Visual Studio Code Git Tutorial

Contents

Time required: 60 minutes

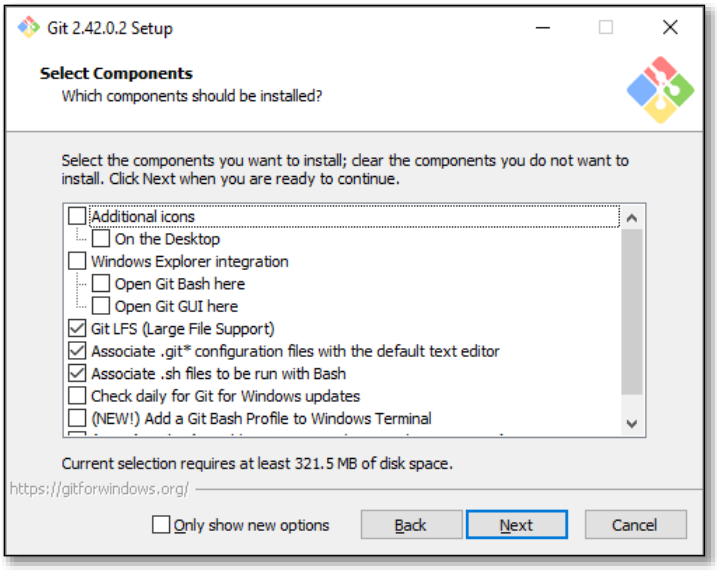
MIcrosoft Tutorial on Version Control with Visual Studio Code

Install git

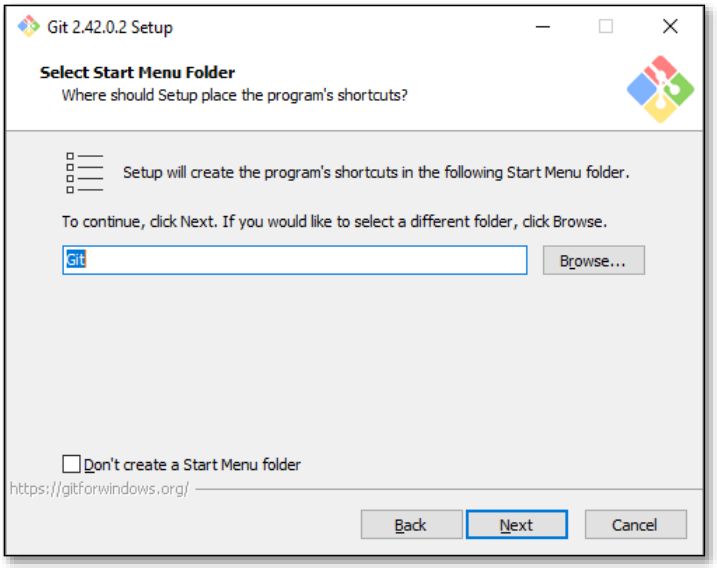
Go to https://git-scm.com/downloads

Download git for your operating system.

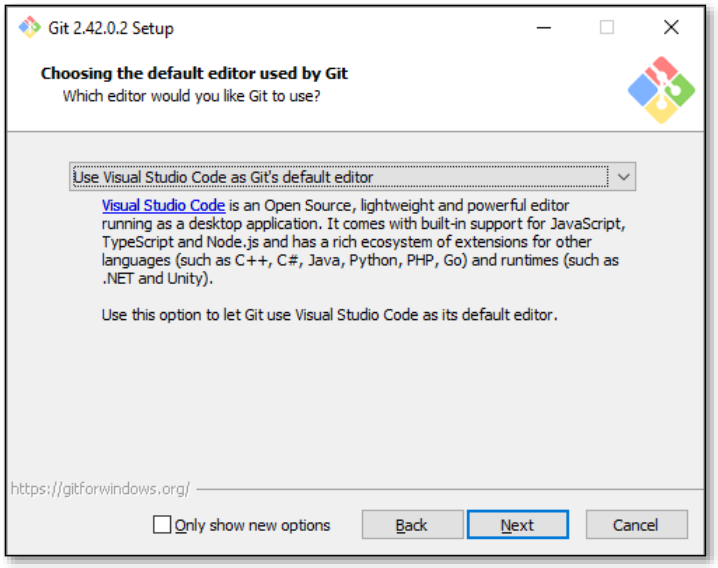
1. Start the installation.
2. Select Components as shown below.



