

How To Setup Git & GitHub

[Edition 01]

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For any issues/help contact : support@k21academy.com

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1 INTRODUCTION

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.

WHY A VERSION CONTROL SYSTEM LIKE GIT IS NEEDED?

Real life projects generally have multiple developers working in parallel. So a version control system like Git is needed to ensure there are no code conflicts between the developers.

Additionally, the requirements in such projects change often. So a version control system allows developers to revert and go back to an older version of the code.

Finally, sometimes several projects which are being run in parallel involve the same codebase. In such a case, the concept of branching in Git is very important.

WHY GITHUB?

Some of the reasons to use GitHub are:

1. Immensely powerful community
2. The largest shared repository
3. Easy version control
4. Secure cloud storage
5. Countless number of integrations

This activity guide cover steps for:

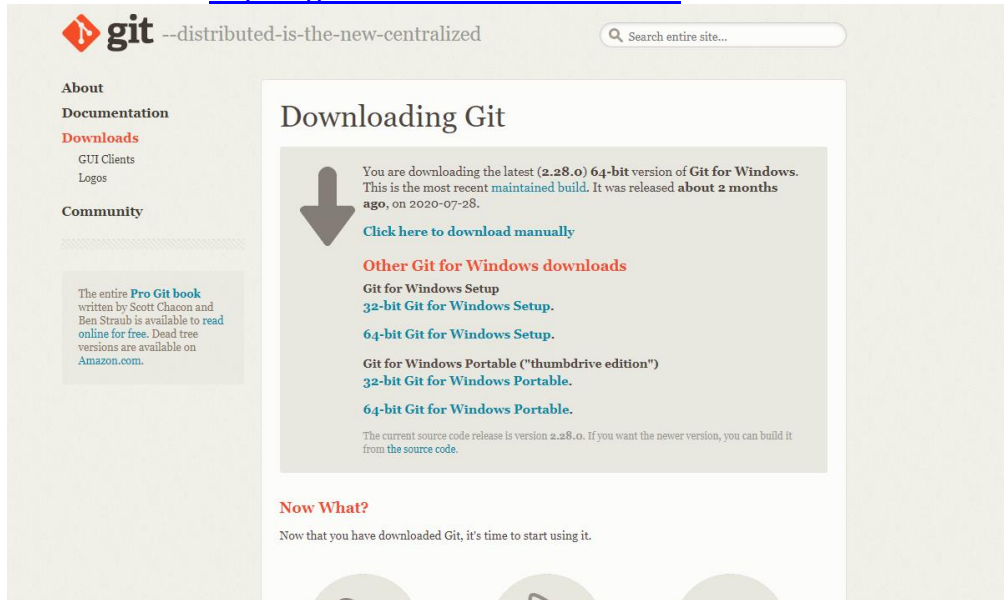
1. Installing Git on windows.
2. Signing Up for Github.
3. Creating a Repository

2 DOCUMENTATION LINKS

1. What Is Git?
<https://git-scm.com/doc>
2. What is GitHub?
<https://docs.github.com/en/free-pro-team@latest/github>
3. Download Git
<https://git-scm.com/download/win>
4. Signup for GitHub
<https://github.com/>

3 INSTALLING GIT

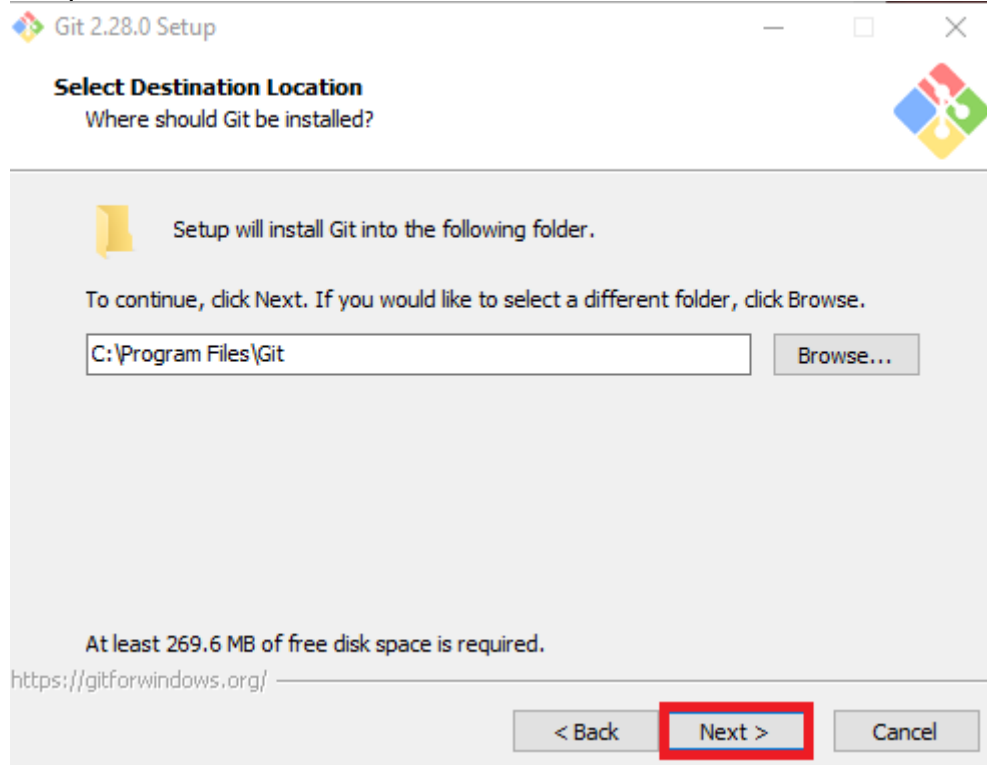
1. To Install SDK git is prerequisite.
2. Download Git <https://git-scm.com/download/win>



