have access to source control features powered by git and GitHub.



Publish to GitHub

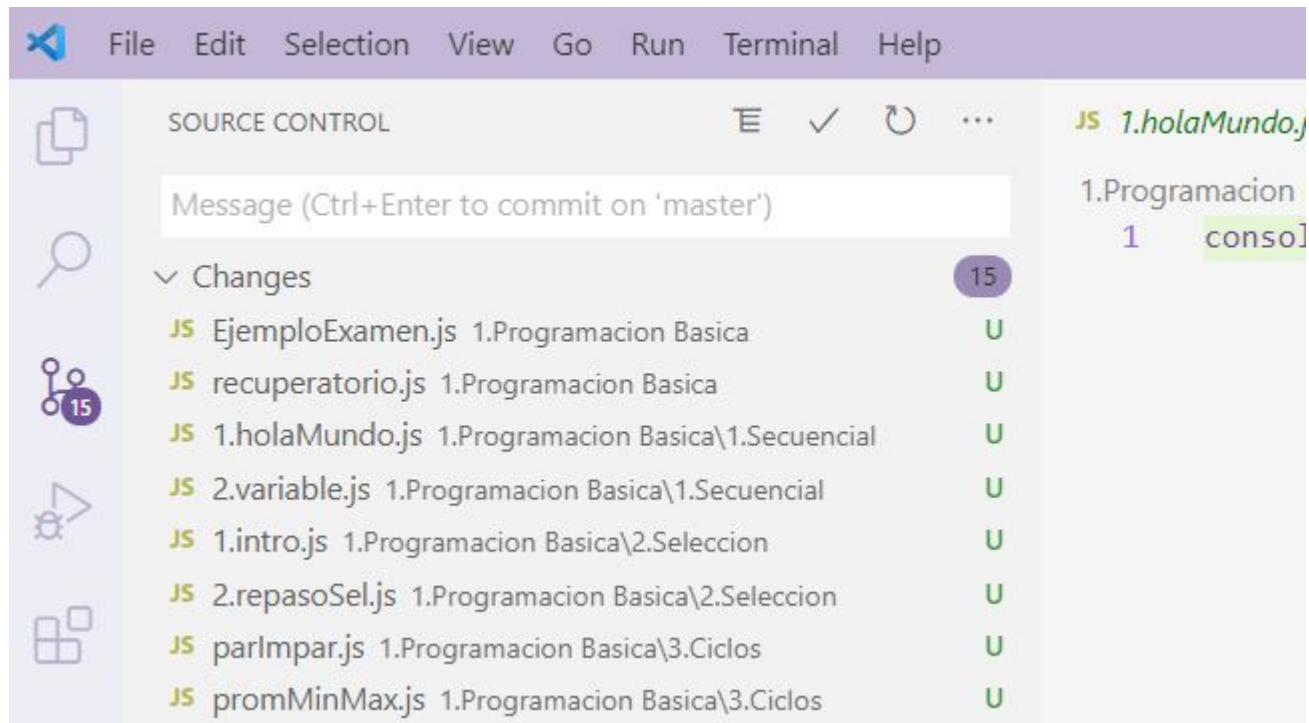
JS 1.holaMundo.js X

```
1.Programacion Basica > 1.Secuencial > JS 1.holaMundo.js  
1 console.log("Hola Mundo");
```

