



GIT E GITHUB

FAPESC – DESENVOLVEDORES PARA TECNOLOGIA DA INFORMAÇÃO

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GIT

Git é um sistema de versionamento, criado por Linus Torvalds, autor do Linux.

É capaz de guardar o histórico de alterações de todos os arquivos dentro de uma pasta, que chamamos de repositório.

Torna-se importante à medida que seu trabalho é colaborativo.

Git é um software que você instala no computador.

GITHUB

GitHub é um site onde você coloca e compartilha repositórios Git.

Utilizado por milhões de pessoas em projetos de código aberto ou fechado.

Útil para colaborar com outros programadores em projetos de ciência de dados.

Existem alternativas, como GitLab e BitBucket.

GitHub é um site que você acessa na internet.



Apoiadores:



CENTRO DE INOVAÇÃO VIDEIRA



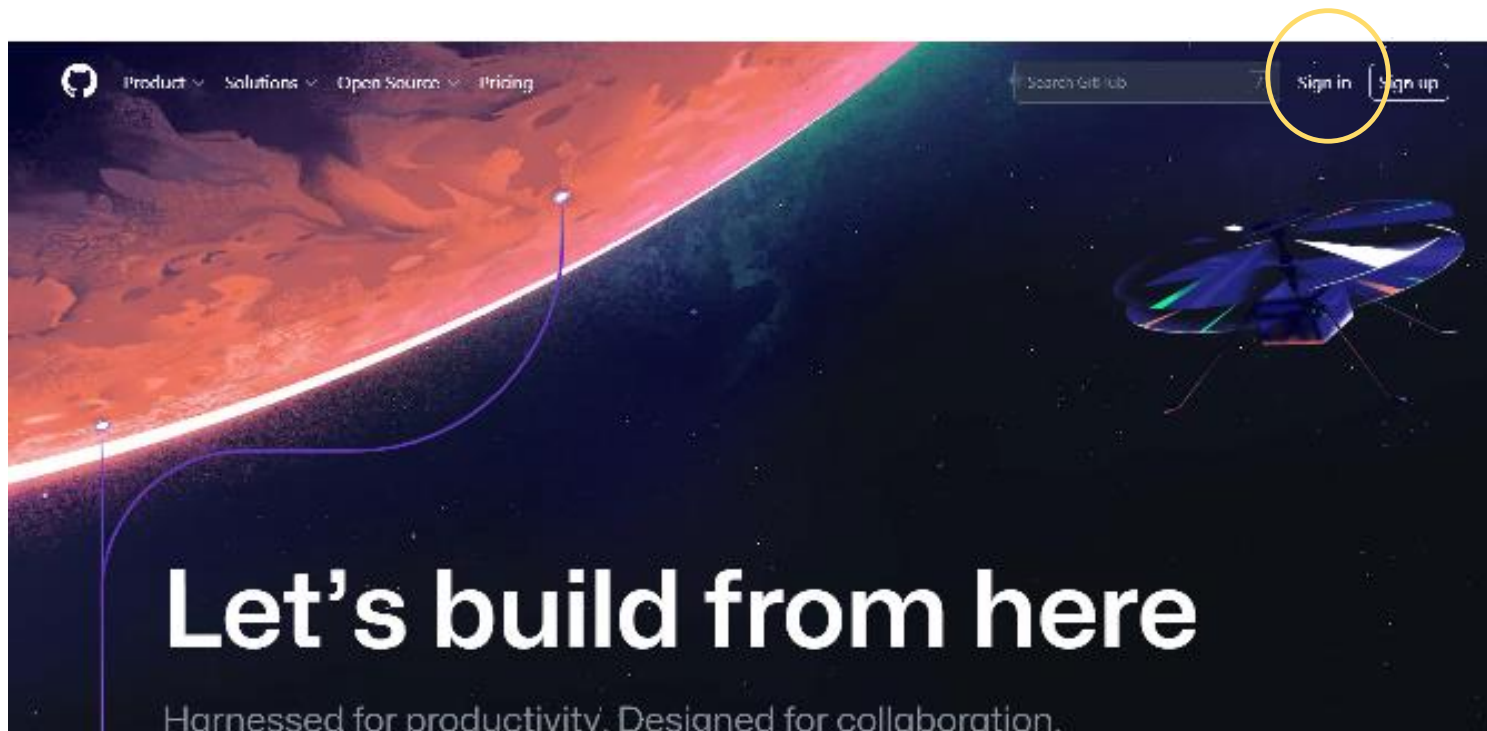
fapesc



GOVERNO DO ESTADO DE SANTA CATARINA

GITHUB

Vamos começar fazendo uma conta no GitHub
No site: <https://github.com/>





Sign in to GitHub

Username or email address

Password

[Forgot password?](#)

Sign in

New to GitHub? [Create an account.](#)

GITHUB

Welcome to GitHub!
Let's begin the adventure

Enter your email

→ escolha um email e preencha aqui

Continue

Email is invalid or already taken

GITHUB

Welcome to GitHub!
Let's begin the adventure

Enter your email
✓ franciele.petry@unoesc.edu.br

Create a password
→

Password is strong

GITHUB

Welcome to GitHub!
Let's begin the adventure

Enter your email
✓ franciele.petry@unoesc.edu.br

Create a password
✓

Enter a username
→

GITHUB

Would you like to receive product updates and announcements via email?

Type "y" for yes or "n" for no

→ n

Continue

Verify your account

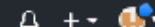


Create account



GITHUB

Continue for free

[Pull requests](#) [Issues](#) [Codespaces](#) [Marketplace](#) [Explore](#)

Create your first project

Ready to start building? Create a repository for a new idea or bring over an existing repository to keep contributing to it.