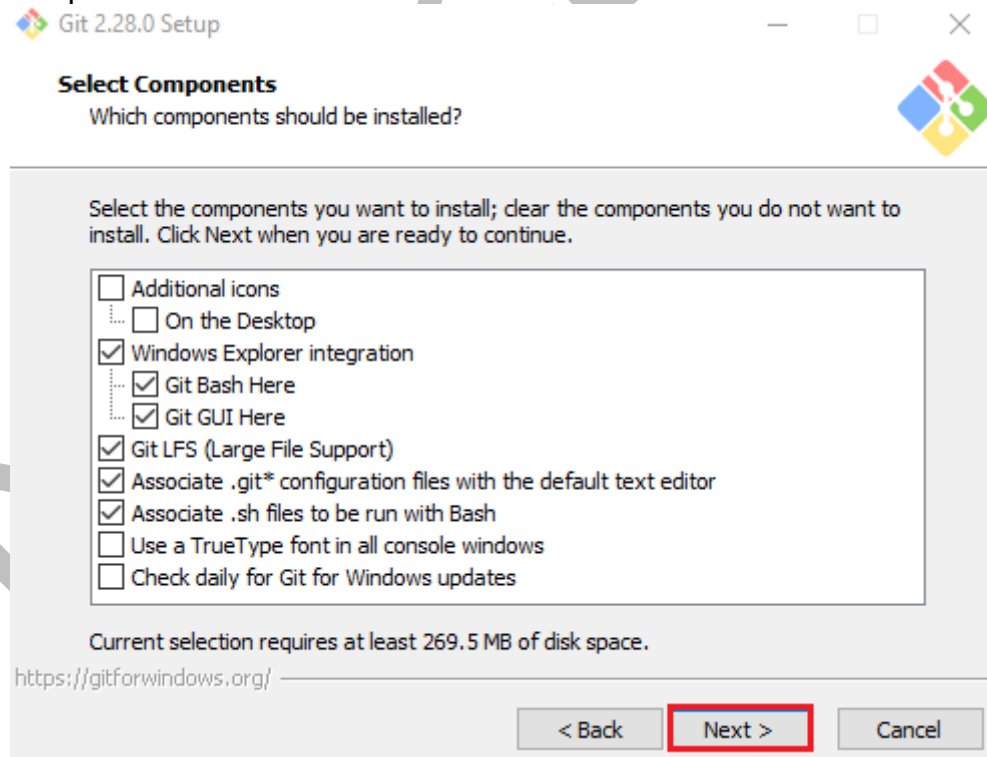
3. Run the installer.



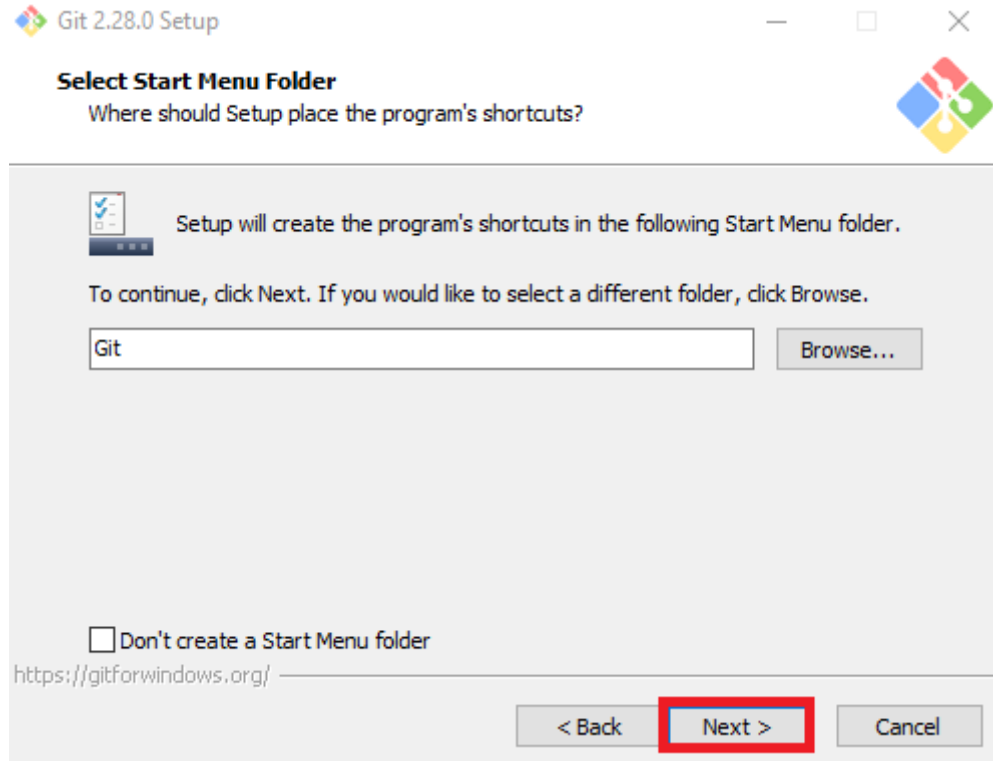
4. Keep default and click on Next.