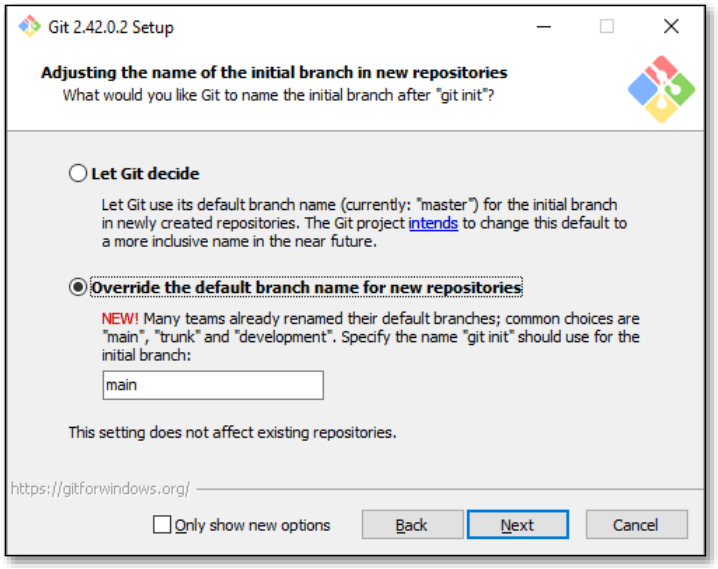
3. Select Start Menu Folder



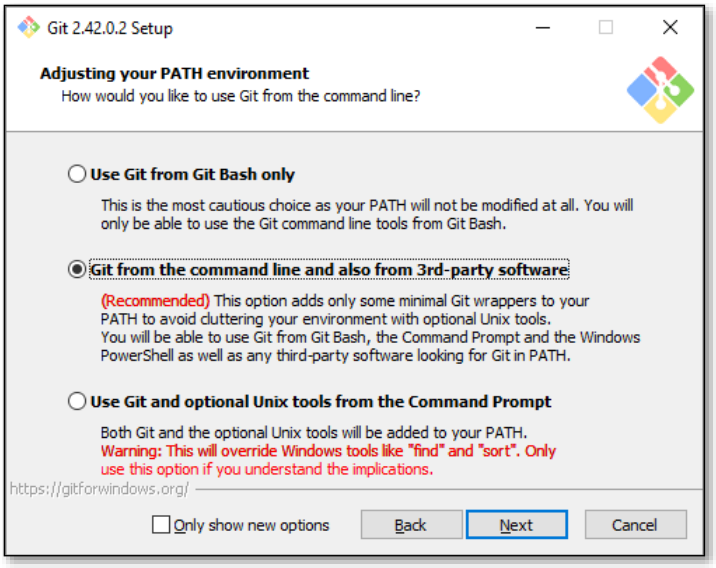
4. Choose the default editor used by Git as shown below.



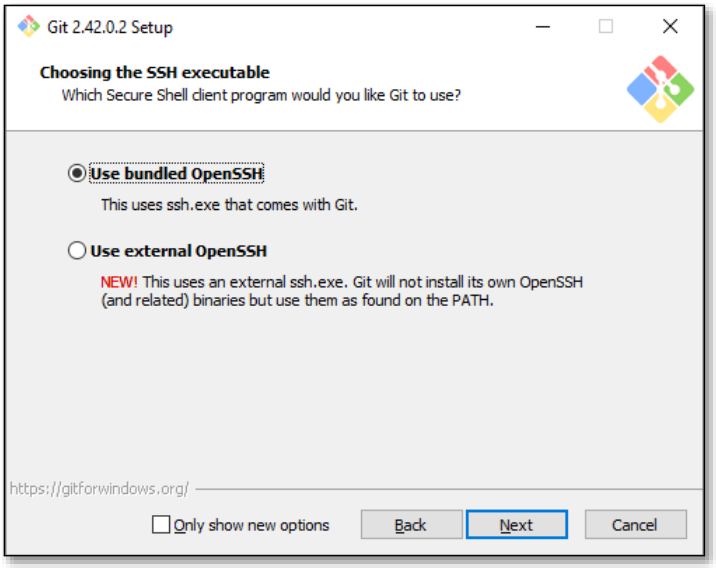
5. Adjusting the name of the initial branch in new repositories as shown below.



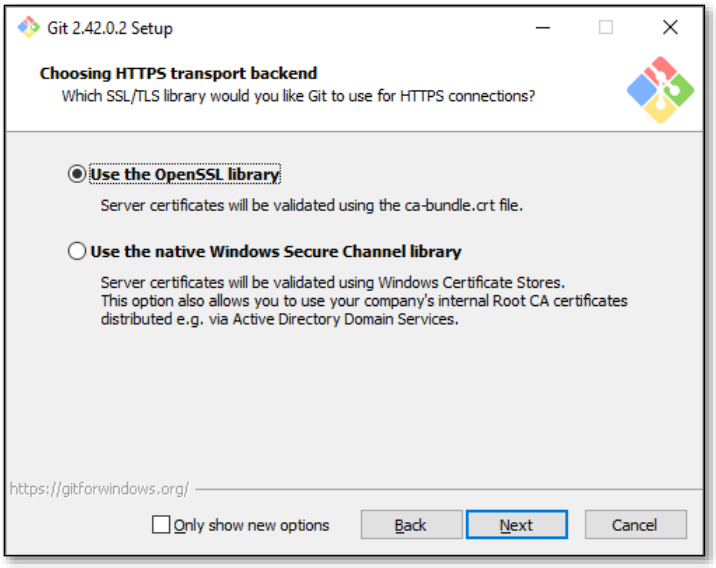
6. Adjusting your PATH environment, leave as default.