[Create repository](#)[Import repository](#)

Recent activity

When you take actions across GitHub, we'll provide links to that activity here.

The home for all developers — including you.

Welcome to your personal dashboard, where you can find an introduction to how GitHub works, tools to help you build software, and help merging your first lines of code.

[Start writing code](#)

Start a new repository

A repository contains all of your project's files, revision history, and collaborator discussion.

P3zinha /



Public

Anyone on the internet can see this repository.



Private

You choose who can see and commit to this repository.

[Create a new repository](#)

Introduce yourself with a profile README

Share information about yourself by creating a profile README, which appears at the top of your profile page.

P3zinha / README.md

[Create](#)

1. Hi, I'm @P3zinha
2. I'm interested in ...
3. I'm currently learning ...
4. I'm looking to collaborate on ...
5. How to reach me ...
- 6.

Universe 2022

Let's build from here

Watch all the latest product announcements and expert-driven sessions from this year's event, available now on demand.

[Watch now](#)

Start coding instantly with GitHub Codespaces

Spin up fully configured dev environments on powerful VMs that start in seconds. Get up to 60 hours a month of free time.

[Get started](#)

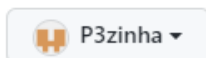
Latest changes

GITHUB

Create a new repository

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

Owner *



Repository name *

html ✓

Great repository names html is available. morable. Need inspiration? How about **supreme-succotash**?

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.

GITHUB

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.](#)

.gitignore template: None ▼

Choose a license

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

License: None ▼

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.

Create repository


GITHUB


P3zinha / html Public

 Pin

 Unwatch

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

 main ▾

 1 branch  0 tags


Go to file

Add file ▾

 Code ▾



P3zinha Initial commit

049aad4 now  1 commit



README.md

Initial commit

now

README.md



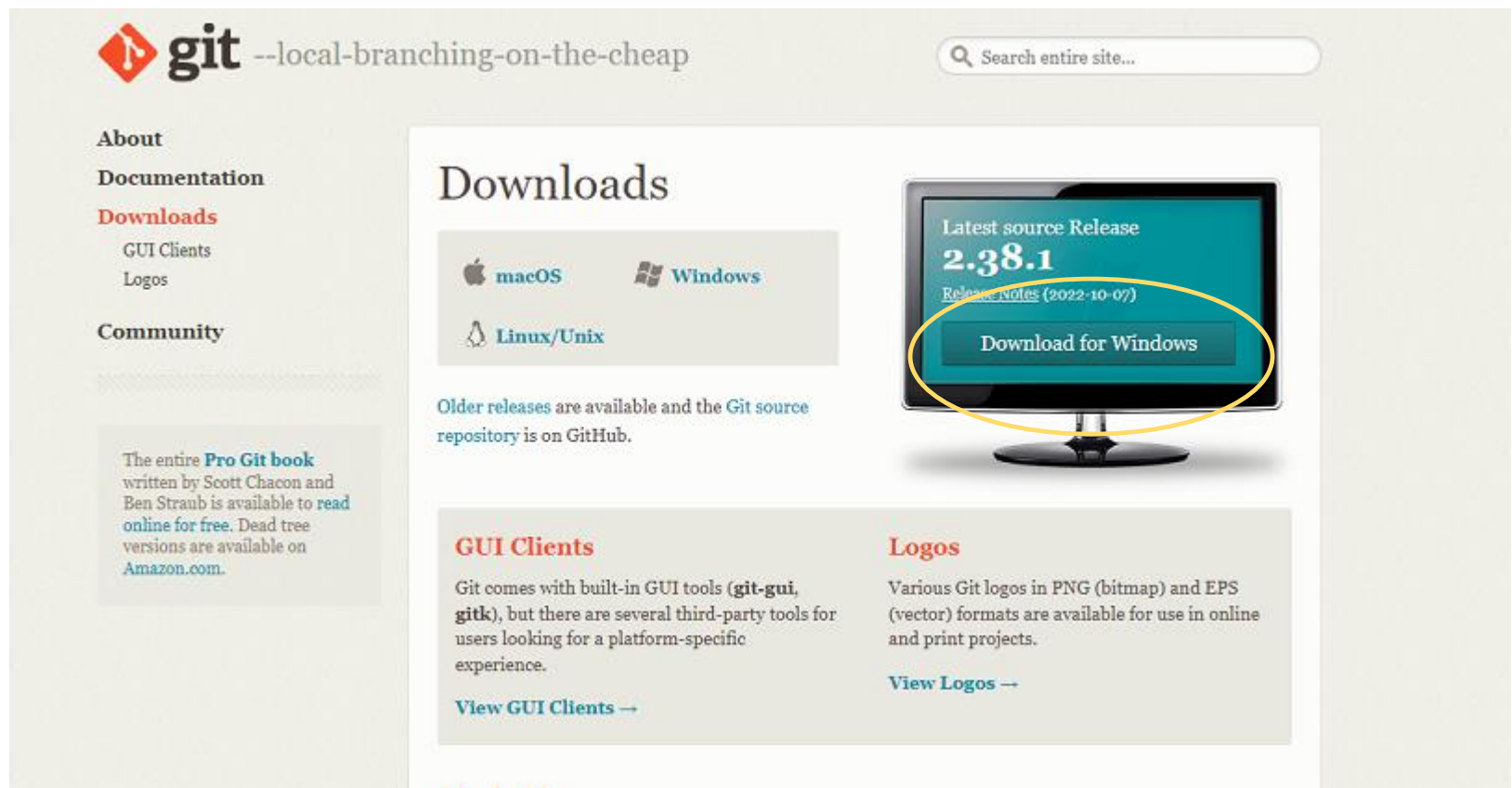
html

Apoiadores:

GIT

Vamos instalar o Git na nossa máquina.