5. Keep default and click on Next.



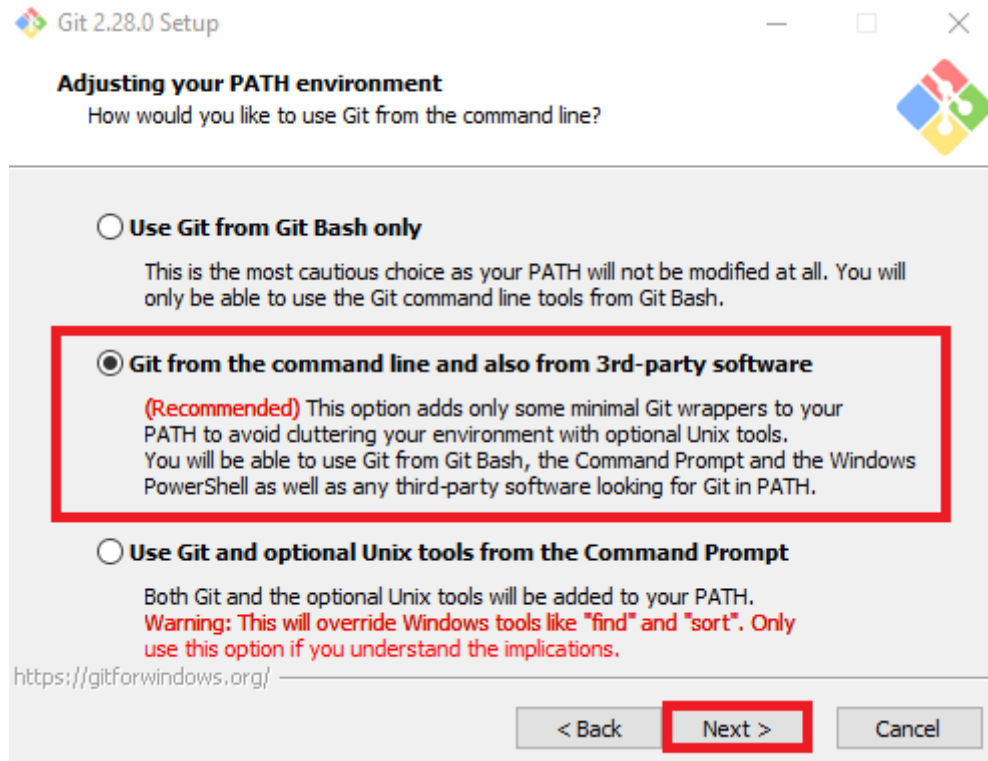
6. Keep default and click on Next.



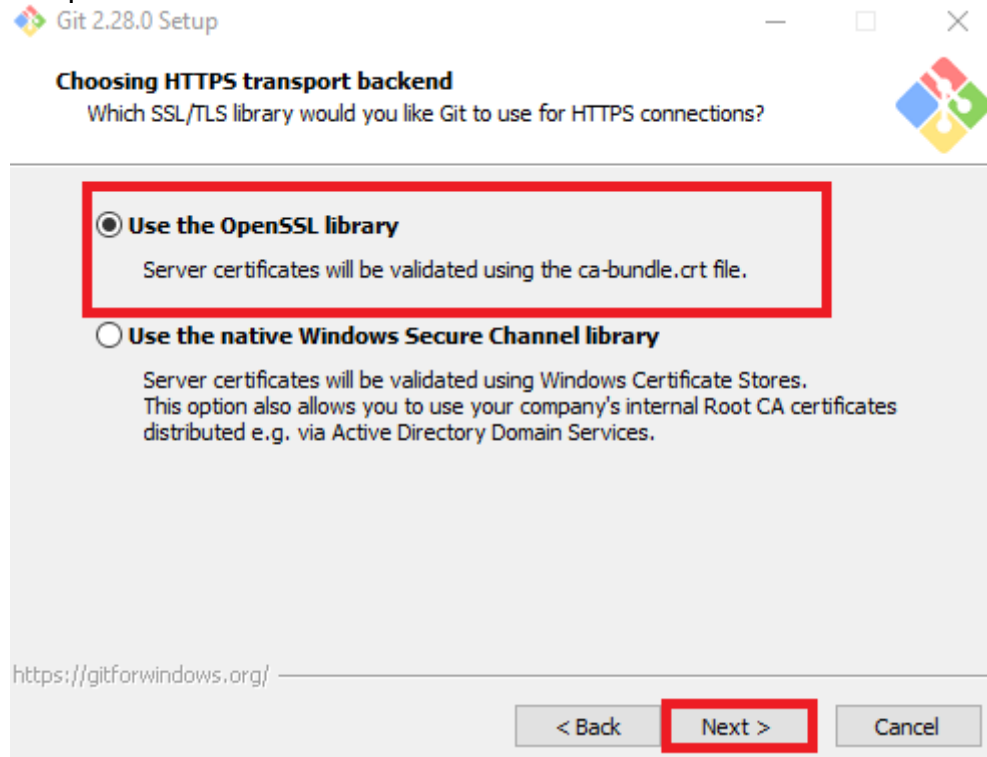
7. Select a text editor like atom, sublime text. I have selected sublime text as it is very light weight and then click on Next.



