

# Xóchitl Analí Cabañas Mota

NAO ID: 3319

September 9th, 2025

In-Mexico Program Backend  
Developer Certification

GitHub and Digital Repository  
Management:

**Develop – Sprint 1**

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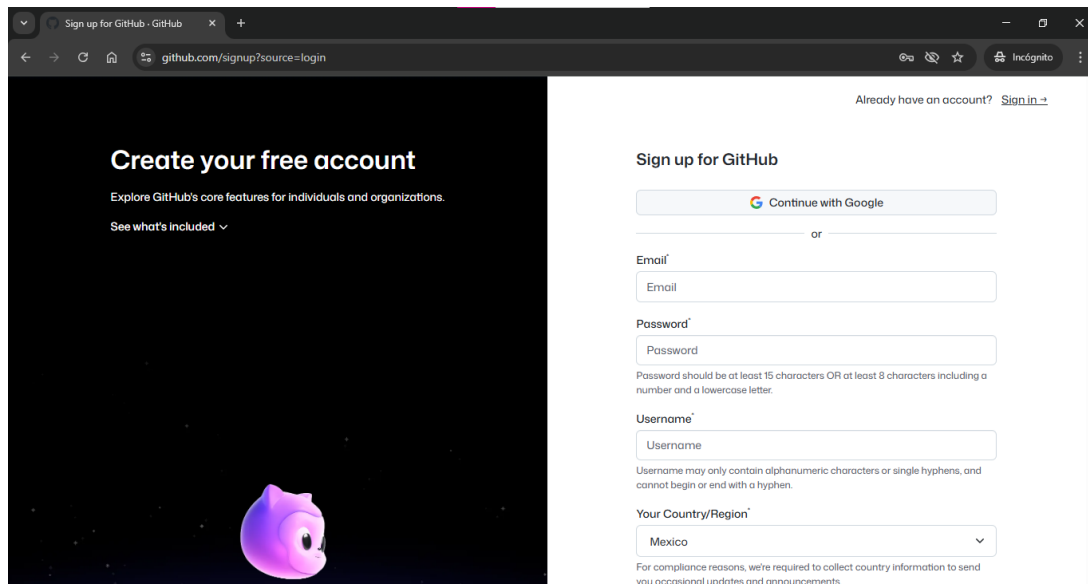
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## Executive Summary

This report shows the configuration process of GitHub and Git. It includes screenshots of key steps such as account creation, installation, SSH key generation, and GitHub configuration within the Git terminal. Each section is briefly documented along a screenshot to have a graphic description.

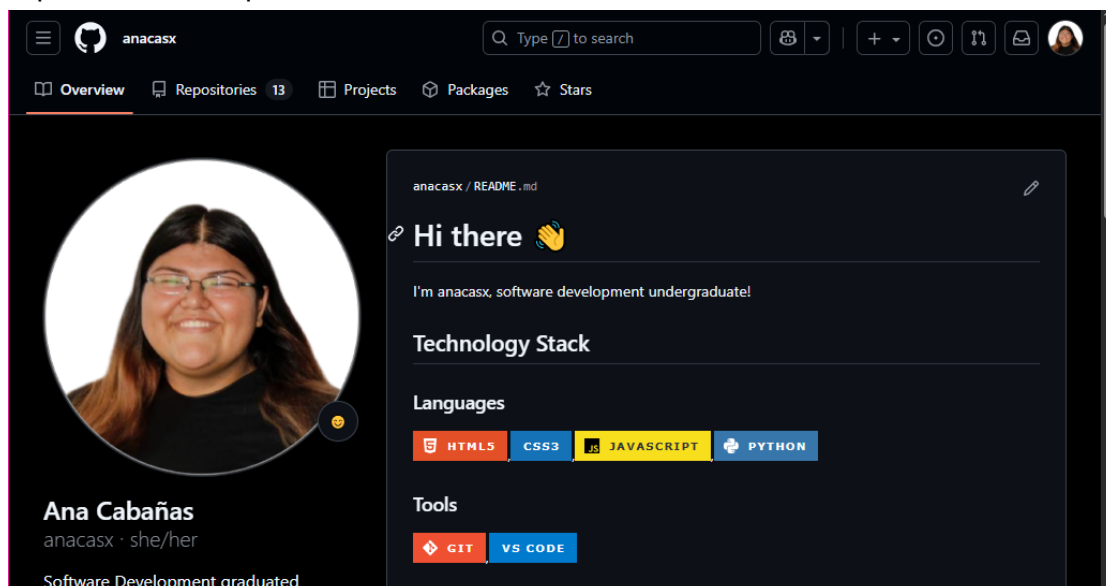
## GitHub Account Creation

To create a GitHub account, we go to the official page and register.