Para baixar acesso o site: <https://git-scm.com/downloads>



The screenshot shows the Git website's Downloads page. The header features the Git logo and the tagline "--local-branching-on-the-cheap". A search bar is located in the top right corner. The left sidebar contains navigation links: "About", "Documentation", "Downloads" (highlighted in red), "GUI Clients", "Logos", and "Community". The main content area is titled "Downloads" and includes a section for the latest source release, "2.38.1", with a yellow circle highlighting the "Download for Windows" button. Below this, there are links for "Older releases" and the "Git source repository". The bottom section is divided into two columns: "GUI Clients" and "Logos", each with a "View" link.

git --local-branching-on-the-cheap

Search entire site...

About
Documentation
Downloads
GUI Clients
Logos
Community

The entire **Pro Git book** written by Scott Chacon and Ben Straub is available to [read online for free](#). Dead tree versions are available on [Amazon.com](#).

Downloads

macOS Windows Linux/Unix

Latest source Release
2.38.1
[Release notes \(2022-10-07\)](#)
Download for Windows

Older releases are available and the Git source repository is on GitHub.

GUI Clients

Git comes with built-in GUI tools (**git-gui**, **gitk**), but there are several third-party tools for users looking for a platform-specific experience.


[View GUI Clients →](#)

Logos

Various Git logos in PNG (bitmap) and EPS (vector) formats are available for use in online and print projects.

[View Logos →](#)

GIT

 Git 2.38.1 Setup

Information

Please read the following important information before continuing.



When you are ready to continue with Setup, click Next.

GNU General Public License

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.
59 Temple Place - Suite 330, Boston, MA 02111-1307, USA

Everyone is permitted to copy and distribute verbatim copies
of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your
freedom to share and change it. By contrast, the GNU General Public
License is intended to guarantee your freedom to share and change

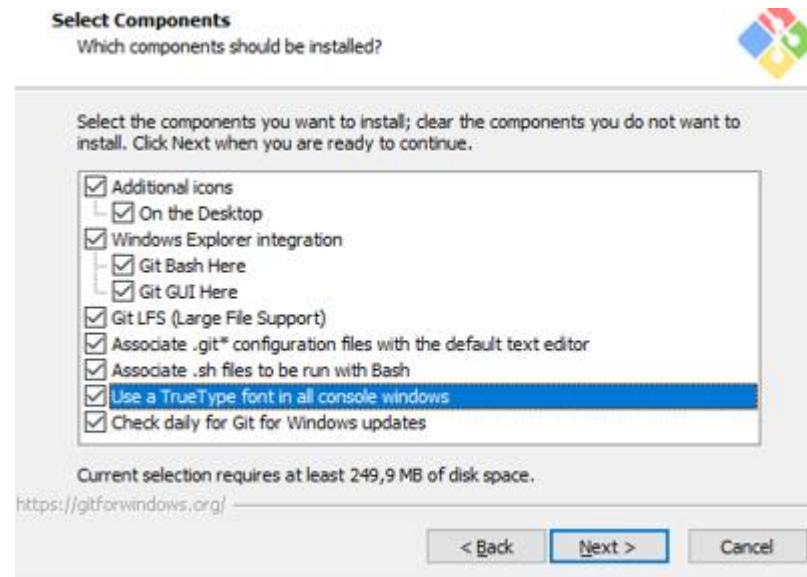
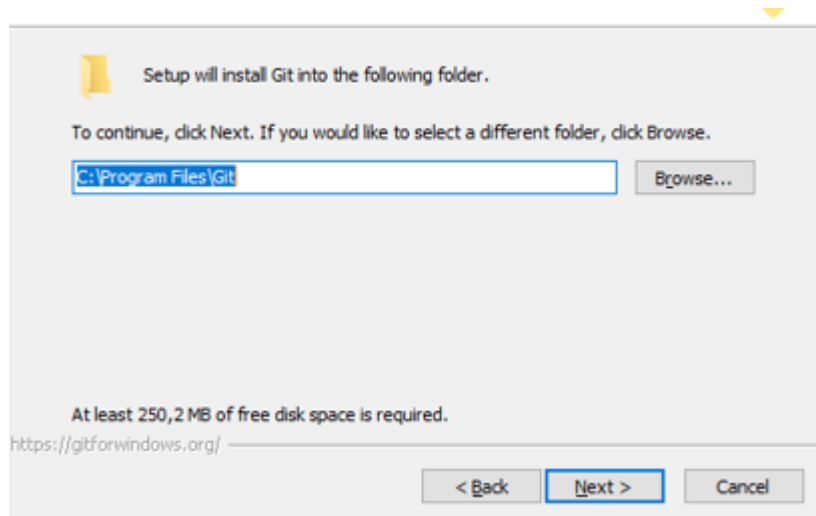
<https://gitforwindows.org/>

☒ Only show new options

Next

Cancel

GIT



GIT

Select Start Menu Folder

Where should Setup place the program's shortcuts?



Setup will create the program's shortcuts in the following Start Menu folder.

To continue, click Next. If you would like to select a different folder, click Browse.

Git

Browse...

☐ Don't create a Start Menu folder

<https://gitforwindows.org/>

< Back

Next >

Cancel

Choosing the default editor used by Git

Which editor would you like Git to use?



Use Vim (the ubiquitous text editor) as Git's default editor

The [Vim editor](#), while powerful, [can be hard to use](#). Its user interface is unintuitive and its key bindings are awkward.

Note: Vim is the default editor of Git for Windows only for historical reasons, and it is highly recommended to switch to a modern GUI editor instead.

Note: This will leave the 'core.editor' option unset, which will make Git fall back to the 'EDITOR' environment variable. The default editor is Vim - but you may set it to some other editor of your choice.

