

Experiment - 2

Aim: Installation of GIT BASH.

Theory: Git is a DevOps tool for source code management—an open-source version control system (VCS) used to handle small to very large projects efficiently. Git is used to tracking changes in the source code, supporting non-linear development so that multiple developers can work together in near real-time.

By far, the most widely used modern version control system in the world today is Git. Git is a mature, actively maintained open source project originally developed in 2005 by Linus Torvalds, the famous creator of the Linux operating system kernel. A staggering number of software projects rely on Git for version control, including commercial projects as well as open source. Developers who have worked with Git are well represented in the pool of available software development talent and it works well on a wide range of operating systems and IDEs (Integrated Development Environments). Having a distributed architecture, Git is an example of a DVCS (hence Distributed Version Control System). Rather than have only one single place for the full version history of the software as is common in once-popular version control systems like CVS or Subversion (also known as SVN), in Git, every developer's working copy of the code is also a repository that can contain the full history of all changes.

Summary: Steps For Git Installation on Windows 10

1. Download and install Git
2. Git bash interface
3. Basic Git commands
4. Create a local repository
5. Connect to the remote repository
6. Push the file to GitHub

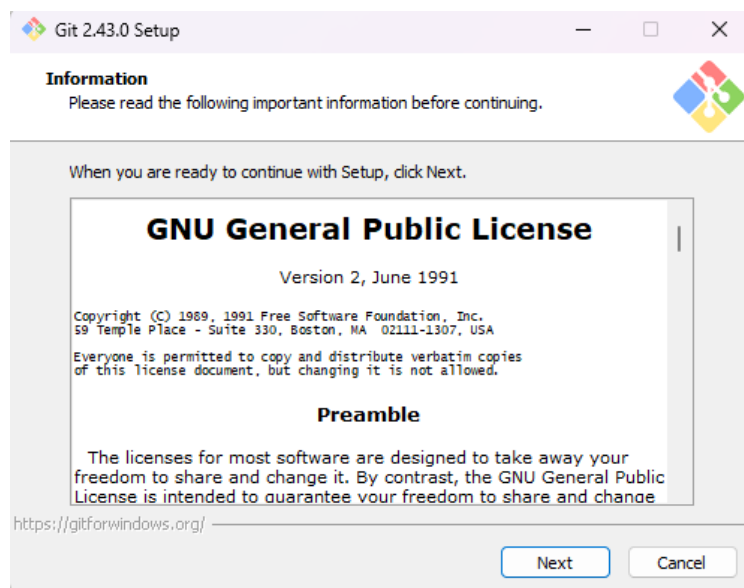
There are two methods to launch git in windows. One is launching git using a bash scripting shell with the help of the command line and another is launching git using a graphical user interface.

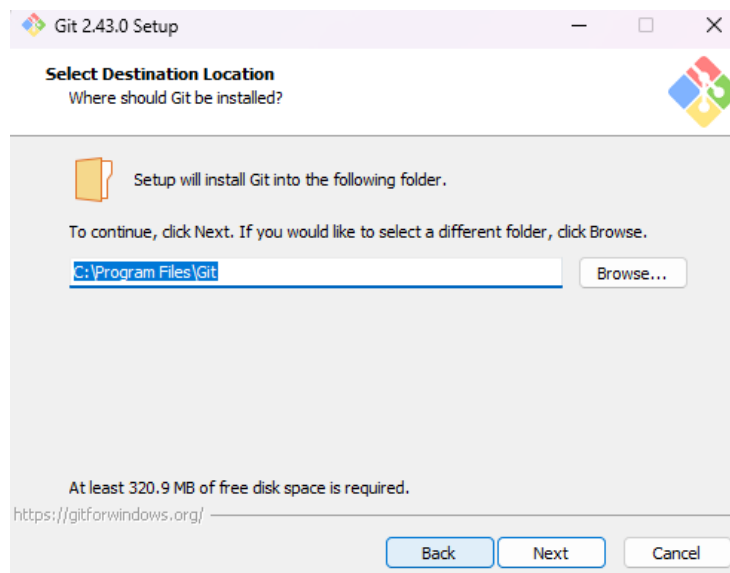
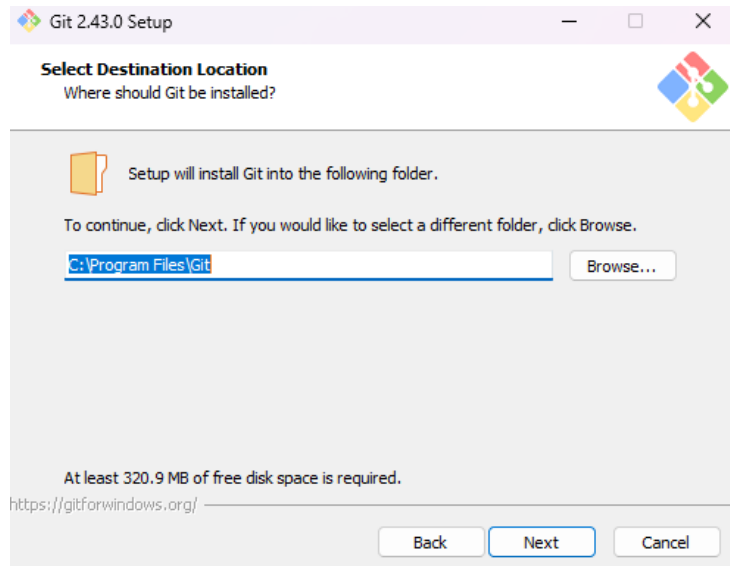
1. To launch git via bash scripting shell,
First, open the window and search for git bash and open it.
2. To launch git via graphical user interface(GUI), similarly, first open the window and search for git GUI and click on the application icon and open it