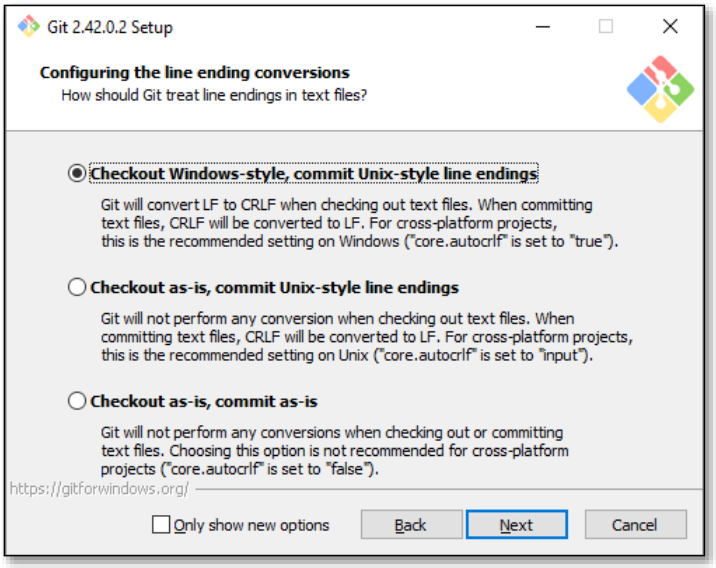
7. Choosing the SSH executable, leave as default.



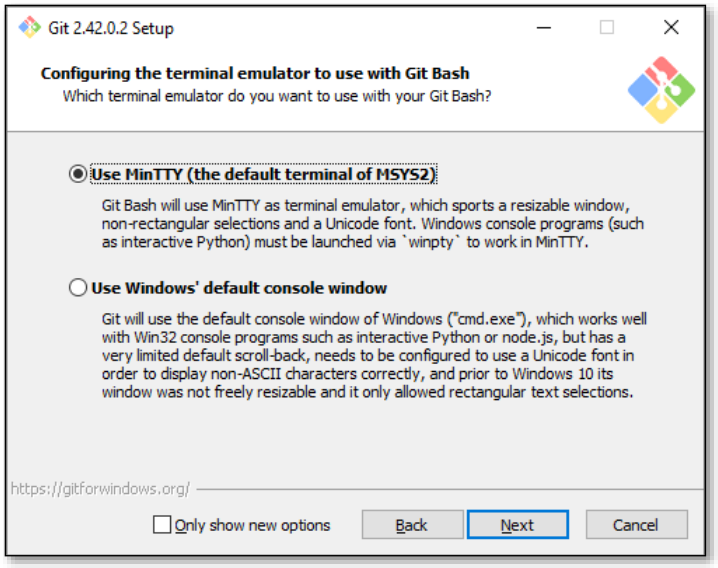
8. Choosing HTTPS transport backend, leave as default.



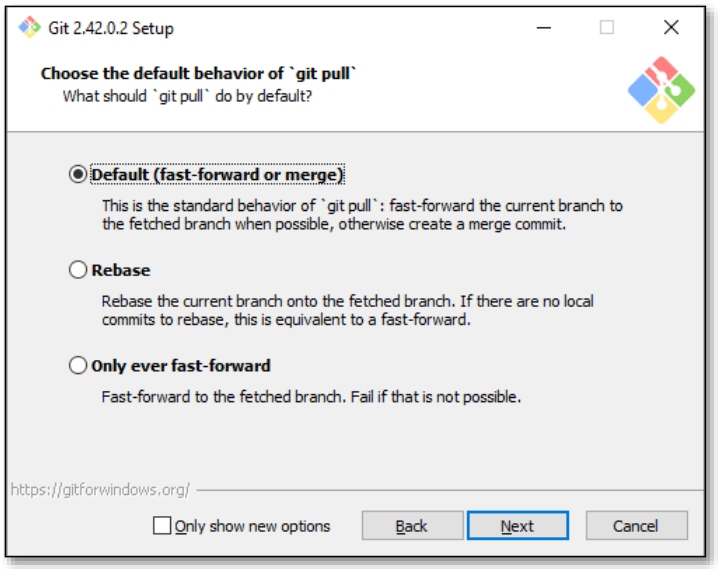
9. Configuring the line ending conversions, leave as default.



