WORK-CASE №1

Git and GitHub Introduction

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What is Git?

Git is a version control system for tracking changes in files.

Git allows you to:

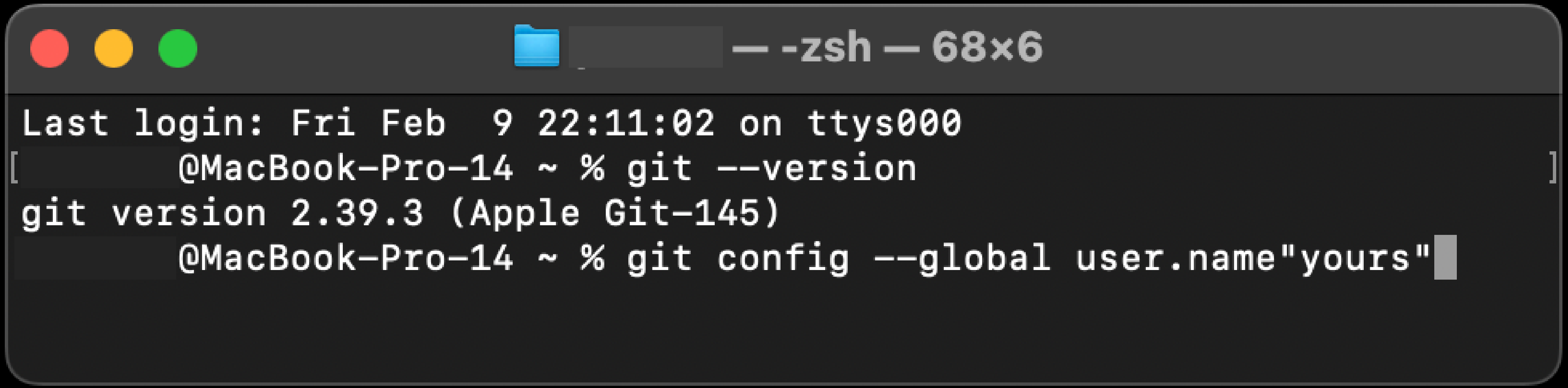
- Store and track all changes made to your projects.
- Collaborate with other people on projects.
- Easily revert to previous versions of your projects.

https://git-scm.com

GIT-Global Information Tracker

How to Use Git?

Git is typically used through the **command line**. The Git command line interface (CLI) is a tool for running these commands.



```
Last login: Fri Feb  9 22:11:02 on ttys000
[[redacted]@MacBook-Pro-14 ~ % git --version                                    ]
git version 2.39.3 (Apple Git-145)
[redacted]@MacBook-Pro-14 ~ % git config --global user.name"yours"
```

Configure your Git username and email using the following commands :

$ git config --global user.name "Name Surname"
$ git config --global user.email "your@gmail.com"

The Git command line tool is installed by default on macOS and Linux.

To check the availability or your version of git, you need to open the Command Prompt (Windows), Terminal (MAC), or Linux Terminal.

Once open, run this command:
git --version

Basics Git Commands

Clone: Cloning a repository on our local machine.

```
git clone ‹repository _url›
```

Init : Initialize a new Git repository.

```
git init
```

Add: adds one or more modified files to the list of files to be included in the next commit.

```
git add <-file name-›
```

Commit: It is the record of change.

```
git commit -m "some message"
```

Status : Displays the state of the code.

```
git status
```

Pull: Fetch and merge changes from a remote repository.

```
git pull origin ‹branch> or main
```