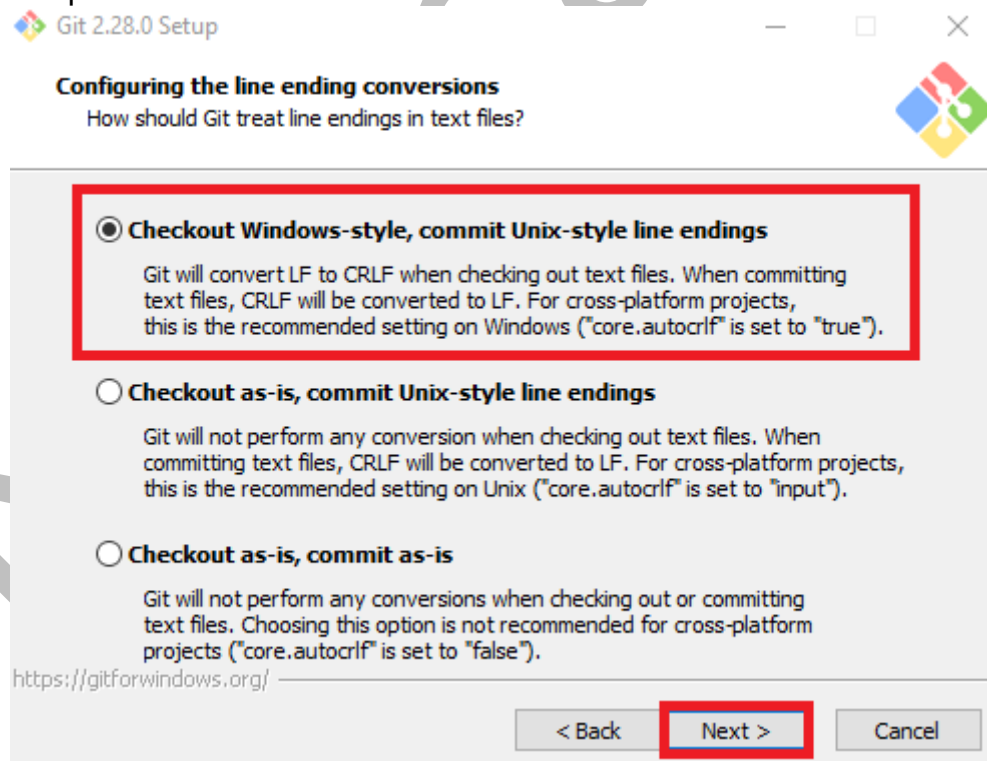
8. Make sure the following option is selected and click on next.



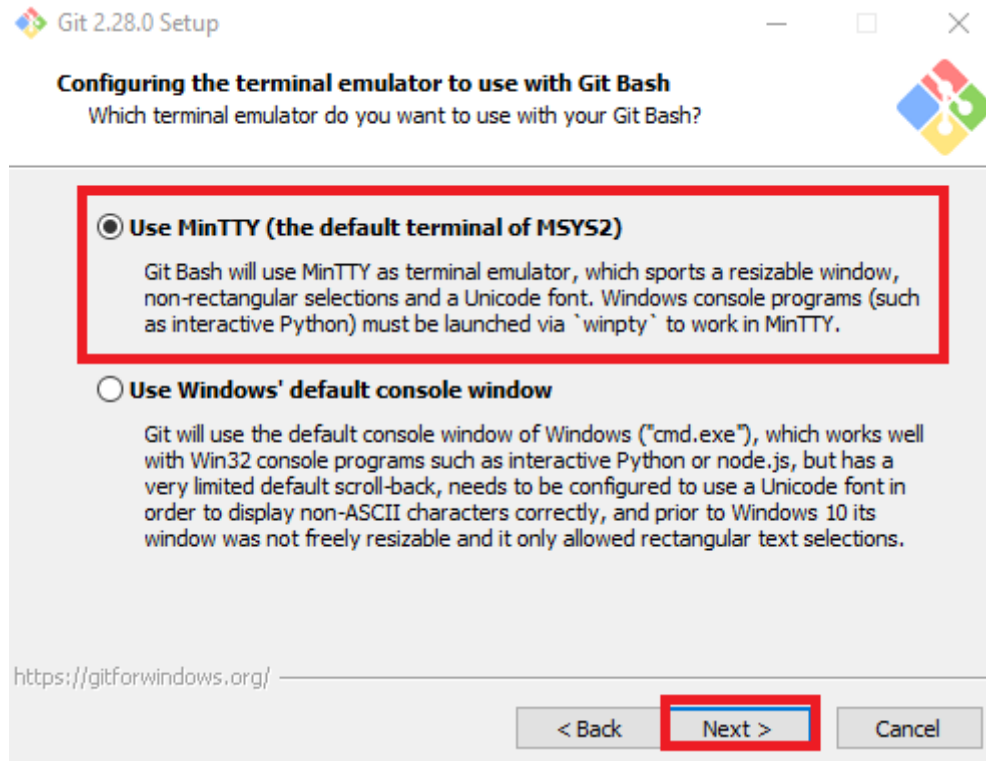
9. Keep default and click on Next.