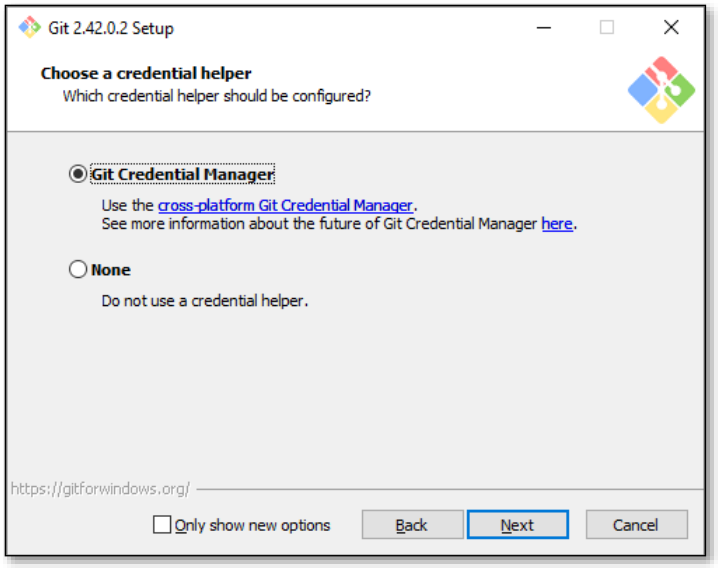
10. Configuring the terminal emulator to use with Git Bash, leave as default.



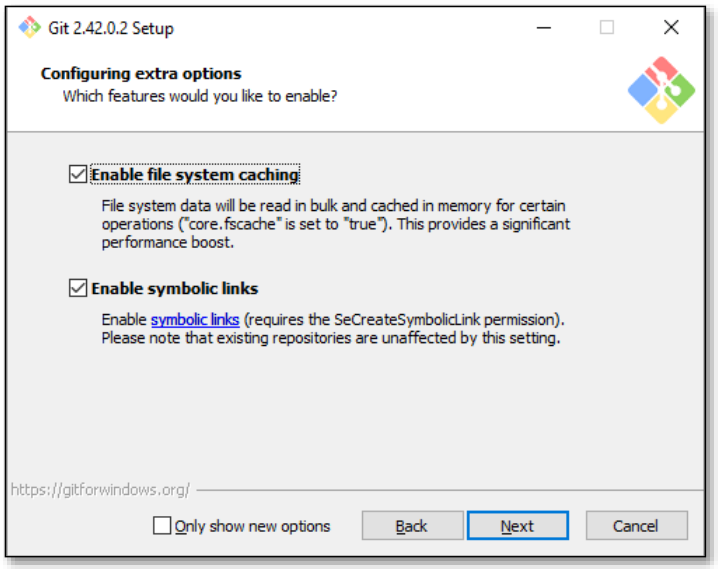
11. Choose the default behavior of "git pull", leave as default.



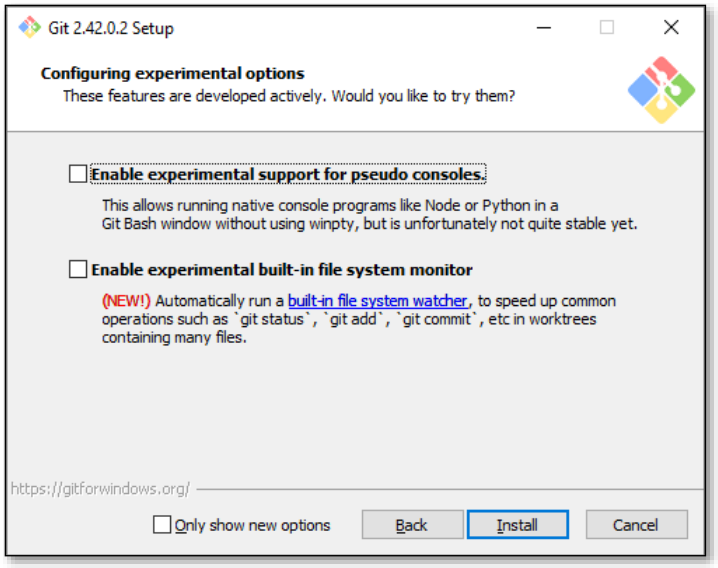
12. Choose a credential helper, leave as default.



Configure extra options, leave as default.



13. Configuring experimental options, leave as default.



14. Click Install. That's it!

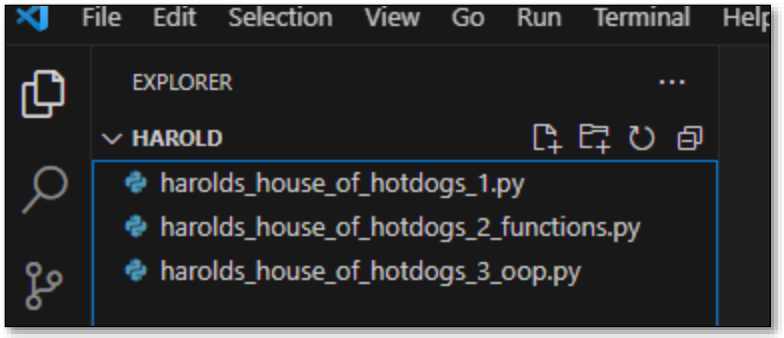
Setup git

Open a command prompt.