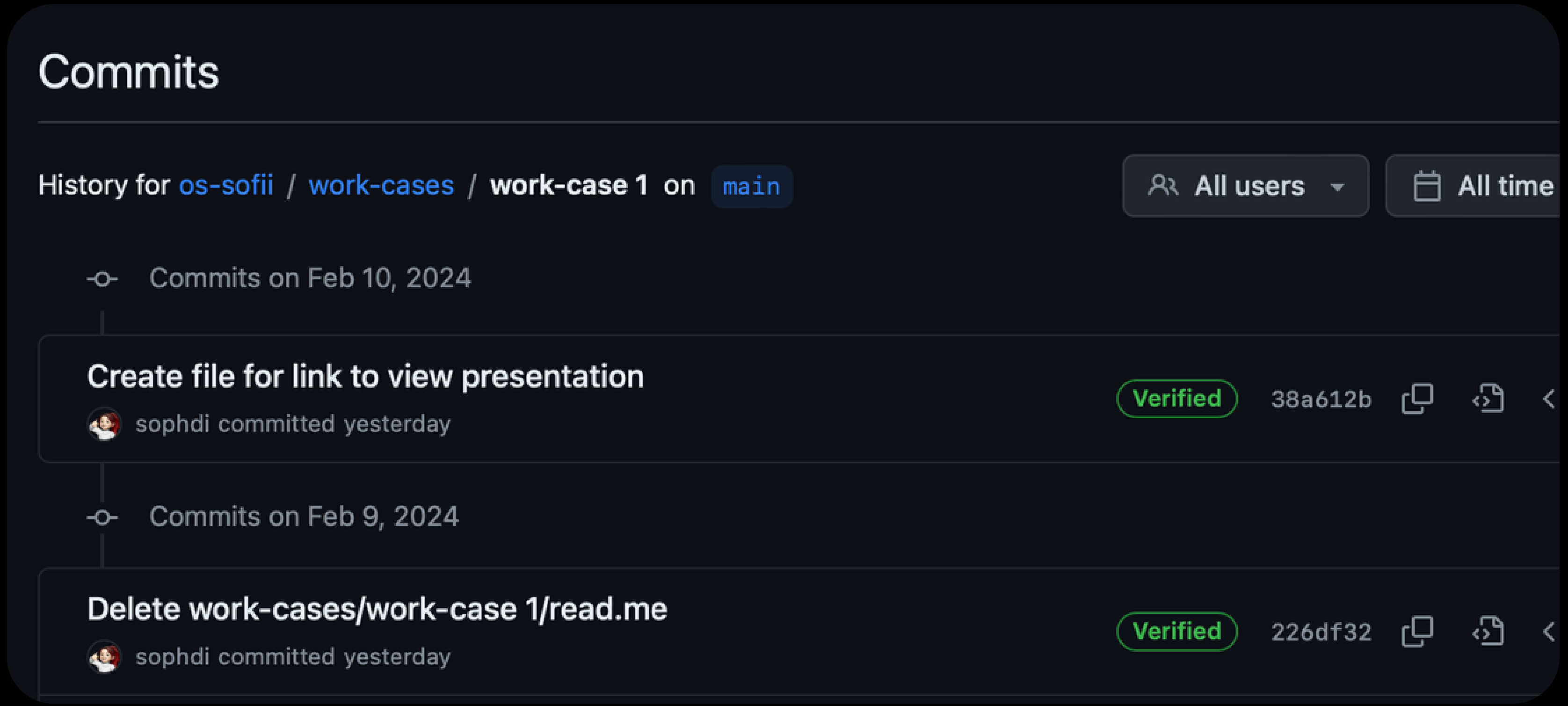
Push : upload local repo content to remote repo.

```
git push origin ‹branch> or main
```

Git commit

The git commit command captures a snapshot of the project's currently staged changes.

Committed snapshots can be thought of as "safe" versions of a project—Git will never change them unless you explicitly ask it to.