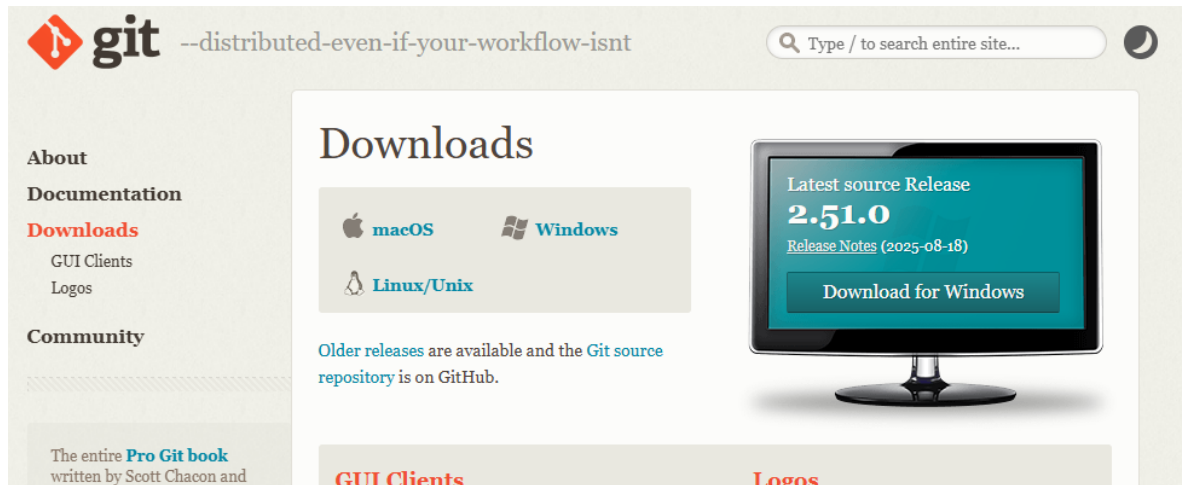
The screenshot shows the GitHub sign-up page in a web browser. The page has a dark theme. On the left, there's a section titled "Create your free account" with a subtext "Explore GitHub's core features for individuals and organizations." and a link "See what's included". On the right, there's a "Sign up for GitHub" form. The form includes a "Continue with Google" button, an "Email" input field, a "Password" input field with a note "Password should be at least 15 characters OR at least 8 characters including a number and a lowercase letter.", a "Username" input field with a note "Username may only contain alphanumeric characters or single hyphens, and cannot begin or end with a hyphen.", and a "Your Country/Region" dropdown menu set to "Mexico". At the bottom of the form, there's a small note: "For compliance reasons, we're required to collect country information to send you occasional updates and announcements."

In this simple way, we can create a profile to use the cloud and organize our repositories. The profile can also be customized.