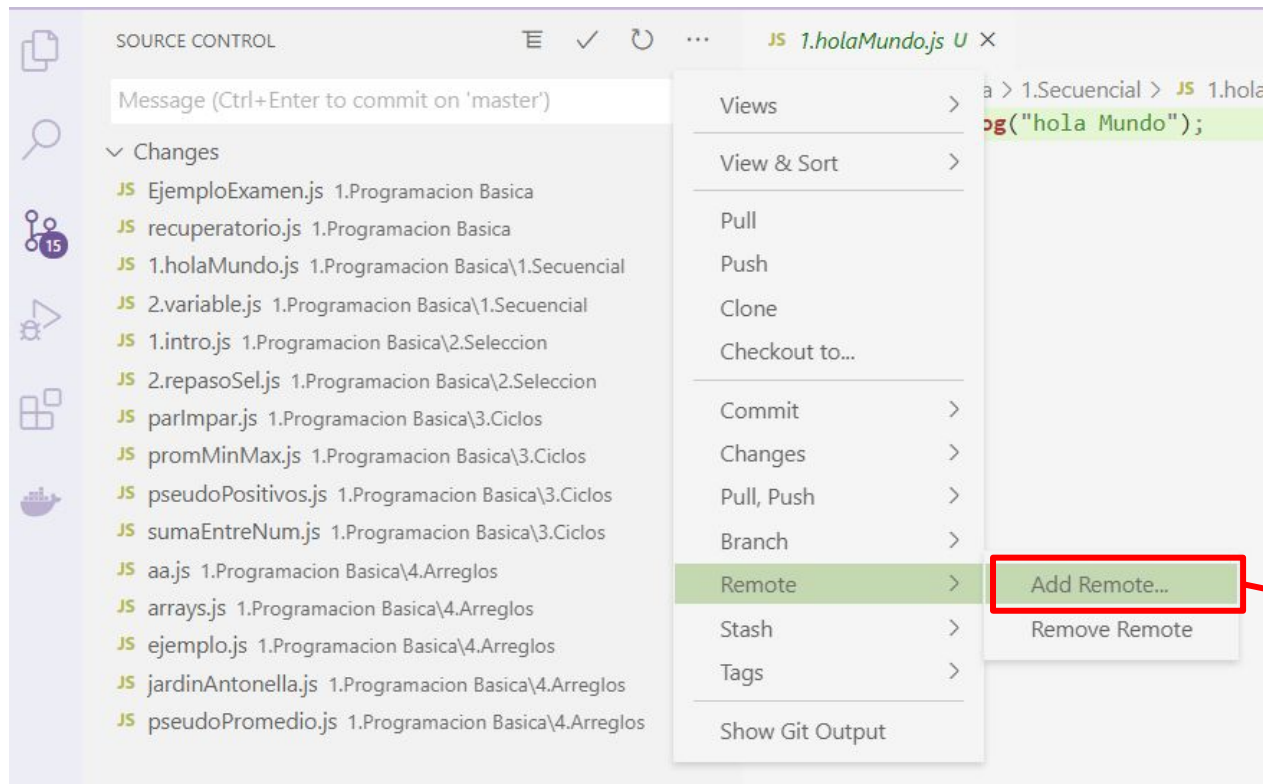
Generamos nuestro "Repo" local

Vinculando proyecto con Git

- U: Updated (actualizado)
- A: Added (agregado)
- D: Deleted (eliminado)

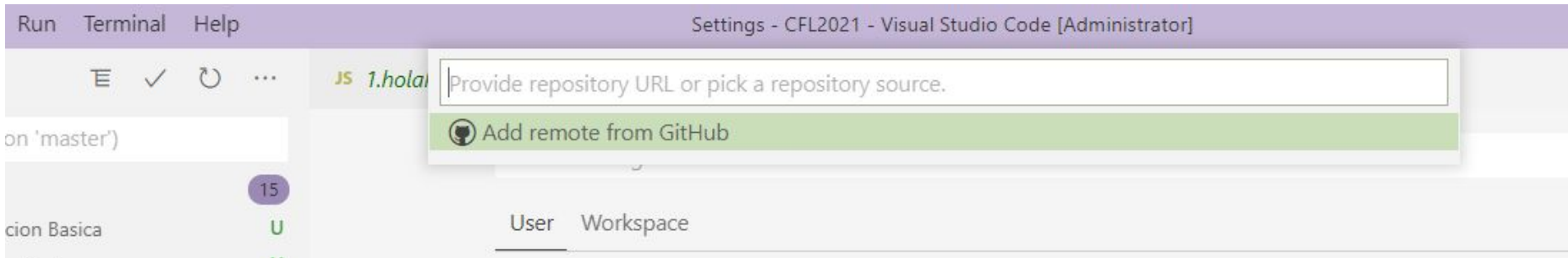


Vinculando proyecto con Git



Llamamos Remote al Repositorio que esta en github

Vinculando proyecto con Git



Visual Studio Code



The extension 'GitHub' wants to sign in using GitHub.

