

Experiment - 2

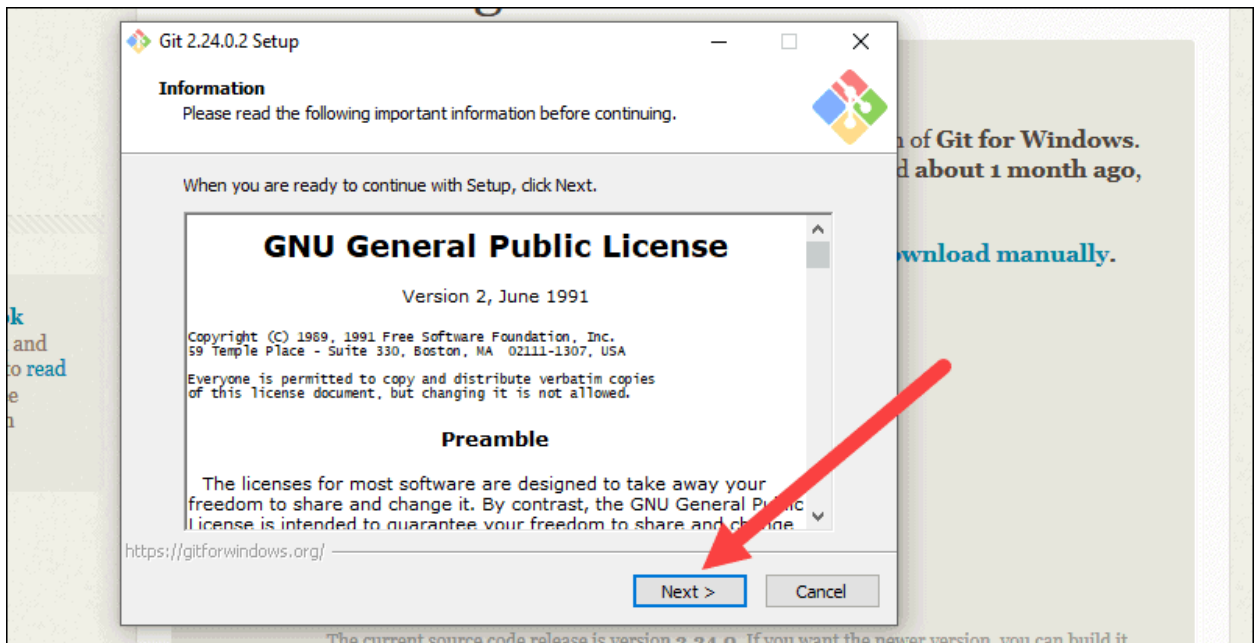
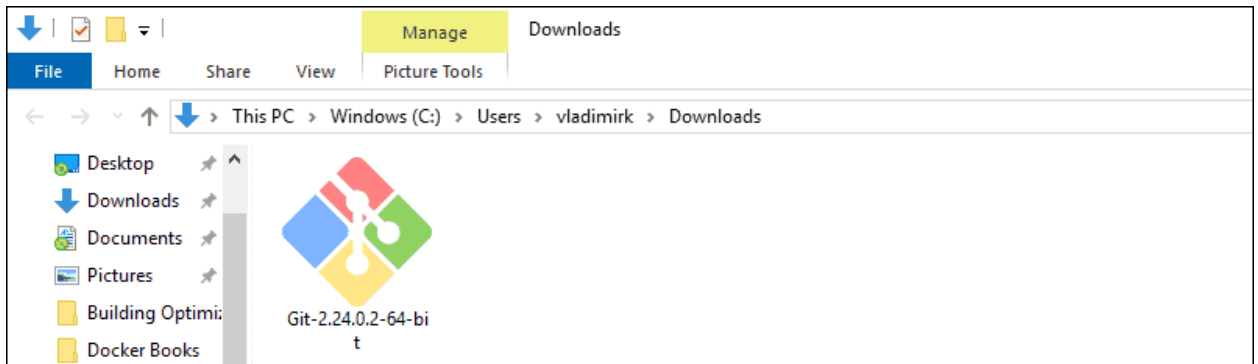
Aim: Installation and login git