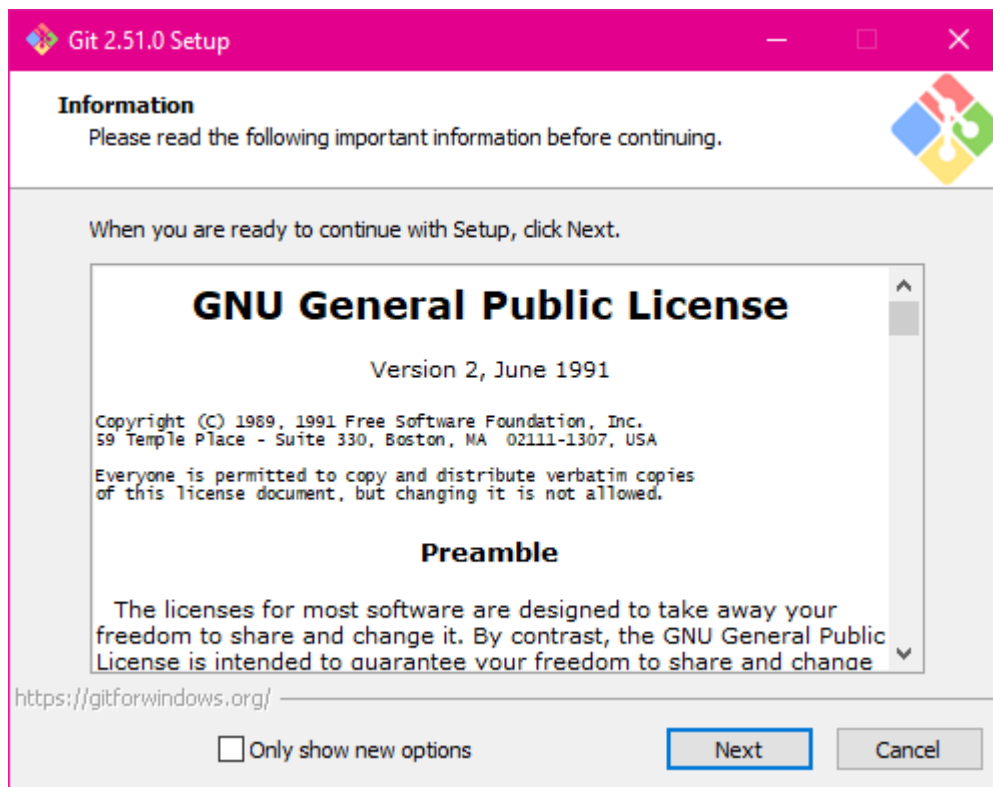


## Git Installation

To use Git in the local environment, it is necessary to install Git. In this case, for Windows, we simply access the official Git page and download the executable.

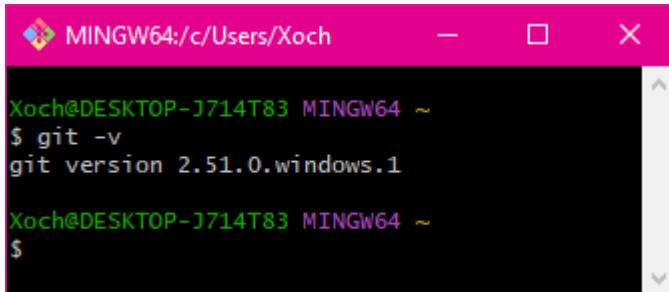


With this wizard, we can install Git in a graphical and simple manner.



## Verifying Git Installation

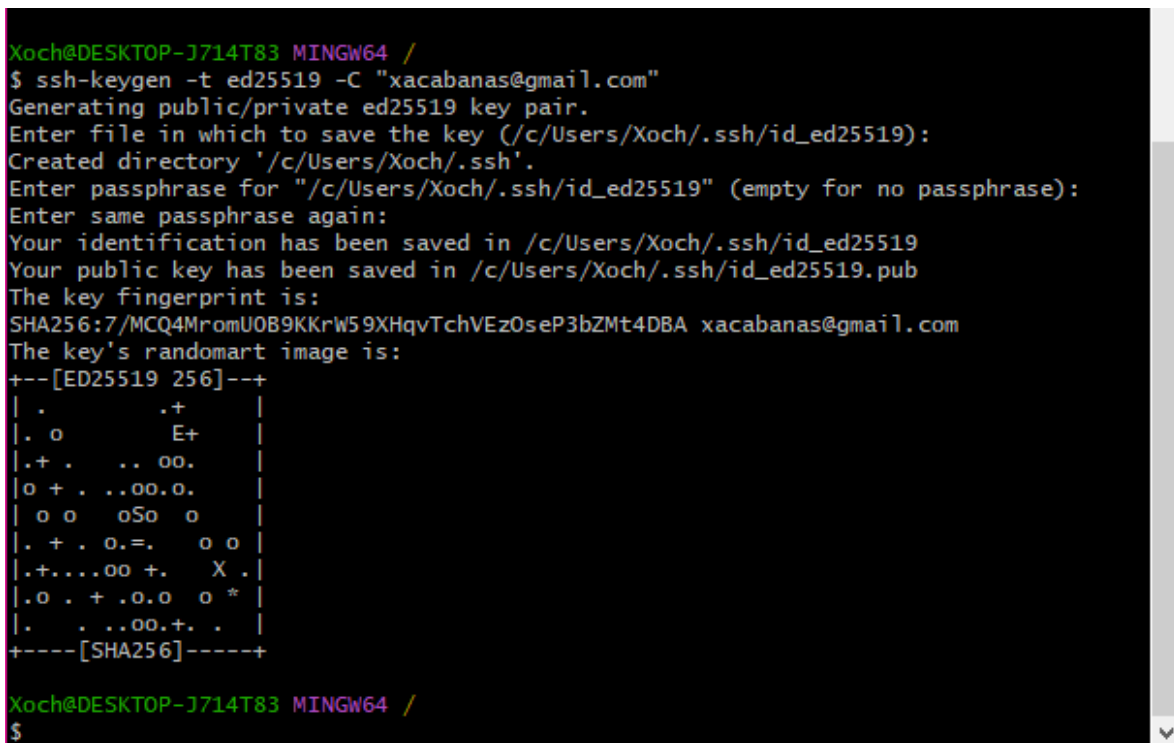
To confirm that we have correctly installed Git, we can use the command `git -v` to display the installed version. This can be done from a CMD terminal or from Git Bash, which indirectly assumes that Git is already installed.