Allow

Cancel

Pide que iniciar sesión en github

Vinculando proyecto con Git



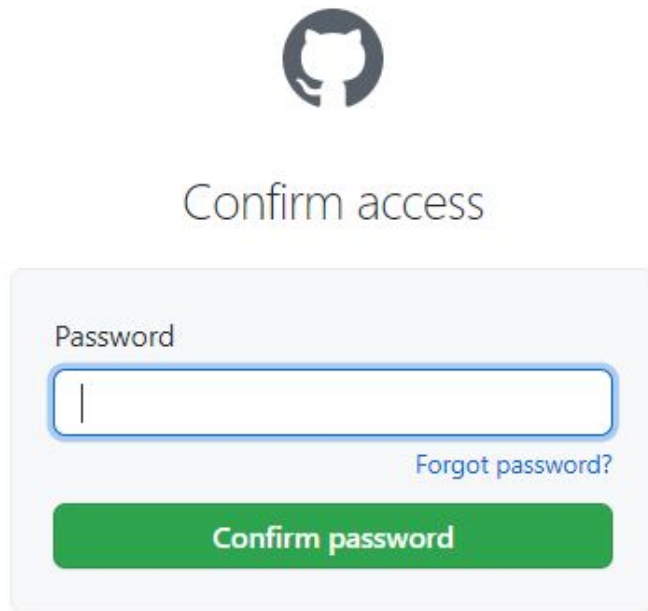
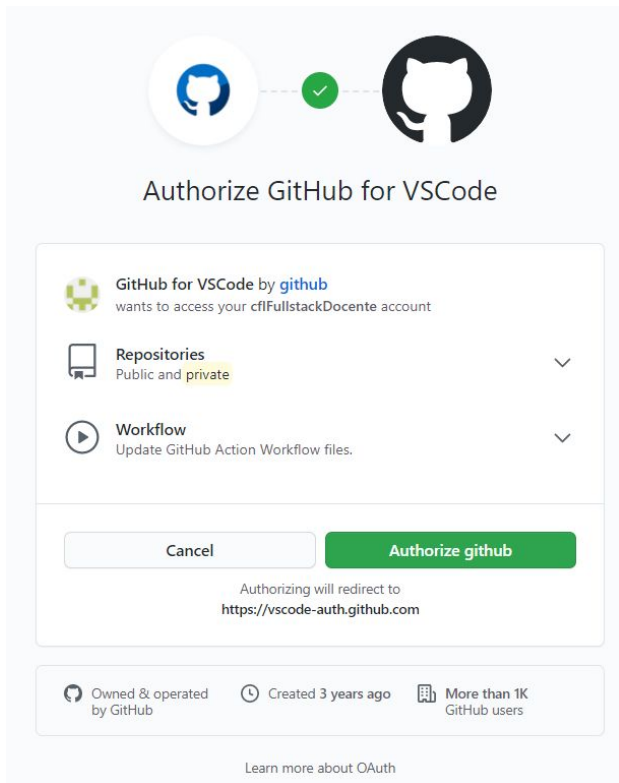
Authorize Visual Studio Code to access GitHub

If you initiated this authorization from Visual Studio Code, click 'Continue' to authorize access to GitHub

Continue

[Do not authorize](#)

Vinculando proyecto con Git



Tip: You are entering `sudo mode`. We won't ask for your password again for a few hours.

Vinculando proyecto con Git



Success!