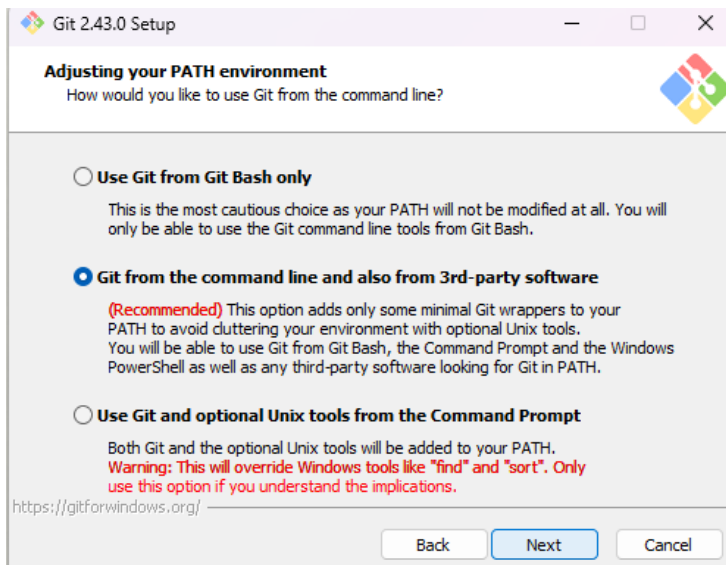
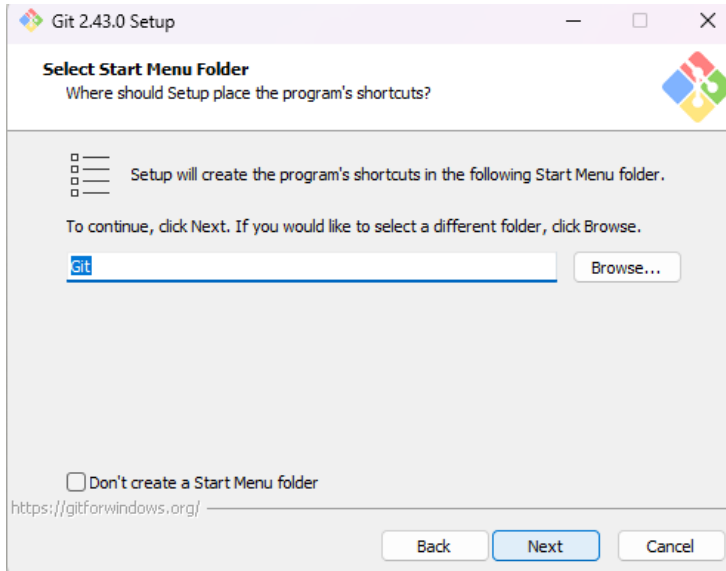
You can configure your local GitHub installation with credentials by using the following commands. Also, don't forget to add your own GitHub credentials for username and email address.