<https://gitforwindows.org/>

< Back

Next >

Cancel

Apoiadores:



GIT

Adjusting your PATH environment

How would you like to use Git from the command line?



☐ Use Git from Git Bash only

This is the most cautious choice as your PATH will not be modified at all. You will only be able to use the Git command line tools from Git Bash.

☒ Git from the command line and also from 3rd-party software

(Recommended) This option adds only some minimal Git wrappers to your PATH to avoid cluttering your environment with optional Unix tools. You will be able to use Git from Git Bash, the Command Prompt and the Windows PowerShell as well as any third-party software looking for Git in PATH.

☐ Use Git and optional Unix tools from the Command Prompt

Both Git and the optional Unix tools will be added to your PATH.
Warning: This will override Windows tools like "find" and "sort". Only use this option if you understand the implications.

<https://gitforwindows.org/>

< Back

Next >

Cancel

Choosing HTTPS transport backend

Which SSL/TLS library would you like Git to use for HTTPS connections?



☒ Use the OpenSSL library

Server certificates will be validated using the ca-bundle.crt file.

☐ Use the native Windows Secure Channel library

Server certificates will be validated using Windows Certificate Stores. This option also allows you to use your company's internal Root CA certificates distributed e.g. via Active Directory Domain Services.

<https://gitforwindows.org/>

< Back

Next >

Cancel

Apoiadores:



GIT

Configuring the line ending conversions

How should Git treat line endings in text files?



☒ Checkout Windows-style, commit Unix-style line endings

Git will convert LF to CRLF when checking out text files. When committing text files, CRLF will be converted to LF. For cross-platform projects, this is the recommended setting on Windows ("core.autocrlf" is set to "true").

☐ Checkout as-is, commit Unix-style line endings

Git will not perform any conversion when checking out text files. When committing text files, CRLF will be converted to LF. For cross-platform projects, this is the recommended setting on Unix ("core.autocrlf" is set to "input").

☐ Checkout as-is, commit as-is

Git will not perform any conversions when checking out or committing text files. Choosing this option is not recommended for cross-platform projects ("core.autocrlf" is set to "false").

<https://gitforwindows.org/>

< Back

Next >

Cancel

Configuring the terminal emulator to use with Git Bash

Which terminal emulator do you want to use with your Git Bash?



☐ Use MinTTY (the default terminal of MSYS2)

Git Bash will use MinTTY as terminal emulator, which sports a resizable window, non-rectangular selections and a Unicode font. Windows console programs (such as interactive Python) must be launched via 'winpty' to work in MinTTY.

☒ Use Windows' default console window

Git will use the default console window of Windows ("cmd.exe"), which works well with Win32 console programs such as interactive Python or node.js, but has a very limited default scroll-back, needs to be configured to use a Unicode font in order to display non-ASCII characters correctly, and prior to Windows 10 its window was not freely resizable and it only allowed rectangular text selections.

<https://gitforwindows.org/>

< Back

Next >

Cancel

GIT

Configuring extra options

Which features would you like to enable?



☒ Enable file system caching

File system data will be read in bulk and cached in memory for certain operations ("core.fsCache" is set to "true"). This provides a significant performance boost.

☒ Enable Git Credential Manager

The [Git Credential Manager for Windows](#) provides secure Git credential storage for Windows, most notably multi-factor authentication support for Visual Studio Team Services and GitHub. (requires .NET framework v4.5.1 or later).

☐ Enable symbolic links

Enable [symbolic links](#) (requires the SeCreateSymbolicLink permission). Please note that existing repositories are unaffected by this setting.

<https://gitforwindows.org/>

< Back

Next >

Cancel

Configuring experimental options

Which bleeding-edge features would you like to enable?



☐ Enable experimental, built-in add -i/-p

(NEW!) Use the experimental built-in interactive add ("git add -i" or "git add -p"). This makes it faster (especially the startup!), but it is not yet considered robust.

<https://gitforwindows.org/>

< Back

Install

Cancel

Apoio de:



GIT

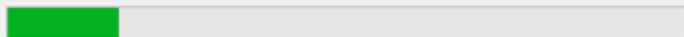
Installing

Please wait while Setup installs Git on your computer.



Extracting files...

C:\Program Files\Git\mingw64\bin\tcl8.6\msgs\ar_lb.msg



<https://gitforwindows.org/>

Cancel

Completing the Git Setup Wizard

Setup has finished installing Git on your computer. The application may be launched by selecting the installed shortcuts.

Click Finish to exit Setup.