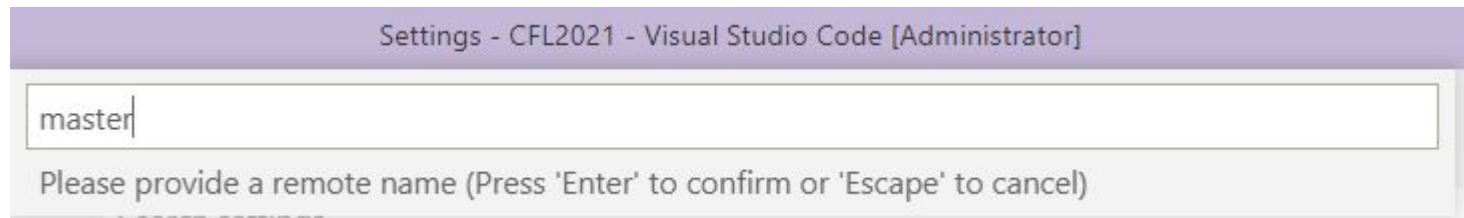
Authorization was successful. You will be redirected back to Visual Studio Code

Didn't work?

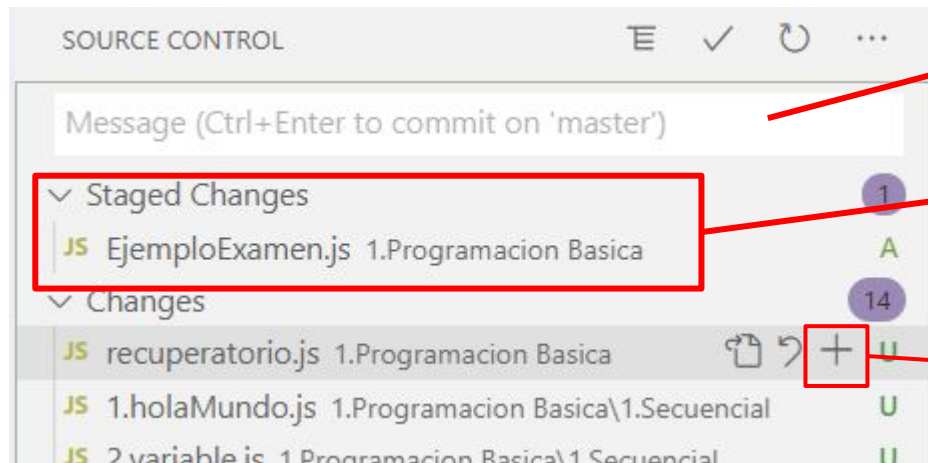
If you aren't redirected, you can add the token manually.

Your authorization token:

Vinculando proyecto con Git



Subiendo cambios a Github



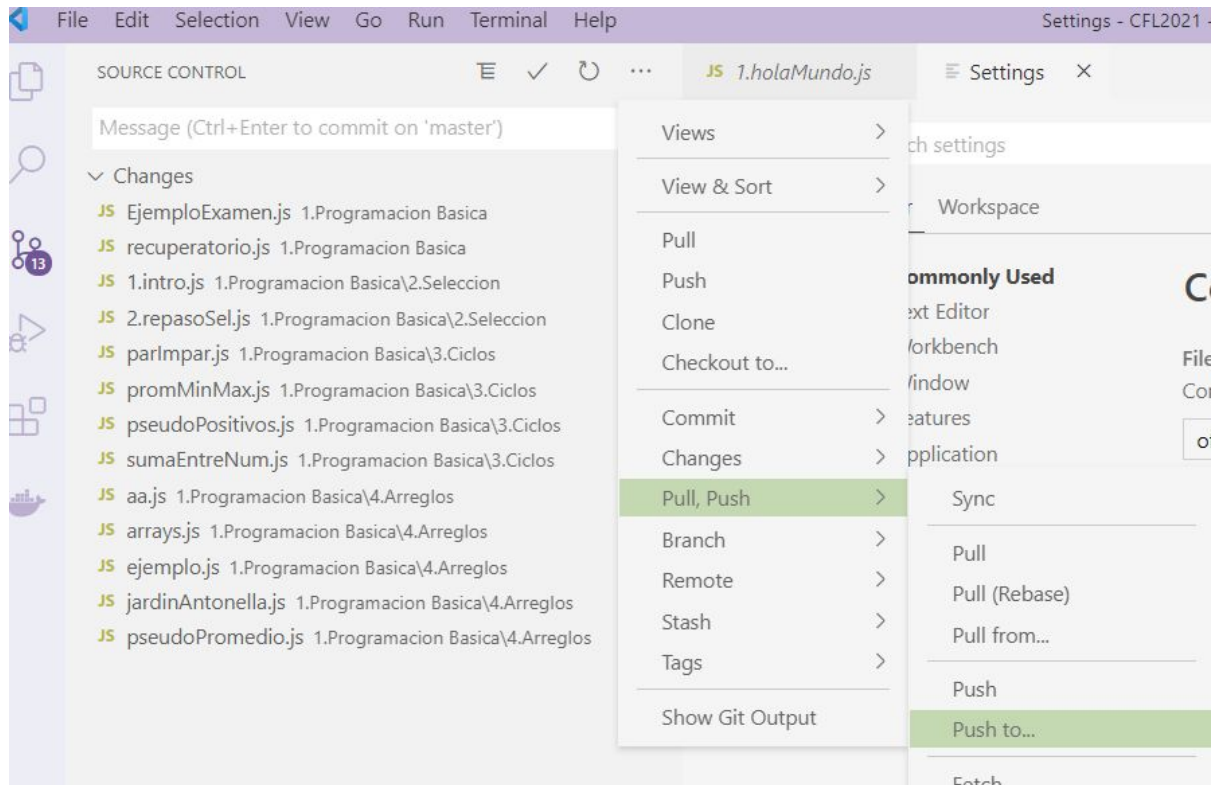
Mensaje del commit (ej: "ejercicios clase 1")