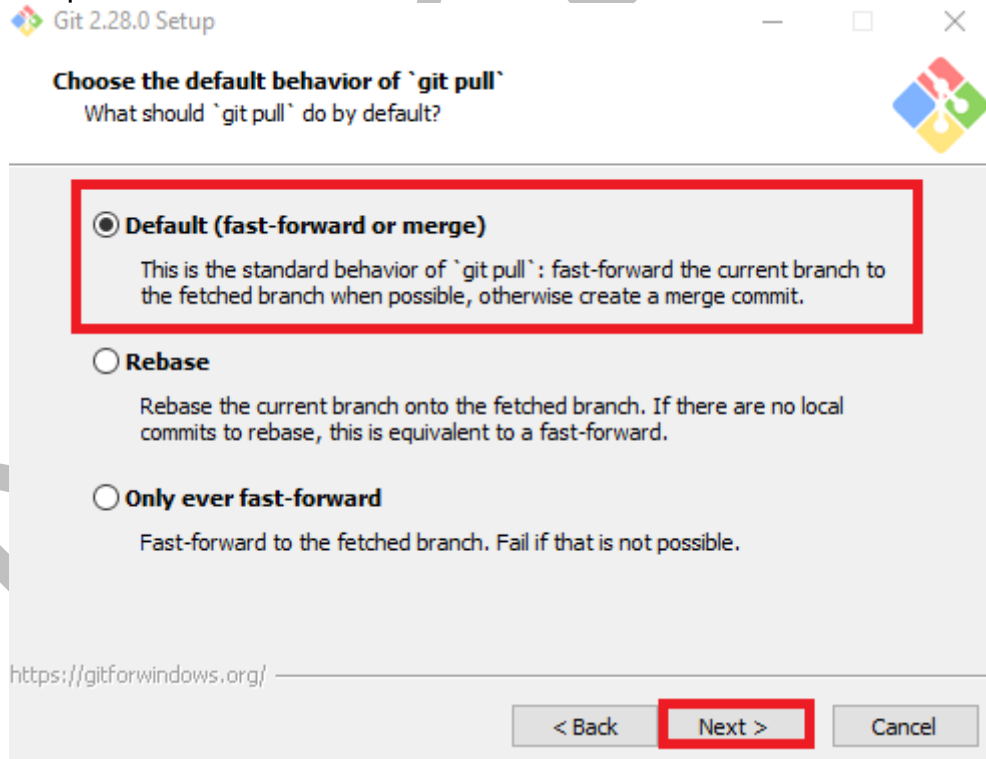
10. Keep default and click on Next.



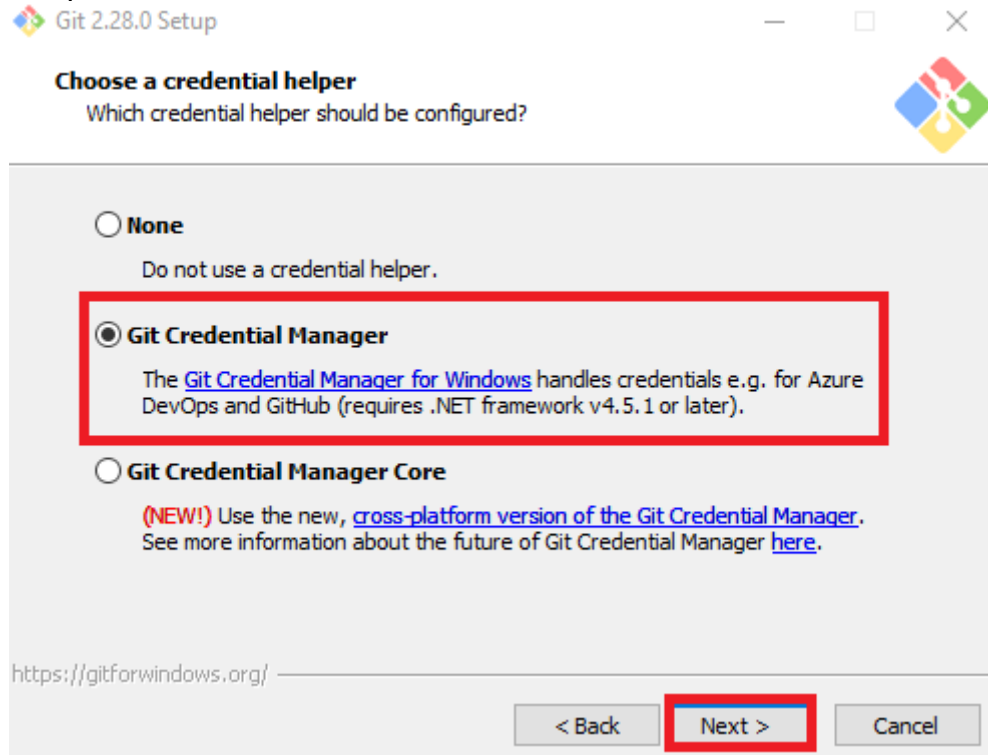
11. Keep default and click on Next.