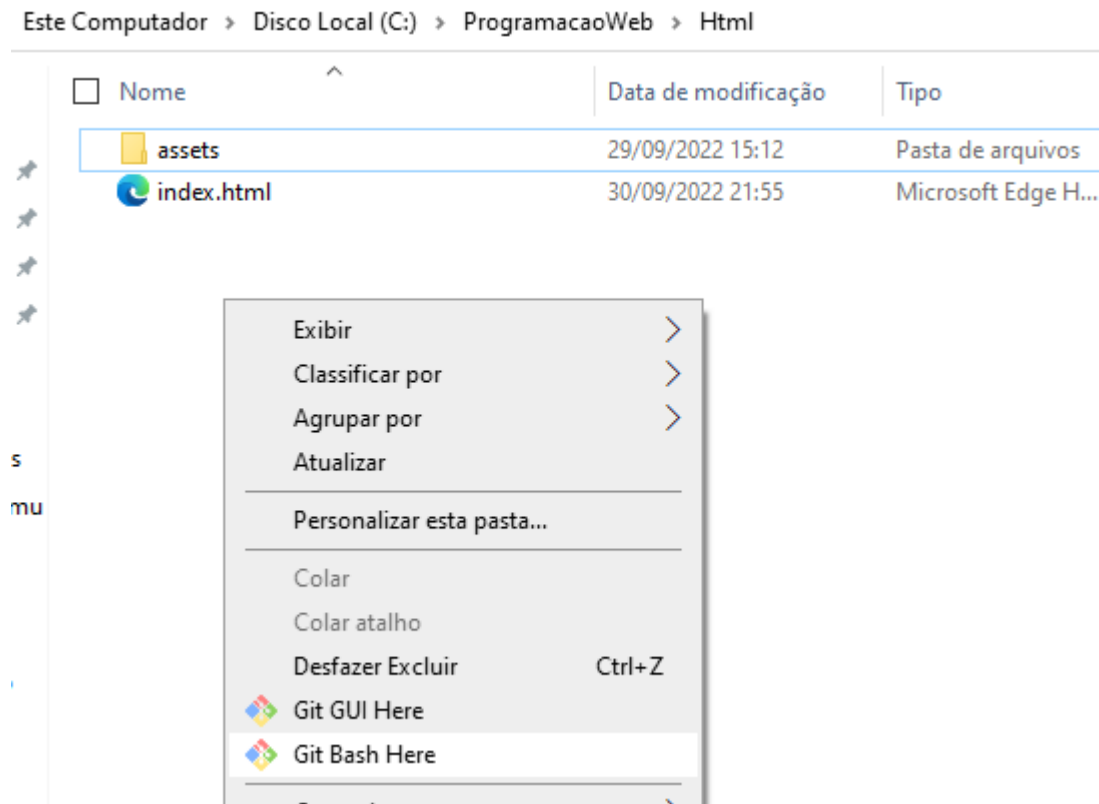
- ☐ Launch Git Bash
- ☒ View Release Notes



Finish

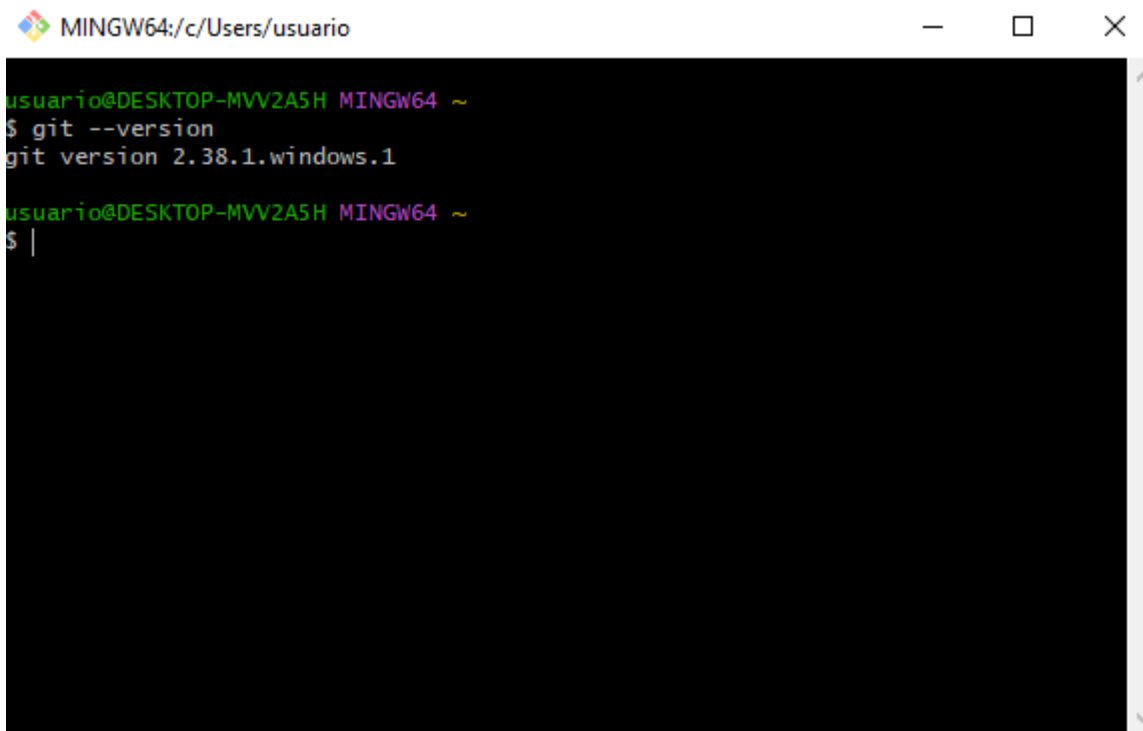
GIT

Agora podemos executar o git Bash através do atalho criado e iniciar a configuração inicial. O git Bash será utilizado de forma semelhante ao prompt de comando.



GIT

Agora podemos executar o git Bash através do atalho criado e iniciar a configuração inicial. O git Bash será utilizado de forma semelhante ao prompt de comando.



```
MINGW64:/c/Users/usuario

usuario@DESKTOP-MVV2A5H MINGW64 ~
$ git --version
git version 2.38.1.windows.1

usuario@DESKTOP-MVV2A5H MINGW64 ~
$ |
```

git --version

GIT

É preciso fazer a configuração inicial executando a seguinte linha de comando (com as adaptações necessárias, conforme seus dados, mantendo as aspas):

```
git config --global user.name "seu nome de usuário aqui"
```

em seguida configurar seu e-mail

```
git config --global user.email "seu email aqui"
```