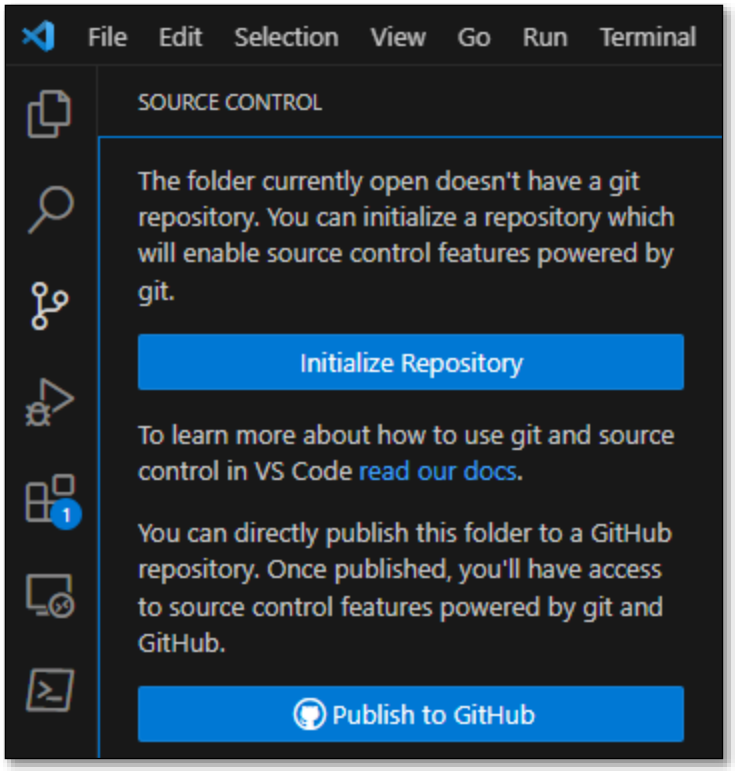
```
# Confirm that git is installed
git --version
# Configure your username and email address
git config --global user.name "Your name"
# Confirm your settings.
git config --global --list
```

Setup New Repository

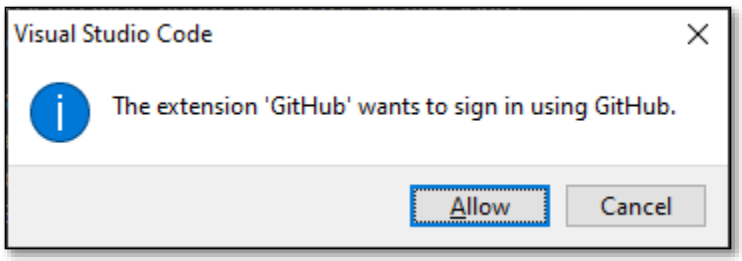
1. Open a current project on your computer to synchronize with GitHub.
2. Right Click the project folder → **Open with Code**. This opens your folder as a Visual Studio Code project.
3. Right Click the repository folder → **Open with Code**



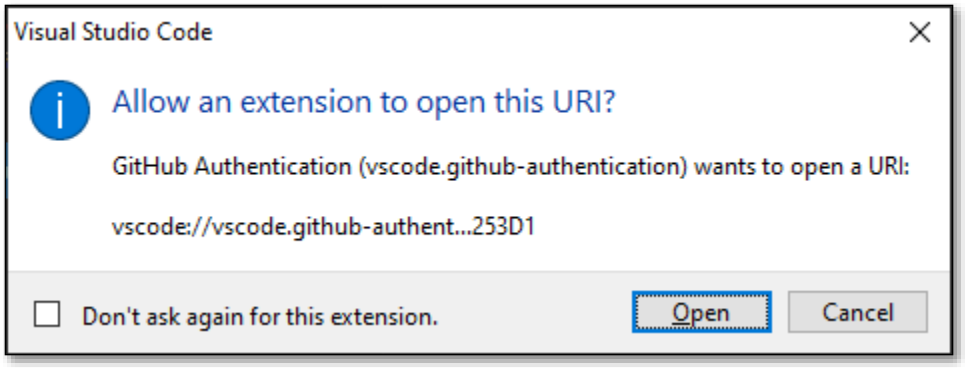
4. Click the **Source Control** button → the **...** menu → **Clone.**



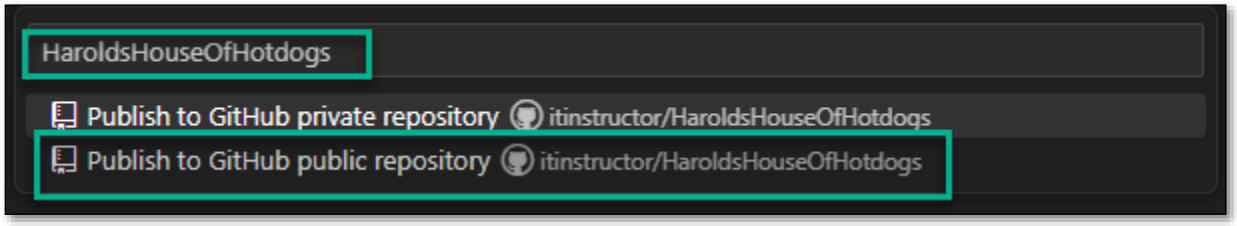
5. Click Publish to GitHub.