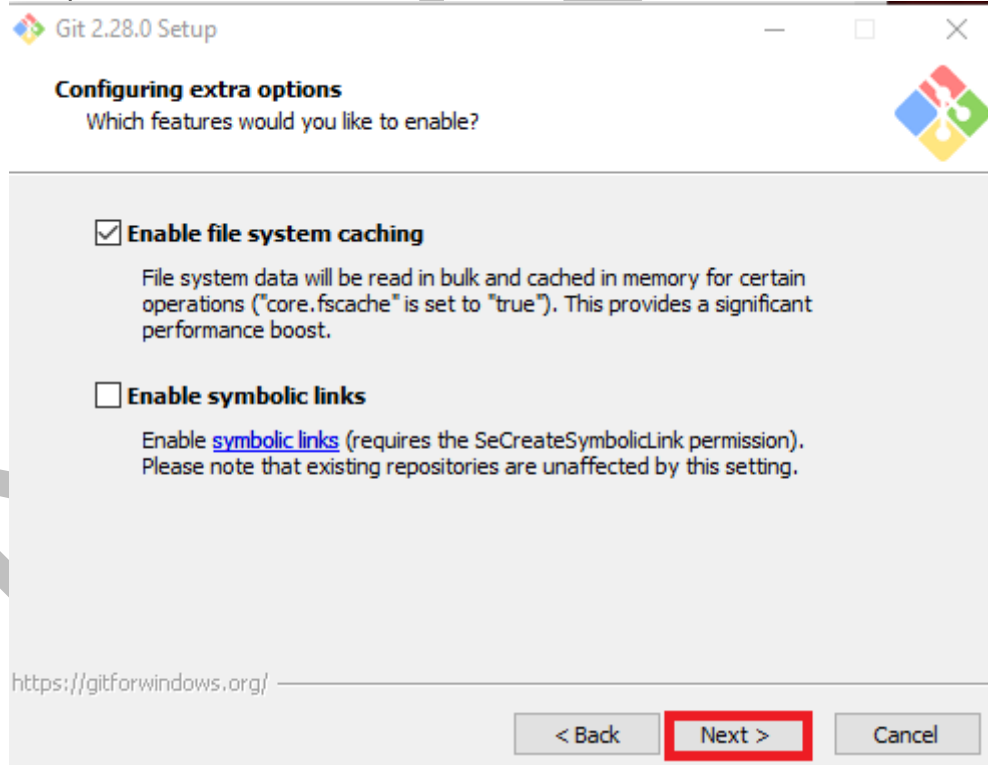
12. Keep default and click on Next.



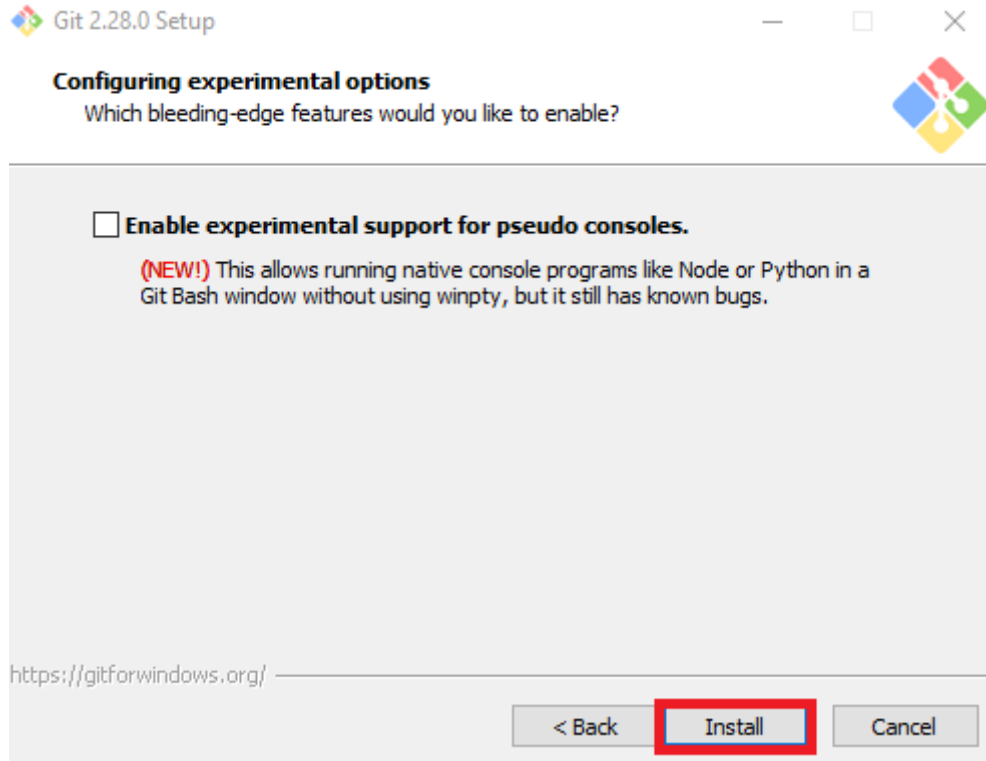
13. Keep default and click on Next.