Commits

History for os-sofii / work-cases / work-case 1 on main

Commits on Feb 10, 2024

Create file for link to view presentation
sophdi committed yesterday
38a612b

Commits on Feb 9, 2024

Delete work-cases/work-case 1/read.me
sophdi committed yesterday
226df32

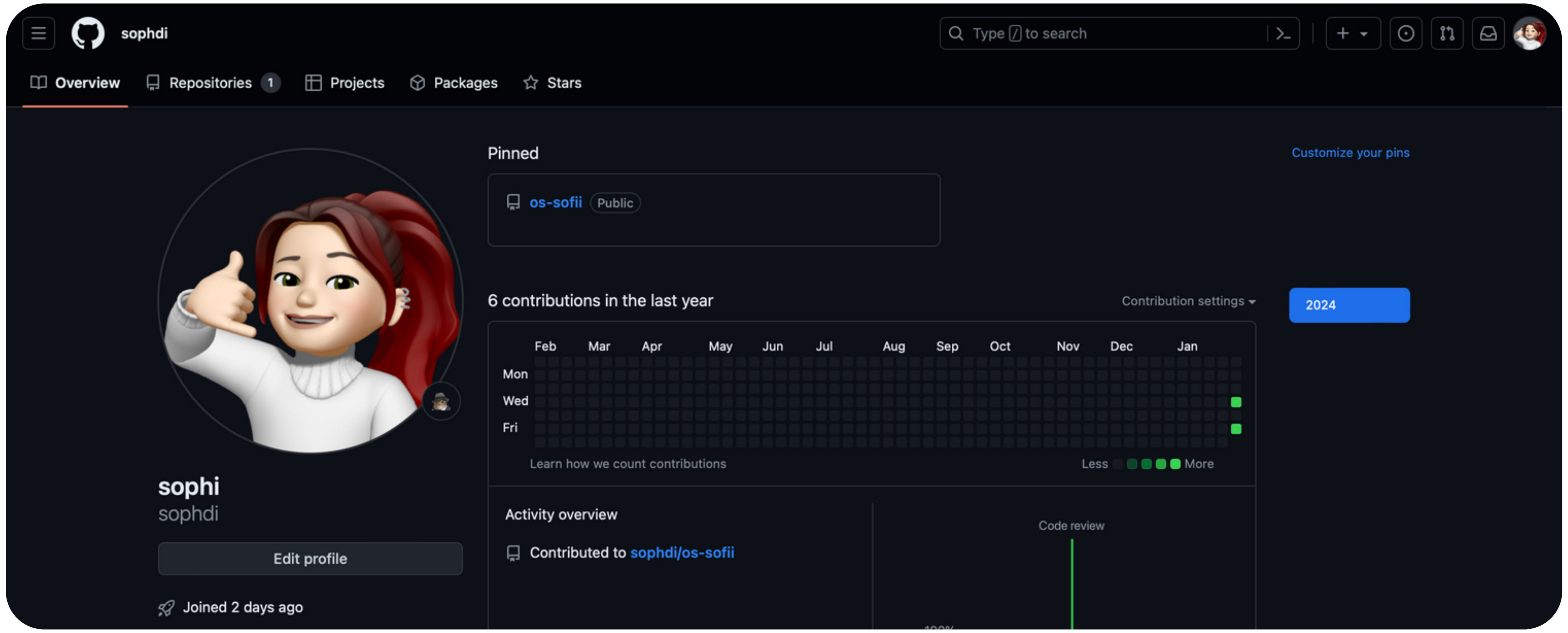
Commit records changes to one or more files in your branch. Git assigns each commit a unique ID, called a SHA or hash, that identifies:

- The specific changes
- When the changes were made
- Who created the changes

My commits in GitHub

What is GitHub?

GitHub is a code hosting platform, built for collaboration.