Cambios a incluir en el siguiente commit

Pasamos nuestros cambios a Staged

Commit: Cambio de una versión a otra.

Subiendo cambios a Github



Push to nos deja decidir a donde queremos subir nuestro commit

Settings - CFL2021 - Visual Studio Code [Administrator]

Pick a remote to publish the branch 'master' to:

master https://github.com/cflFullstackDocente/CFL2021.git

+ Add a new remote...

**Por ahora se
sube siempre a
master**

📁 cflFullstackDocente / CFL2021

<> Code

🔔 Issues

🔗 Pull requests

🔄 Actions

📁 Projects

📖 Wiki

🛡 Security

📈 Insights

⚙ Settings

🔗 master ▾

🔗 1 branch

🏷 0 tags

Go to file

Add file ▾

📄 Code ▾

rbeltracchi Clase 1

7ec84da 7 minutes ago 🕒 1 commit



1.Programacion Basica/1.Secuencial

Clase 1

7 minutes ago

Help people interested in this repository understand your project by adding a README.

Add a README

Agregar colaboradores

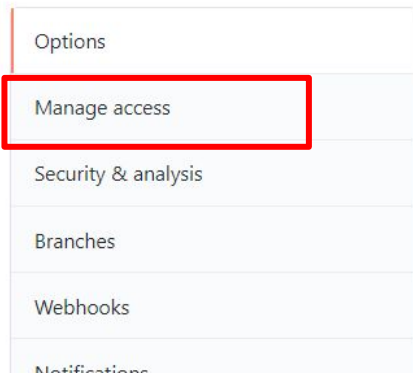
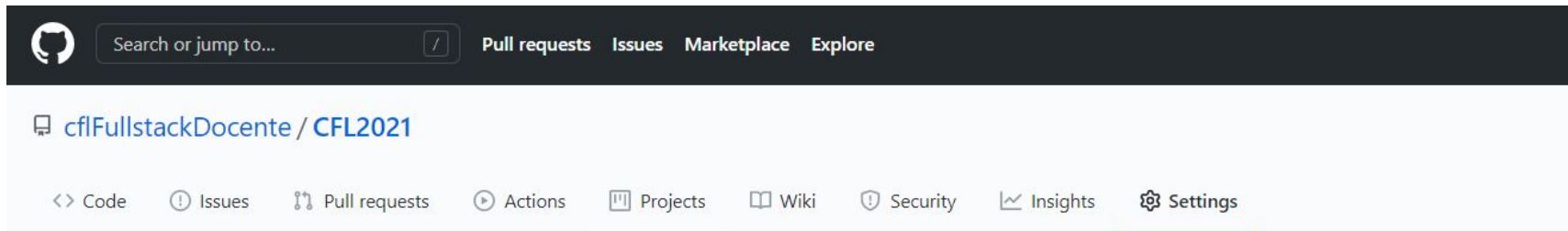
[Pull requests](#)[Issues](#)[Marketplace](#)[Explore](#)[cflFullstackDocente](#) / [CFL2021](#)[Code](#)[Issues](#)[Pull requests](#)[Actions](#)[Projects](#)[Wiki](#)[Security](#)[Insights](#)[Settings](#)[master](#)[1 branch](#)[0 tags](#)[Go to file](#)[Add file](#)[Code](#)[rbeltracchi](#) [Clase 1](#)