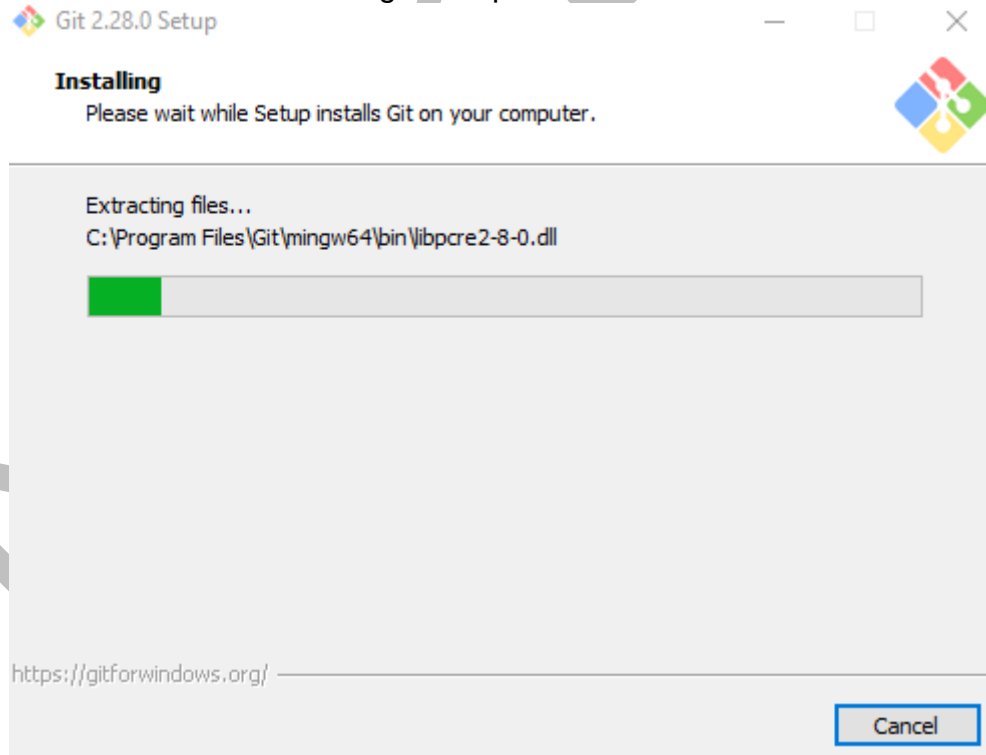
14. Keep default and click on Next.