Para verificar se está tudo ok use:

```
git config --list
```

GIT

```
usuario@DESKTOP-MVV2A5H MINGW64 /c/ProgramacaoWeb/Html (master)
$ git config --global user.name "P3zinha"

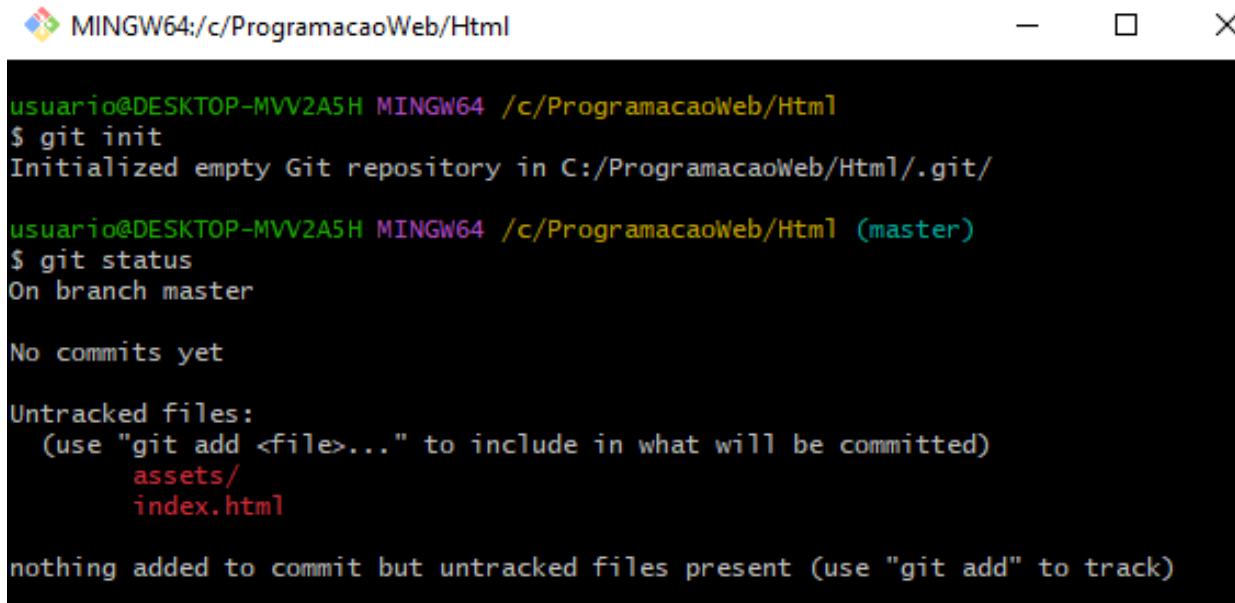
usuario@DESKTOP-MVV2A5H MINGW64 /c/ProgramacaoWeb/Html (master)
$ git config --global user.email "franciele.petry@unoesc.edu.br"

usuario@DESKTOP-MVV2A5H MINGW64 /c/ProgramacaoWeb/Html (master)
$ git config --list
http.sslcainfo=C:/Program Files/Git/mingw64/ssl/certs/ca-bundle.crt
http.sslbackend=openssl
diff.astextplain.textconv=astextplain
filter.lfs.clean=git-lfs clean -- %f
filter.lfs.smudge=git-lfs smudge -- %f
filter.lfs.process=git-lfs filter-process
filter.lfs.required=true
credential.helper=manager-core
core.autocrlf=true
core.fscache=true
core.symlinks=false
pull.rebase=false
credential.https://dev.azure.com.usehttppath=true
init.defaultbranch=master
user.name=P3zinha
user.email=franciele.petry@unoesc.edu.br
core.repositoryformatversion=0
core.filemode=false
core.bare=false
core.logallrefupdates=true
core.symlinks=false
core.ignorecase=true
```

GIT

git status: Quais arquivos estão incluídos na minha versão?

Ou quais arquivos foram atualizados?



```
MINGW64:/c/ProgramacaoWeb/Html
usuario@DESKTOP-MVV2A5H MINGW64 /c/ProgramacaoWeb/Html
$ git init
Initialized empty Git repository in C:/ProgramacaoWeb/Html/.git/

usuario@DESKTOP-MVV2A5H MINGW64 /c/ProgramacaoWeb/Html (master)
$ git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    assets/
    index.html

nothing added to commit but untracked files present (use "git add" to track)
```

GIT

git init

```
MINGW64:/c/ProgramacaoWeb/Html

usuario@DESKTOP-MVV2A5H MINGW64 /c/ProgramacaoWeb/Html
$ git init
Initialized empty Git repository in C:/ProgramacaoWeb/Html/.git/

usuario@DESKTOP-MVV2A5H MINGW64 /c/ProgramacaoWeb/Html (master)
$
```



Menu Exibir

- ☒ Caixas de seleção de item
- ☒ Extensões de nomes de arquivos
- ☒ Itens ocultos

GIT

git add .

```
usuario@DESKTOP-MVV2A5H MINGW64 /c/ProgramacaoWeb/Html (master)
$ git add .
```

git status

```
usuario@DESKTOP-MVV2A5H MINGW64 /c/ProgramacaoWeb/Html (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:   assets/css/styles.css
    new file:   assets/img/contato.png
    new file:   assets/img/fundo.jpg
    new file:   assets/img/icone.jpg
    new file:   assets/img/portfolio-1.jpg
    new file:   assets/img/portfolio-2.jpeg
    new file:   assets/img/portfolio-3.jpeg
    new file:   assets/img/portfolio-4.jpg
    new file:   assets/img/portfolio-5.jpeg
    new file:   assets/img/portfolio-6.jpeg
    new file:   index.html
```