7ec84da 2 days ago

[1 commit](#)[1.Programacion Basica/1.Secuencial](#)[Clase 1](#)

2 days ago

Agregar colaboradores



Settings

Repository name

Rename

☐ Template repository

Template repositories let users generate new repositories with the same directory structure and files. [Learn more.](#)

Social preview

Agregar colaboradores

Options

Manage access

Security & analysis

Branches

Webhooks

Notifications

Integrations

Deploy keys

Actions

Environments

Secrets

Who has access

PUBLIC REPOSITORY



This repository is public and visible to anyone.

[Manage](#)

DIRECT ACCESS



1 has access to this repository. 1 [collaborator](#).

Manage access

☐ Select all

Type ▾



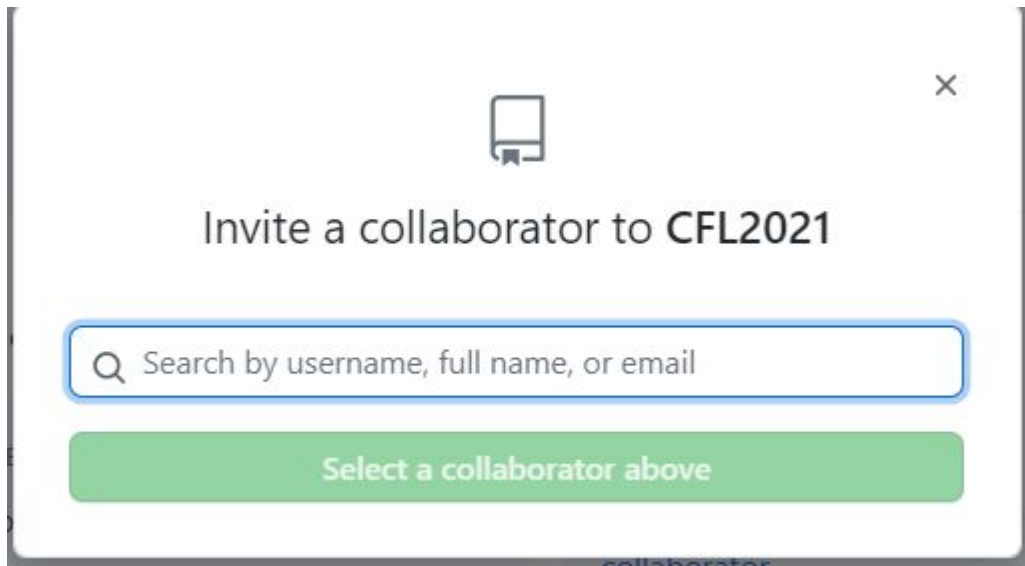
Rodrigo Beltracchi

rbeltracchi • Collaborator



Invite a collaborator

Agregar colaboradores



The screenshot shows a modal dialog box titled "Invite a collaborator to CFL2021". At the top center is an icon of a document with a checkmark. Below the title is a search input field with a magnifying glass icon and the placeholder text "Search by username, full name, or email". Below the search field is a green button with the text "Select a collaborator above". The dialog box has a close button (an 'x') in the top right corner. The word "collaborator" is partially visible at the bottom of the dialog box.

Agregamos nombres de usuarios:

rbeltracchi
francisco-corti
mauri52