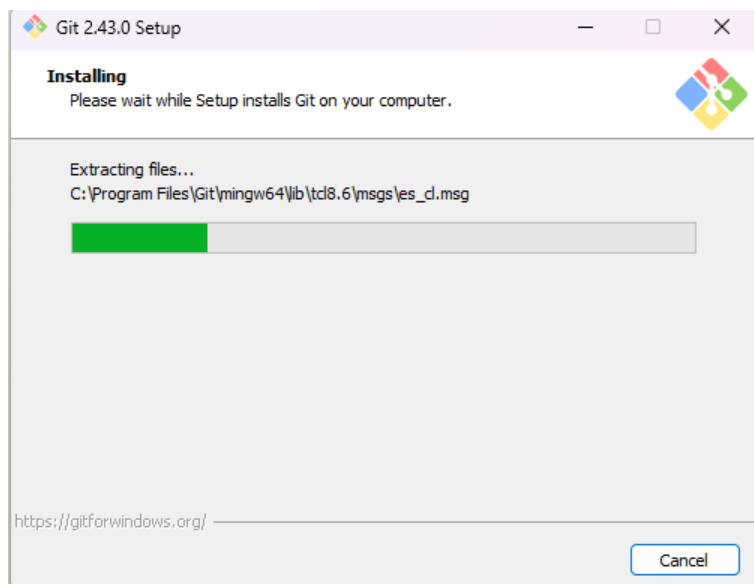
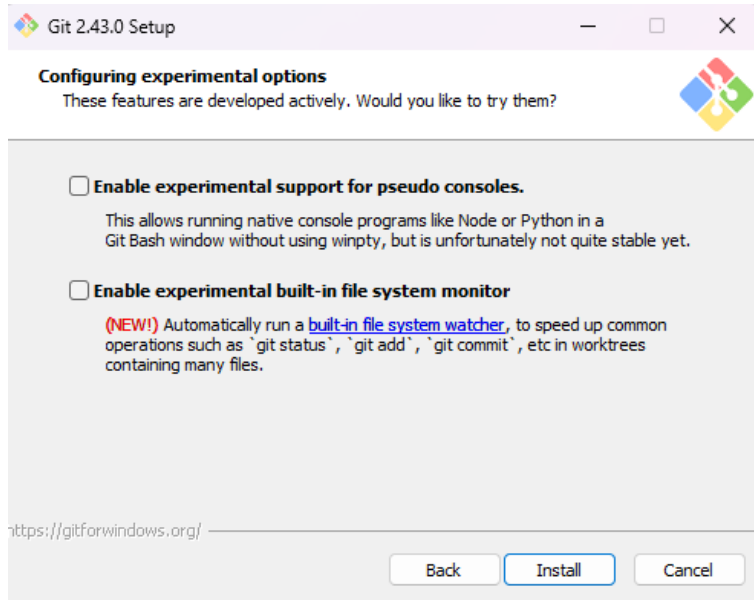
1. `git config --global user.name "github_username"`
2. `git config --global user.email "email_address"`

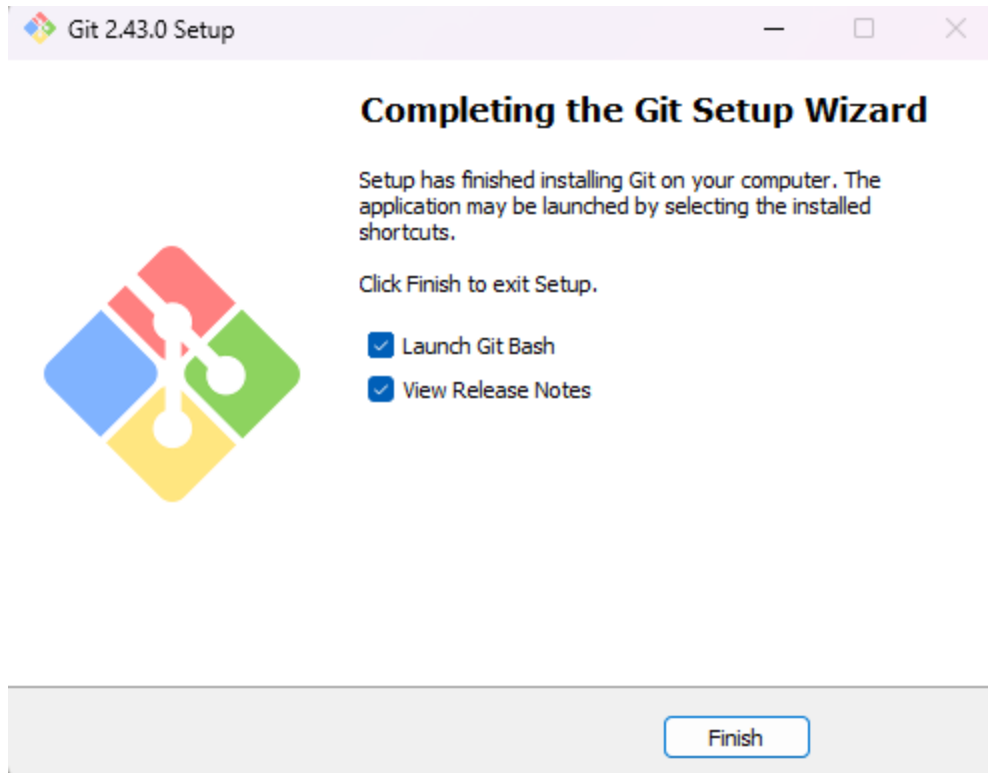
Output:











Conclusion:

- Git Bash is a Microsoft windows based command line application that provides Unix-like shell utilities and experience.
- Git Bash can be downloaded from Git's website for Windows, Mac OS, and Linux/Unix operating Systems.
- After installation it provides a command line on which we can run commands to create, update, clone, etc.