GIT

git commit -m “coloque uma mensagem aqui”

```
usuario@DESKTOP-MVV2A5H MINGW64 /c/ProgramacaoWeb/Html (master)
$ git commit -m "commit inicial"
[master (root-commit) 99d5713] commit inicial
11 files changed, 162 insertions(+)
create mode 100644 assets/css/styles.css
create mode 100644 assets/img/contato.png
create mode 100644 assets/img/fundo.jpg
create mode 100644 assets/img/icone.jpg
create mode 100644 assets/img/portfolio-1.jpg
create mode 100644 assets/img/portfolio-2.jpeg
create mode 100644 assets/img/portfolio-3.jpeg
create mode 100644 assets/img/portfolio-4.jpg
create mode 100644 assets/img/portfolio-5.jpeg
create mode 100644 assets/img/portfolio-6.jpeg
create mode 100644 index.html
```

```
usuario@DESKTOP-MVV2A5H MINGW64 /c/ProgramacaoWeb/Html (master)
$ git status
On branch master
nothing to commit, working tree clean
```

GIT

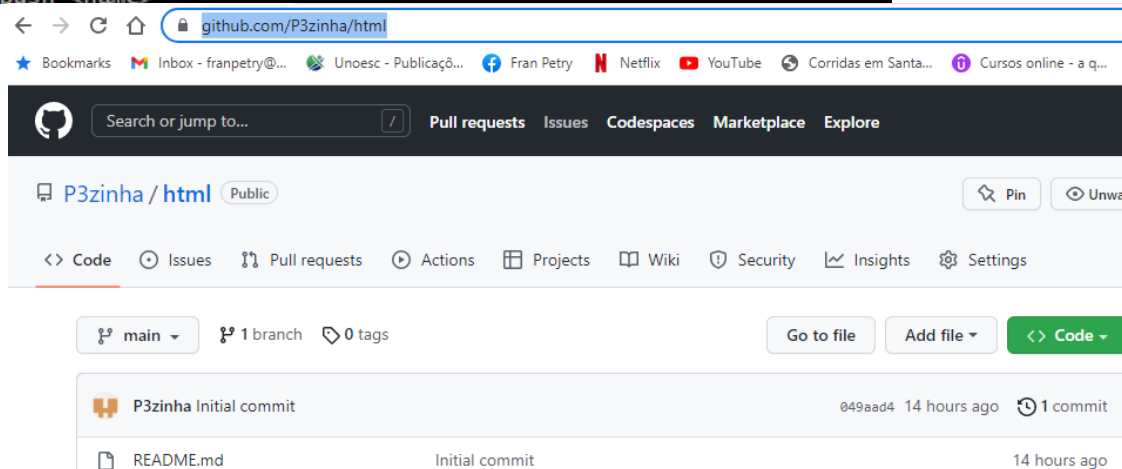
Para enviar os arquivos para a nuvem digitamos git push

```
usuario@DESKTOP-MVV2A5H MINGW64 /c/ProgramacaoWeb/Html (master)
$ git push
fatal: No configured push destination.
Either specify the URL from the command-line or configure a remote repository
using

    git remote add <name> <url>

and then push using the remote name

    git push <name>
```



GIT

Para enviar os arquivos para a nuvem digitamos git push

MINGW64:/c/ProgramacaoWeb/Html

```
user.name=P3zinha
user.email=franciele.petry@unoesc.edu.br
core.repositoryformatversion=0
core.filemode=false
core.bare=false
core.logallrefupdates=true
core.symlinks=false
core.ignorecase=true

usuario@DESKTOP-MVV2A5H MINGW64 /c/ProgramacaoWeb/Html (master)
$ git push
fatal: No configured push default
Either specify the URL from the remote, or
specify the branch from which to push.

git remote add <name> <url>
and then push using the remote with:
git push <name>

usuario@DESKTOP-MVV2A5H MINGW64 /c/ProgramacaoWeb/Html (master)
$ git remote add origin https://github.com/P3zinha/html
```

```
usuario@DESKTOP-MVV2A5H MINGW64 /c/ProgramacaoWeb/Html (master)
$ git remote add origin https://github.com/P3zinha/html
```

```
usuario@DESKTOP-MVV2A5H MINGW64 /c/ProgramacaoWeb/Html (master)
$ git push
fatal: The current branch master has no upstream branch.
To push the current branch and set the remote as upstream, use

git push --set-upstream origin master

To have this happen automatically for branches without a tracking
upstream, see 'push.autoSetupRemote' in 'git help config'.
```

```
usuario@DESKTOP-MVV2A5H MINGW64 /c/ProgramacaoWeb/Html (master)
$ git push --set-upstream origin master
```


GIT

```
usuario@DESKTOP-MVV2A5H MINGW64 /c/ProgramacaoWeb/Html (master)
$ git push --set-upstream origin master
```

Connect to GitHub

GitHub

Sign in

Browser/Device

Token

Sign in with your browser

Sign in with a code

Don't have an account? [Sign Up](#)



Git Credential Manager by [Git Credential Manager](#)
wants to access your P3zinha account



Gists
Read and write access



Repositories
Public and private



Workflow
Update GitHub Action Workflow files.



Cancel

Authorize
GitCredentialManager

Authorizing will redirect to
<http://localhost:63127>

GIT + GITHUB




Authentication Succeeded

You may now close this tab and return to the application.