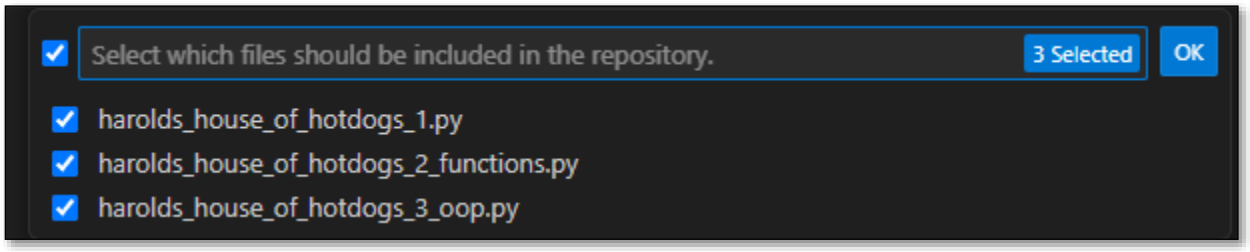
6. Click Open.



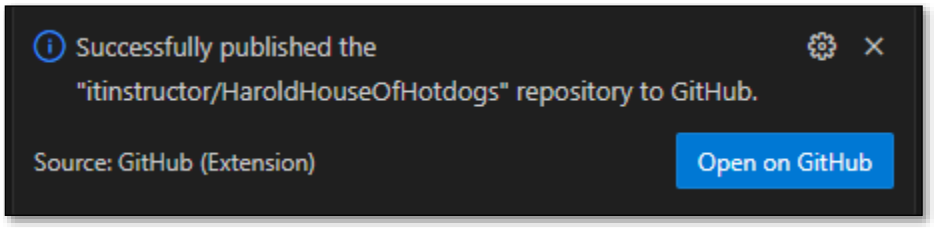
7. The name will follow the name of your project folder. It is best to name project folders without any spaces. I used CamelCase which is also called PascalCase. https://www.techtarget.com/whatis/definition/CamelCase



8. Click OK

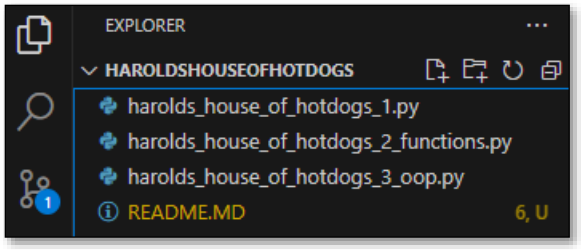


9. You should see the following message. Click Open on GitHub to make sure it worked.



Commit Changes

1. Create a README.MD file in your project folder.



2. Create a basic README.MD file like the following. This is my standard README.MD file, only use what you think will work for you.

```
# Harold's House of Hotdogs

Harold's House of Hotdogs is an Agile development assignment in Intro to
Computer Science 1 at Western Nebraska Community College.

## Version History
- (09-07-23) V1 Initial commit

### Purpose
I am an Information Technology Instructor at [Western Nebraska Community
College](https://www.wncc.edu). I teach Information Technology,
CyberSecurity and Computer Science. Best job ever!

In the current software development environment, it is important to learn
more than one language and understand version control systems such as git
and Github. Understanding the concepts and solving the problem
(computational thinking) is important, not memorizing the syntax. Learning
more than one language at a time helps generalize programming concepts and
problem solving at a higher level of understanding and synthesis.

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Program](https://www.facebook.com/wnccitprogram/)

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sa/4.0/"><img alt="Creative Commons License" style="border-width:0"
src="https://i.creativecommons.org/l/by-nc-sa/4.0/88x31.png" /></a><br />

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ShareAlike 4.0 International
License](http://creativecommons.org/licenses/by-nc-sa/4.0/)</a>.

Copyright (c) 2023 William A Loring
```
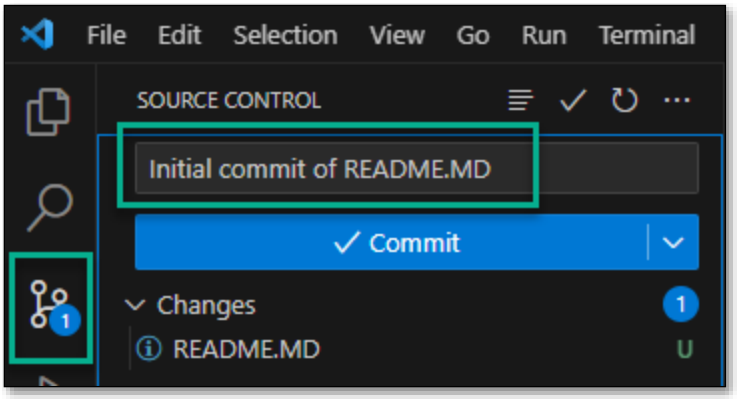
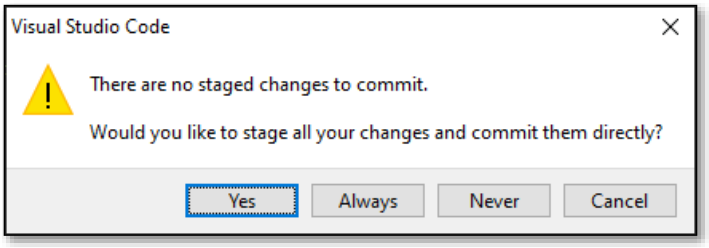
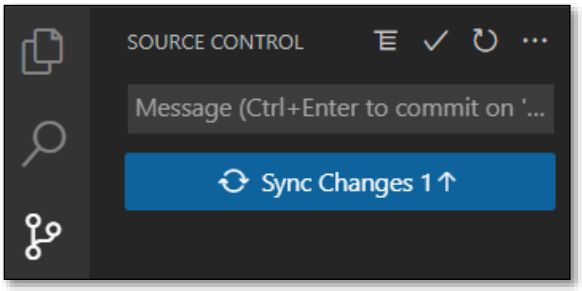