A terminal window titled 'MINGW64:/c/Users/Xoch' with standard window controls. The prompt is 'Xoch@DESKTOP-J714T83 MINGW64 ~'. The command '\$ git -v' has been entered, and the output is 'git version 2.51.0.windows.1'. The prompt '\$' is shown again on the next line.

```
Xoch@DESKTOP-J714T83 MINGW64 ~
$ git -v
git version 2.51.0.windows.1
Xoch@DESKTOP-J714T83 MINGW64 ~
$
```

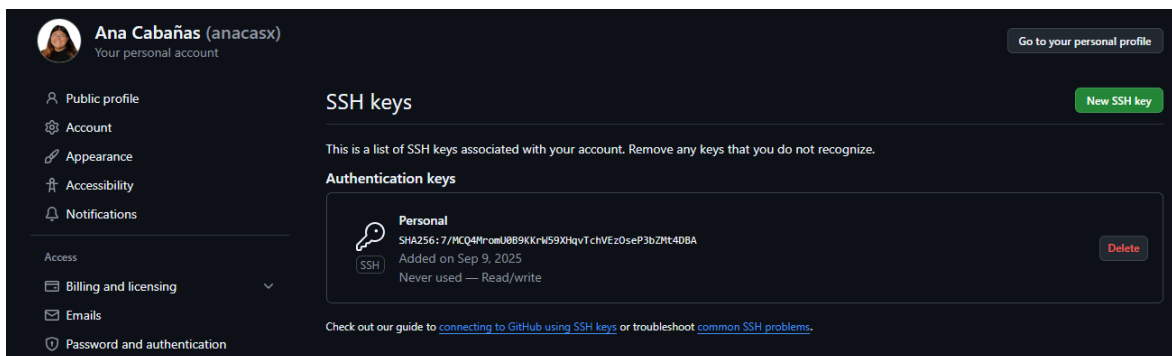
## SSH Key Generation

To create an SSH key, from Git Bash we use the command `ssh-keygen -t ed25519 -C "youremail@example.com"`.

A terminal window showing the execution of 'ssh-keygen -t ed25519 -C "xacabanas@gmail.com"'. It prompts for a file path, creates a directory, asks for a passphrase (which is left empty), and displays the key fingerprint and a randomart image. The prompt is 'Xoch@DESKTOP-J714T83 MINGW64 /'.

```
Xoch@DESKTOP-J714T83 MINGW64 /
$ ssh-keygen -t ed25519 -C "xacabanas@gmail.com"
Generating public/private ed25519 key pair.
Enter file in which to save the key (/c/Users/Xoch/.ssh/id_ed25519):
Created directory '/c/Users/Xoch/.ssh'.
Enter passphrase for "/c/Users/Xoch/.ssh/id_ed25519" (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /c/Users/Xoch/.ssh/id_ed25519
Your public key has been saved in /c/Users/Xoch/.ssh/id_ed25519.pub
The key fingerprint is:
SHA256:7/MCQ4MromU0B9KKrW59XHqvTchVEzOseP3bZMt4DBA xacabanas@gmail.com
The key's randomart image is:
+--[ED25519 256]--+
| .      .+      |
| . o      E+     |
| .+ .    .. oo.  |
| o + .  ..oo.o.  |
| o o   oSo  o    |
| . + . o.=.  o o  |
| .+....oo +.   X  |
| .o . + .o.o  o * |
| .   . ..oo.+ .  |
+-----[SHA256]-----+
Xoch@DESKTOP-J714T83 MINGW64 /
$
```

The generated key must then be added graphically to GitHub.



## GitHub Configuration in Git Terminal

It is also necessary to properly configure the local environment with the correct credentials.

Finally, the connection is verified with the command `ssh -T git@github.com`.

```
MINGW64:/
Xoch@DESKTOP-J714T83 MINGW64 /
$ git config --global user.name "anacax"

Xoch@DESKTOP-J714T83 MINGW64 /
$ git config --global user.email "xacabanas@gmail.com"

Xoch@DESKTOP-J714T83 MINGW64 /
$ ls -al ~/.ssh
total 19
drwxr-xr-x 1 Xoch 197121  0 Sep  9 09:37 ./
drwxr-xr-x 1 Xoch 197121  0 Sep  9 09:40 ../
-rw-r--r-- 1 Xoch 197121 464 Sep  9 09:26 id_ed25519
-rw-r--r-- 1 Xoch 197121 101 Sep  9 09:26 id_ed25519.pub
-rw-r--r-- 1 Xoch 197121 828 Sep  9 09:37 known_hosts
-rw-r--r-- 1 Xoch 197121  92 Sep  9 09:37 known_hosts.old

Xoch@DESKTOP-J714T83 MINGW64 /
$ ssh -T git@github.com
Enter passphrase for key '/c/Users/Xoch/.ssh/id_ed25519':
Hi anacax! You've successfully authenticated, but GitHub does not provide shell.

Xoch@DESKTOP-J714T83 MINGW64 /
$ |
```