15. Keep default and click on Next.



16. Wait for the installation to get completed it will take few minutes for completion.

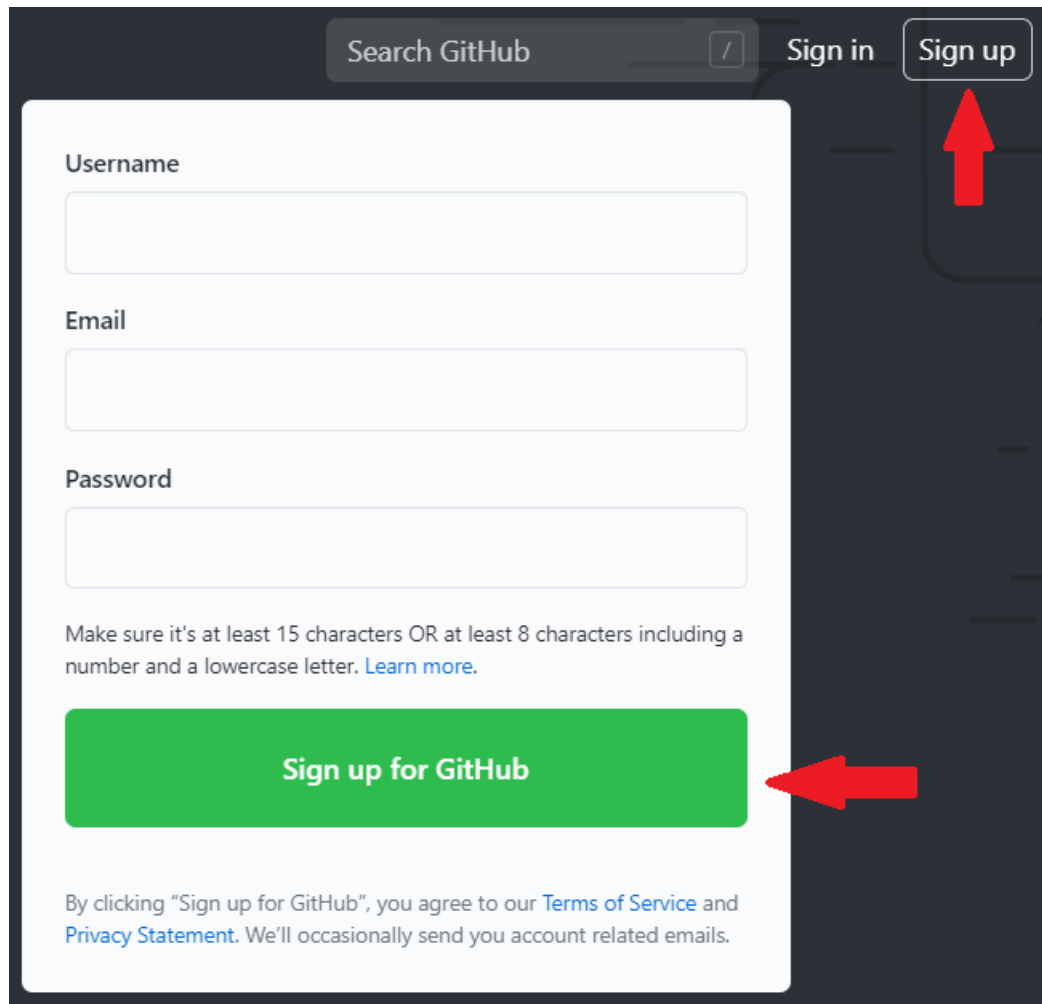


17. Now git is successfully installed

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4 SIGNING UP FOR GITHUB

1. To create an account on GitHub, go to <https://github.com/>
2. Click on Sign Up button or the Sign up for GitHub Button.



The screenshot shows the GitHub sign-up interface. At the top right, there is a 'Sign up' button with a red arrow pointing to it. Below the navigation bar is a search bar and a 'Sign in' button. The main form contains three input fields: 'Username', 'Email', and 'Password'. Below the password field, there is a note: 'Make sure it's at least 15 characters OR at least 8 characters including a number and a lowercase letter. [Learn more.](#)' At the bottom of the form is a large green button labeled 'Sign up for GitHub' with a red arrow pointing to it. Below the button, there is a disclaimer: 'By clicking "Sign up for GitHub", you agree to our [Terms of Service](#) and [Privacy Statement](#). We'll occasionally send you account related emails.'

3. Provide the credentials and verify your account as instructed.

Join GitHub

Create your account

Username *

Email address *


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

Pick the spiral galaxy



?
↺
🔊

Create account

4. After step 3 you will be asked some questions. You wish to answer the questions or you can click on the **Complete setup** button.

I am interested in:

languages, frameworks, industries

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

For example: `ocaml` `robotics` `garrysmod`

Complete setup



5. Then click on the Verification Link to verify your GitHub account. For the Verification Link please check your mailbox.
6. You have successfully created a GitHub account.

4.1 Creating a Repository

1. On the top left side, click on the create repository button.

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

2. After this,
 - i. Provide with the repository name. The name of the repository must be unique.
 - ii. Provide an optional description of the repository.
 - iii. Choose public or private repository.
 - iv. Do not forget to initialize the repository. In this you can add a README file or a gitignore file and then select from multiple options for ignoring multiple file types.
3. Click on **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.](#)



Owner * Repository name *

 / Demo 

Great repository names are short and memorable. Need inspiration? How about shiny-carnival?

Description (optional)

Demo

-  **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.

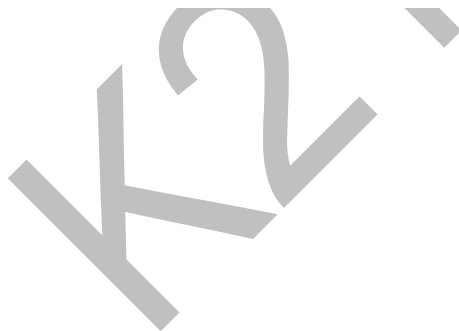
Initialize this repository with:

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.](#)

This will set  master as the default branch. Change the default name in your [settings](#).

[Create repository](#)



4. You have successfully created your first repository.

master 1 branch 0 tags Go to file Add file Code

Initial commit 8389a63 6 minutes ago 1 commits

README.md Initial commit 6 minutes ago

README.md

Demo

demo

About

demo

Readme

Releases

No releases published
[Create a new release](#)

Packages

No packages published
[Publish your first package](#)

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5 TROUBLESHOOTING

5.1 Git is not recognized

Error: Git is not recognized as an internal or external command.

```
C:\Users\cking>git clone https://github.com/awslabs/awsnodejs-sample.git
'git' is not recognized as an internal or external command,
operable program or batch file.
```

Cause: Git is not installed on the system.

Fix: Install Git follow steps from [Section 3 Installing Git](#).

6 SUMMARY

This activity guide covered steps to:

1. Installing Git on windows.
2. Signing up for GitHub.
3. Creating a Repository.

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