3. Click the **Source Control** button.
4. Type in a commit message where it says **Message**.
5. Click **Commit**.



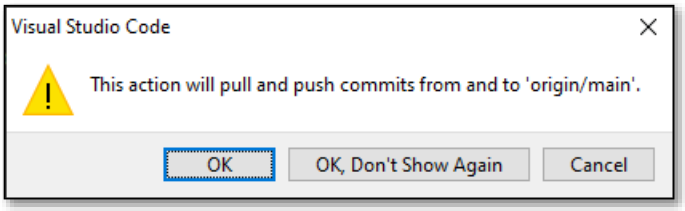
6. Click **Always.**



7. Click **Sync Changes**.



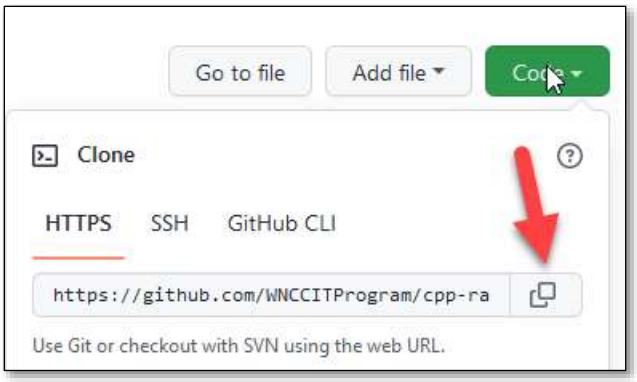
8. Click **OK, Don't Show Again**



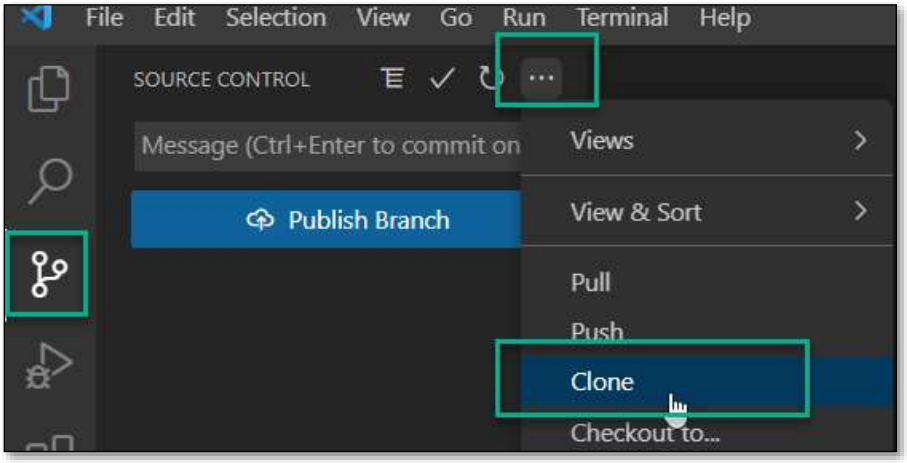
9. Your local repository is synched with github.com