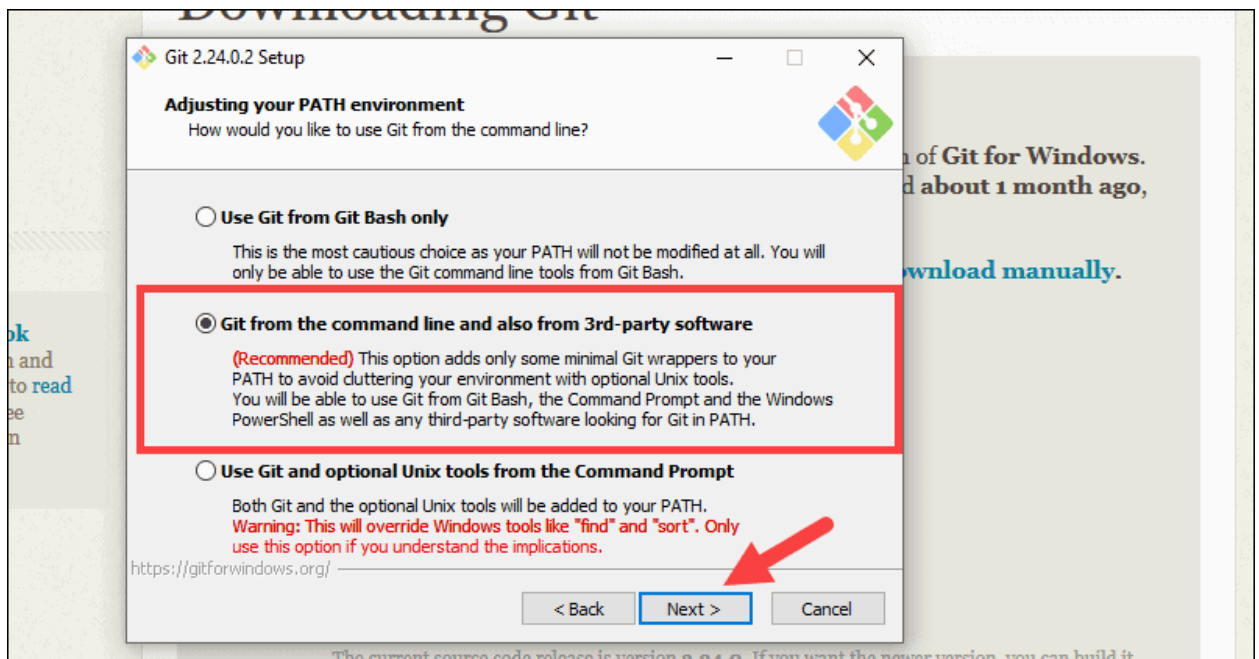
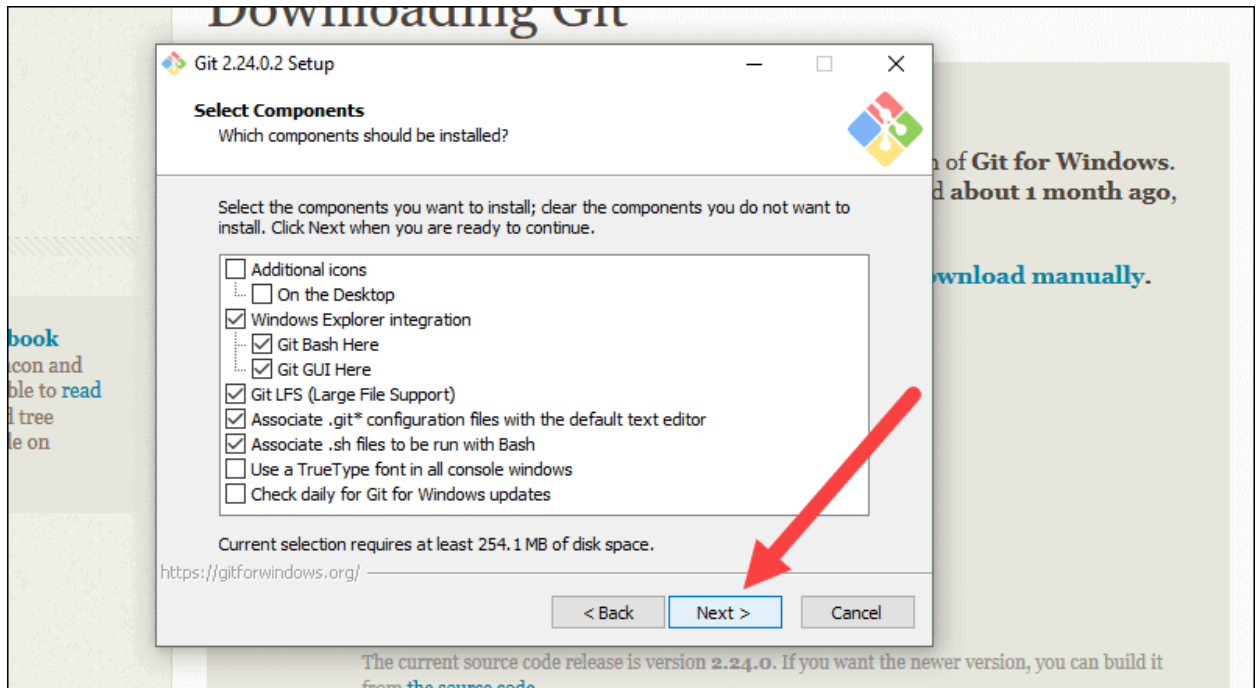
Theory: Git, a powerful version control system, helps you track changes in files and projects over time. Whether you're a seasoned developer or a curious beginner, Git can be your trusty companion in managing your code, documents, and more. This guide will walk you through the installation and initial setup, paving the way for your Git adventures.