sophi
sophdi

Joined 2 days ago

6 contributions in the last year

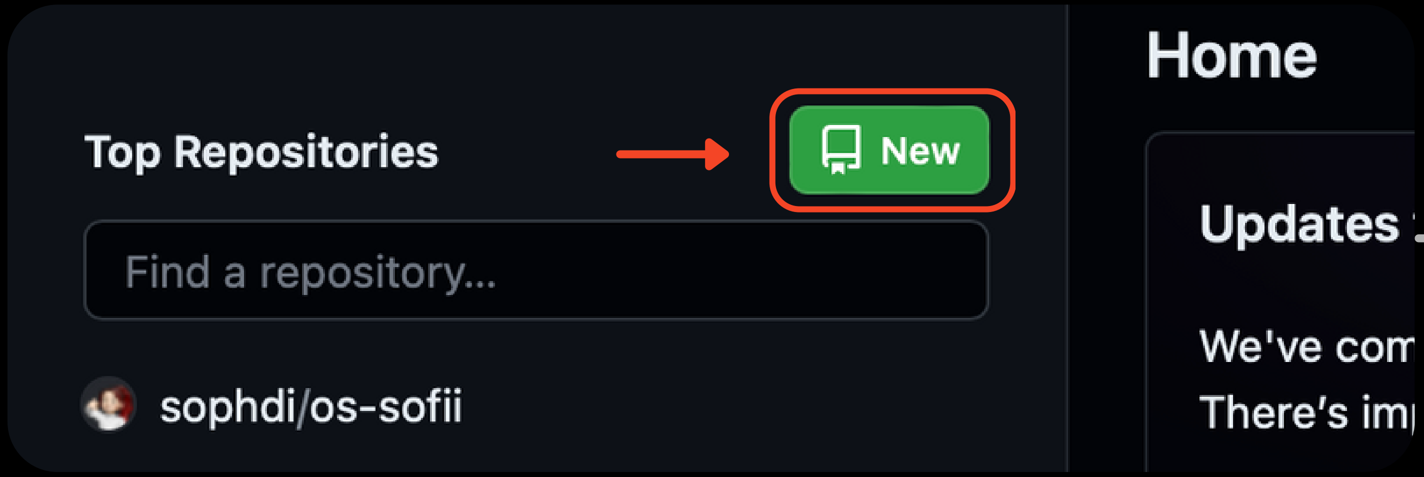
Contributed to sophdi/os-sofii

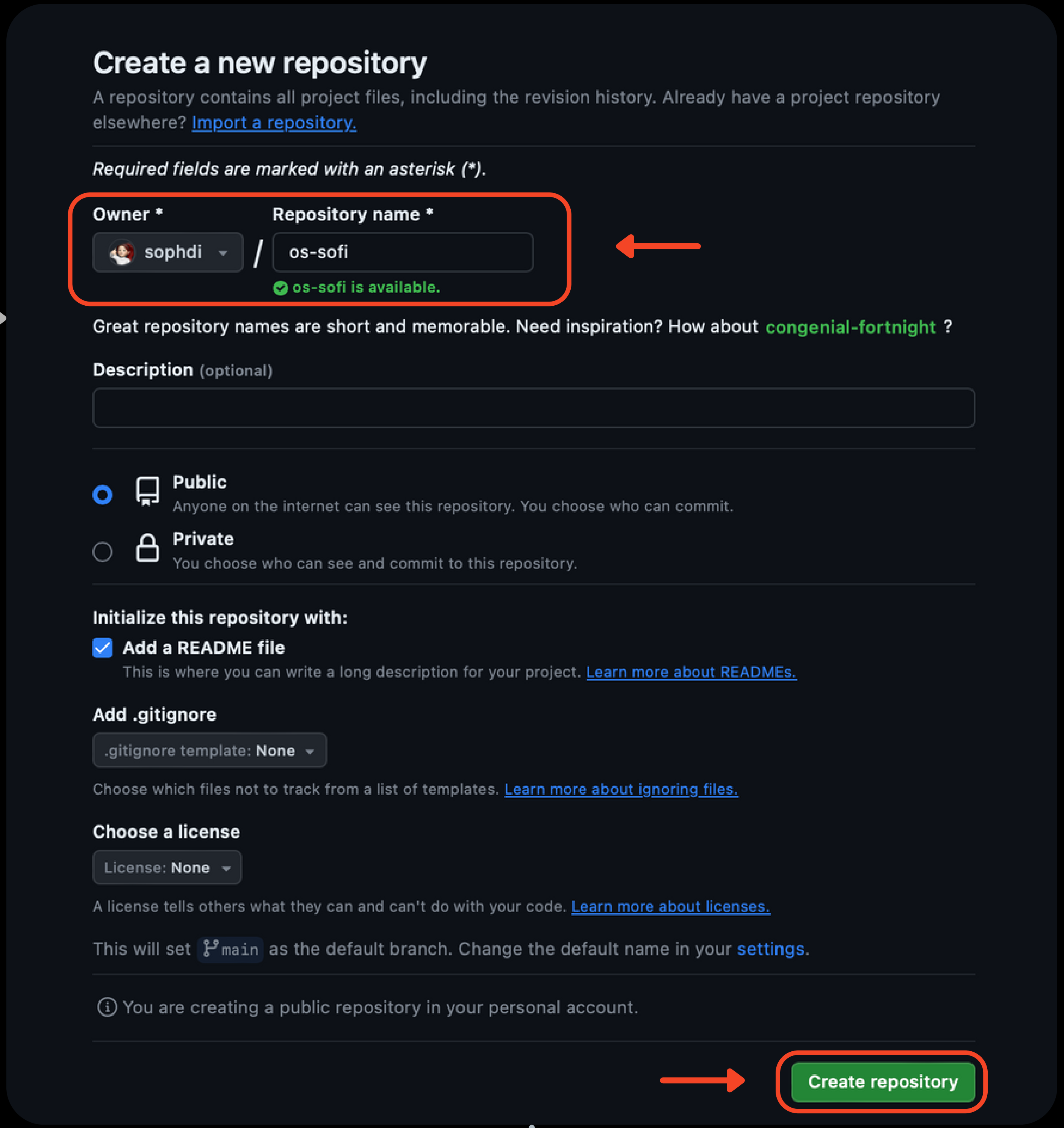
Git - a version control system;
Hub - a social network for developers.