Clone Repository

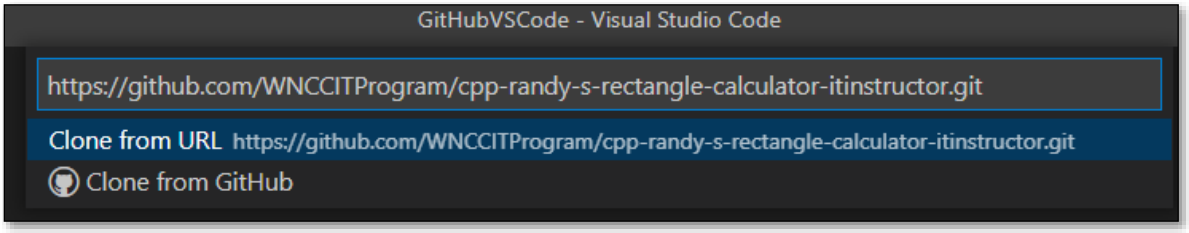
1. Go to github.com to the repository you wish to clone.



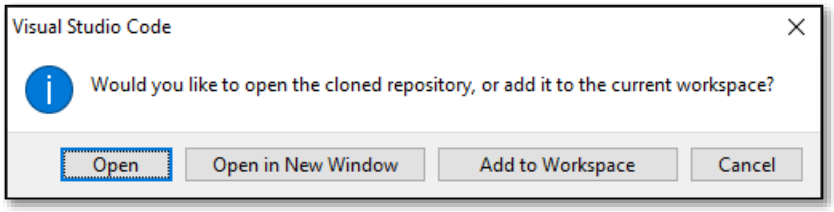
2. Click the green **Code** button → Click the **Copy** button.
3. In File Explorer → Create a folder for your repository.
4. Right Click the repository folder → **Open with Code**



5. Click the **Source Control** button → the **...** menu → **Clone.**



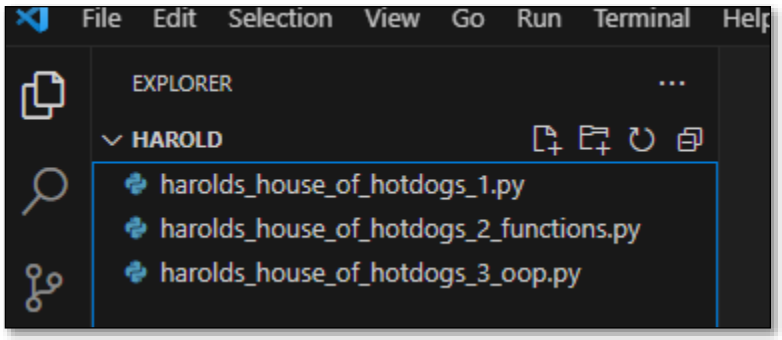
6. Paste in the URL you copied from your GitHub repository.
7. Press the **Enter** Key.
8. Select your GitHub repository folder.



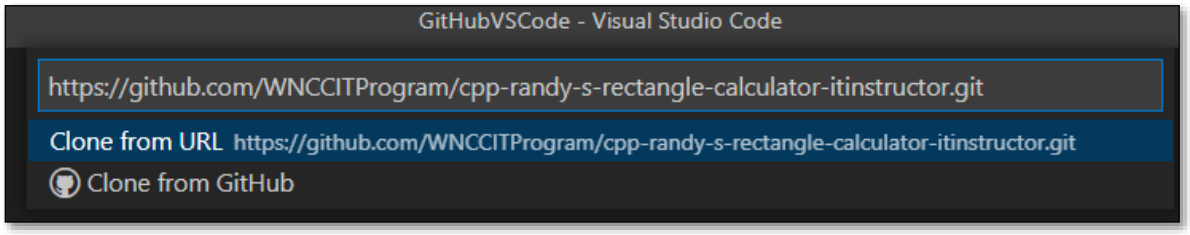
9. Click **Open**.

You should see the readme and other files from the GitHub.com repository.

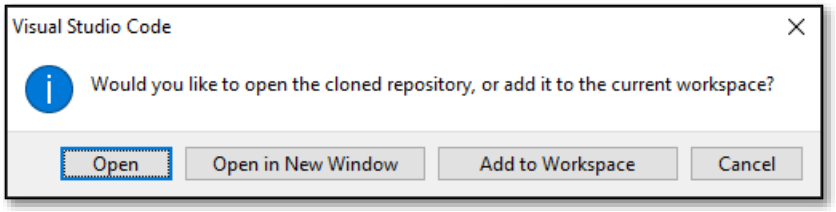
10. Create a folder on your computer for your project.
11. Right Click the project folder → **Open with Code**. This opens your folder as a Visual Studio Code project.
12. Right Click the repository folder → **Open with Code**



13. Click the **Source Control** button → the **...** menu → **Clone.**



14. Paste in the URL you copied from your GitHub repository.
15. Press the **Enter** Key.
16. Select your GitHub repository folder.



17. Click **Open**.

You should see the readme and other files from the GitHub.com repository.

Assignment Submission

1. Insert a screenshot showing a successful git operation in VSCode.