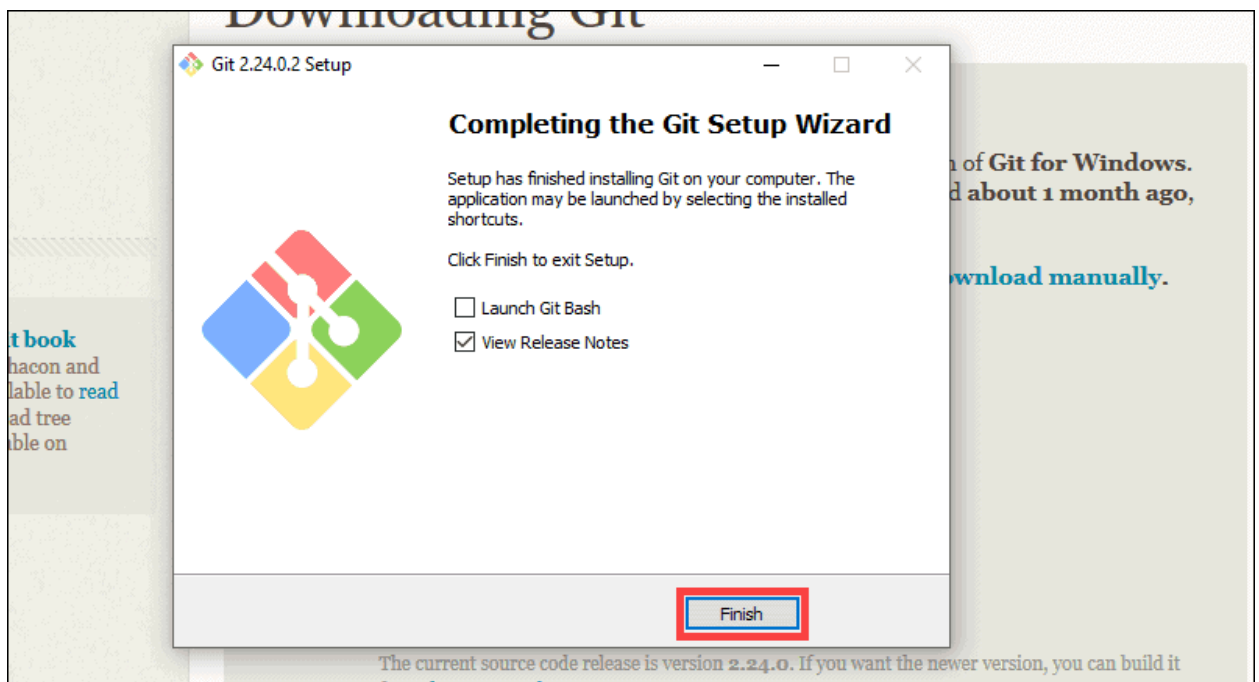
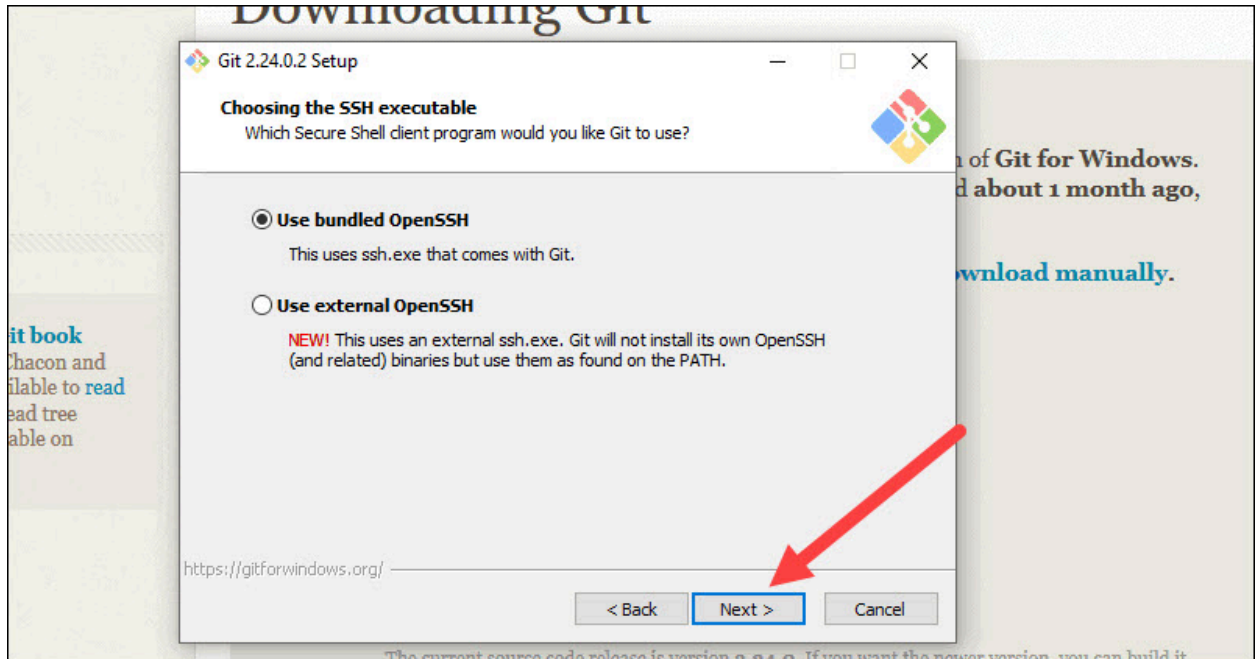
1. Installing Git:

- Head to the official Git website: <https://git-scm.com/downloads>
- Choose your operating system: Windows, macOS, Linux, etc.
- Download the appropriate installer: For most users, the default installer is recommended.
- Run the installer and follow the prompts: The process is straightforward and shouldn't take long.





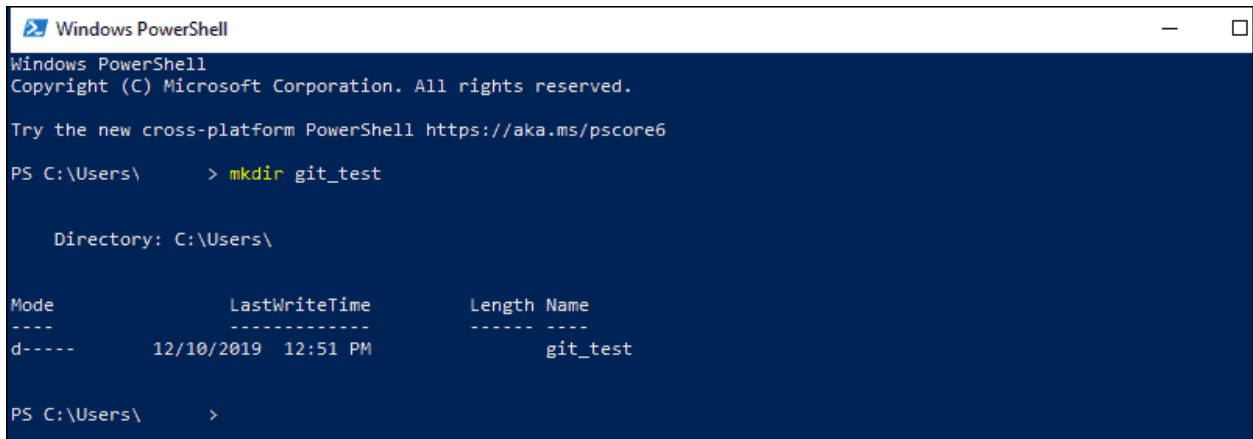




2. First-Time Login (Configuring Git):

1. Open a terminal: This is where you'll interact with Git using commands.
2. Set your username and email:

```
git config --global user.name "Your Name"
git config --global user.email "your\_email@example.com"
```



```
Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\ > mkdir git_test

Directory: C:\Users\

Mode                LastWriteTime         Length Name
----                -
d-----         12/10/2019 12:51 PM             git_test

PS C:\Users\ >
```

3. Verify your configuration:

```
git config --global --list
```

This should display your username and email.

4. Exploring Git Basics:

Now that you're logged in, let's get familiar with some essential Git commands:

- `git init`: Initializes a Git repository in the current directory.
- `git status`: Shows the current status of your files (tracked, untracked, modified).
- `git add`: Adds files to the staging area for the next commit.
- `git commit`: Creates a snapshot of your changes with a descriptive message.
- `git log`: Shows the history of commits for your repository.

5. Additional Resources:

- The official Git documentation: <https://git-scm.com/> - A comprehensive guide for all things Git.
- Interactive Git tutorials: <https://trygit.js.org/> - Learn Git through practical exercises and visualizations.
- Online communities and forums: Connect with other Git users and get help when needed.