For my work, I chose GitHub

GitHub allows you to work together with your team remotely from any location. It provides access control and several collaboration features such as bug tracking, feature requests, task management, continuous integration, and more.

How to create repository





Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? Import a repository.

Required fields are marked with an asterisk (*).

Owner * / Repository name *

sophdi / os-sofi

✓ os-sofi is available.

Great repository names are short and memorable. Need inspiration? How about congenial-fortnight ?

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:

☑ Add a README file
This is where you can write a long description for your project. Learn more about READMEs.

Add .gitignore

.gitignore template: None

Choose which files not to track from a list of templates. Learn more about ignoring files.

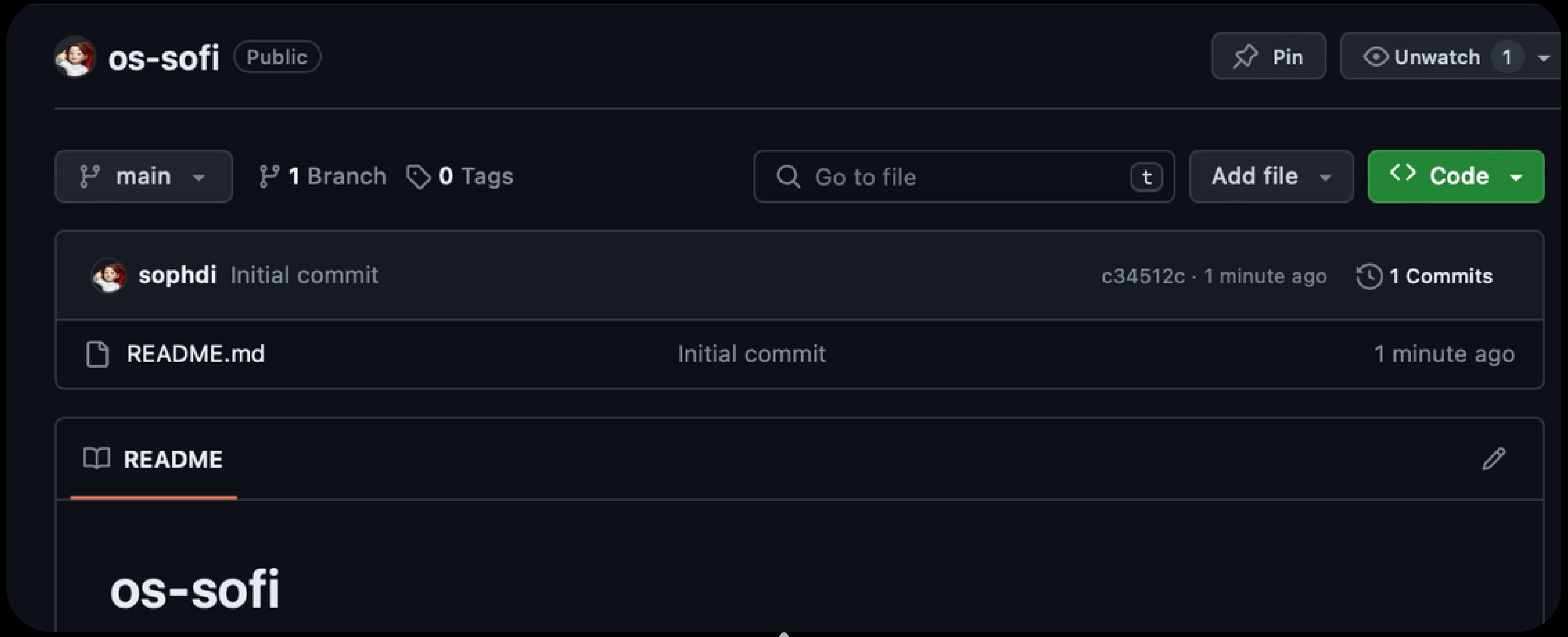
Choose a license

License: None

A license tells others what they can and can't do with your code. Learn more about licenses.