GIT + GITHUB

```
usuario@DESKTOP-MVV2A5H MINGW64 /c/ProgramacaoWeb/Html (master)
$ git push --set-upstream origin master
Enumerating objects: 15, done.
Counting objects: 100% (15/15), done.
Delta compression using up to 4 threads
Compressing objects: 100% (14/14), done.
Writing objects: 100% (15/15), 1.04 MiB | 2.16 MiB/s, done.
Total 15 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'master' on GitHub by visiting:
remote:   https://github.com/P3zinha/html/pull/new/master
remote:
To https://github.com/P3zinha/html
 * [new branch]      master -> master
branch 'master' set up to track 'origin/master'.
```

 master had recent pushes 2 minutes ago

[Compare & pull request](#)

 main ▾

 2 branches  0 tags

[Go to file](#)

[Add file ▾](#)

[Code ▾](#)



Your main branch isn't protected

Protect this branch from force pushing, deletion, or require status checks before merging. [Learn more](#)

[Protect this branch](#)



GIT + GITHUB

Resumo rápido dos comandos após a criação e sincronização como repositório:

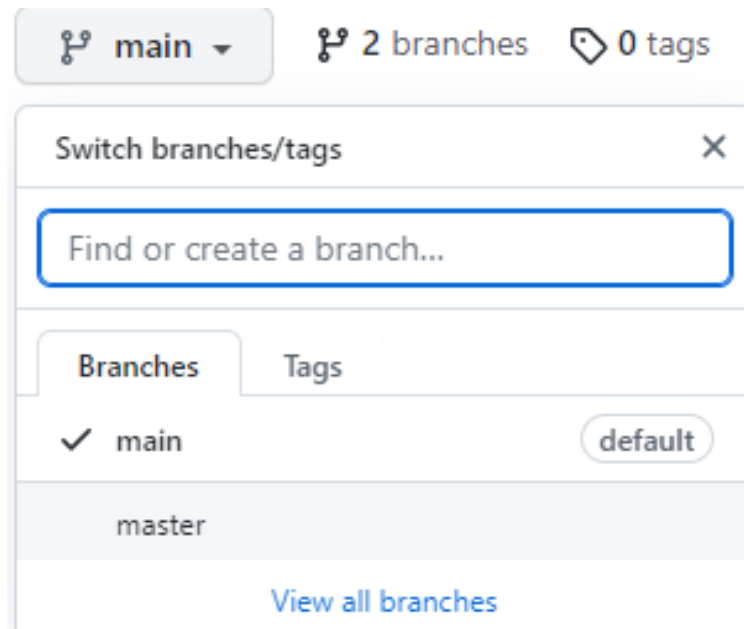
<code>git status</code>	Para ver se tem arquivos modificados ou não copiados
<code>git add .</code>	Adiciona os arquivos modificados ou novos (1)
<code>git commit -m "comentário"</code>	Faz o <u>commit</u> com um comentário a respeito (2)
<code>git push -u origin master</code>	Faz o <u>push</u> para atualizar o repositório com as atualizações do(s) <u>commit</u> (3)

Os passos 1, 2 e 3 são realizados todas as vezes que quiser atualizar o repositório remoto.

GIT + GITHUB

git branch

```
usuario@DESKTOP-MVV2A5H MINGW64 /c/ProgramacaoWeb/Html (master)
$ git branch
* master
```



GIT + GITHUB

git branch

```
usuario@DESKTOP-MVV2A5H MINGW64 /c/ProgramacaoWeb/Html (master)
$ git branch
* master
```

```
usuario@DESKTOP-MVV2A5H MINGW64 /c/ProgramacaoWeb/Html (master)
$ git branch novo
```

```
usuario@DESKTOP-MVV2A5H MINGW64 /c/ProgramacaoWeb/Html (master)
$ git branch
* master
  novo
```

```
usuario@DESKTOP-MVV2A5H MINGW64 /c/ProgramacaoWeb/Html (master)
$ git checkout novo
Switched to branch 'novo'
```


```
usuario@DESKTOP-MVV2A5H MINGW64 /c/ProgramacaoWeb/Html (novo)
$ git branch
  master
* novo
```

Switch branches/tags ×


Branches Tags

main	default
master	
✓ novo	


GIT + GITHUB

 master had recent pushes about 1 hour ago


[Compare & pull request](#)

 novo had recent pushes 4 minutes ago

[Compare & pull request](#)

 master ▾

 3 branches

 0 tags

[Go to file](#)

[Add file ▾](#)

[<> Code ▾](#)

This branch is [1 commit ahead](#), [1 commit behind](#) main.

 [Contribute ▾](#)

franpetry commit inicial

99d5713 1 hour ago  1 commit

 assets	commit inicial	1 hour ago
 index.html	commit inicial	1 hour ago



GIT + GITHUB

git checkout “master”

git merge “branch-paralela”

GIT + GITHUB

The screenshot shows the GitHub repository settings page for 'P3zinha / html'. The repository is marked as 'Public'. The navigation bar includes links for Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights, and Settings. The 'Settings' link is circled in yellow. On the left sidebar, the 'General' tab is selected, and the 'Access' section is expanded, with the 'Collaborators' option circled in yellow. The main content area shows the 'General' settings, including the 'Repository name' field containing 'html' and a 'Rename' button. There is also a checkbox for 'Template repository'.

Add a collaborator to html

Q Search by username, full name, or email

Select a collaborator above



GIT + GITHUB – BOAS PRÁTICAS

- 1: git pull da branch principal
- 2: gerar uma nova branch a partir da branch principal
- 3: alterar conforme necessário
- 4: Finalizar o trabalho na branch principal
- 5: git checkout na branch principal
- 6: git pull
- 7: merge (unir) o código da branch temporária com a principal (depois de testar)
- 8: git push da branch principal

GITHUB

Para deletar um repositório: vá em meus repositórios,
escolha qual deseja deletar,
Vá em settings:

Delete this repository

Once you delete a repository, there is no going back. Please be certain.

Delete this repository

Are you absolutely sure?



Unexpected bad things will happen if you don't read this!

This action **cannot** be undone. This will permanently delete the **P3zinha/html** repository, wiki, issues, comments, packages, secrets, workflow runs, and remove all collaborator associations.

Please type **P3zinha/html** to confirm.

I understand the consequences, delete this repository