This will set `main` as the default branch. Change the default name in your settings.

ⓘ You are creating a public repository in your personal account.

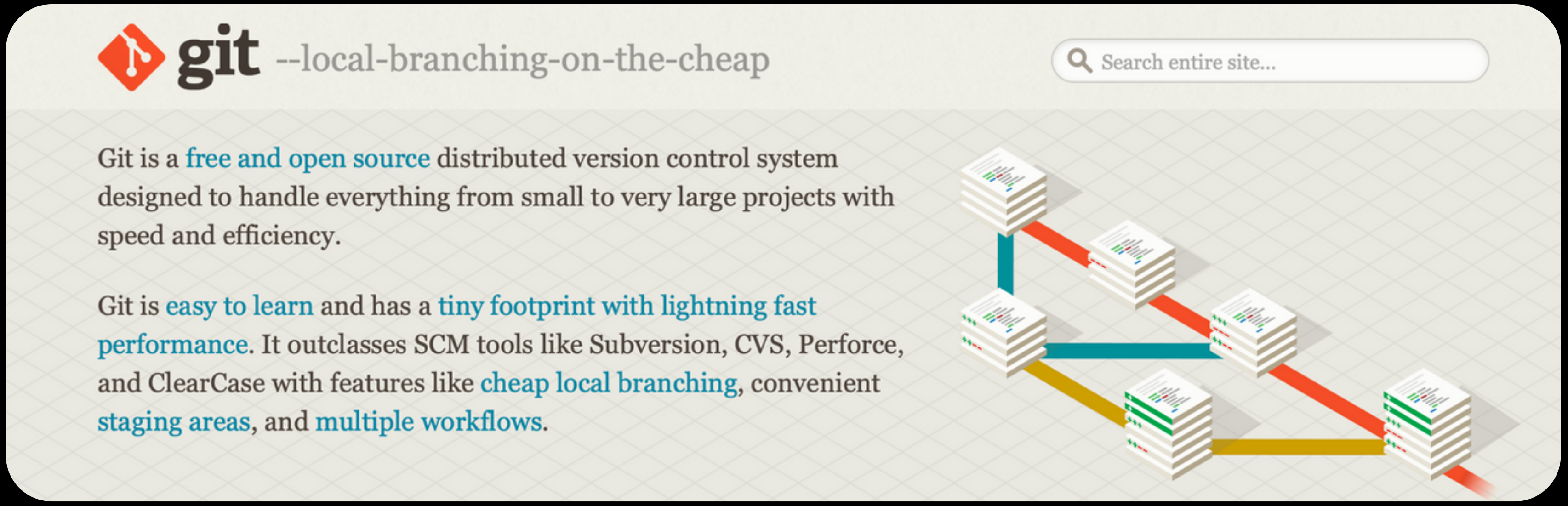


sophdi Initial commit c34512c · 1 minute ago 1 Commits

README.md Initial commit 1 minute ago

README

os-sofi



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.

Git is easy to learn and has a tiny footprint with lightning fast performance. It outclasses SCM tools like Subversion, CVS, Perforce, and ClearCase with features like cheap local branching, convenient staging areas, and multiple workflows.

Conclusion

In WORK-CASE №1, I successfully familiarized myself with the basic concepts of Git and mastered its basic commands. I demonstrated my understanding of GitHub by creating a repository and adding the work I had done to it.

So, using Git is becoming increasingly important in the modern world of programming. Knowing how to use Git is a valuable skill for any developer.

Thank you!