Git Going with GitHub Personal Repository

Contents

Time required: 60 minutes

What is GitHub?

GitHub is a code hosting platform for version control and collaboration. It allows you to collaborate and work together on software engineering projects from anywhere with anyone. It is typical to use a platform like this in a professional development environment.

Having a GitHub presence is very much like a resume for software engineers. It is also a place to work with others, or share your own code.

1: Create a GitHub Account

The first step to explore the benefits of GitHub is to create a GitHub account.

1. Go to www.github.com. If you already have an account, you can use that and skip to the next section.
2. Click on the **Signup** option at the upper right corner.

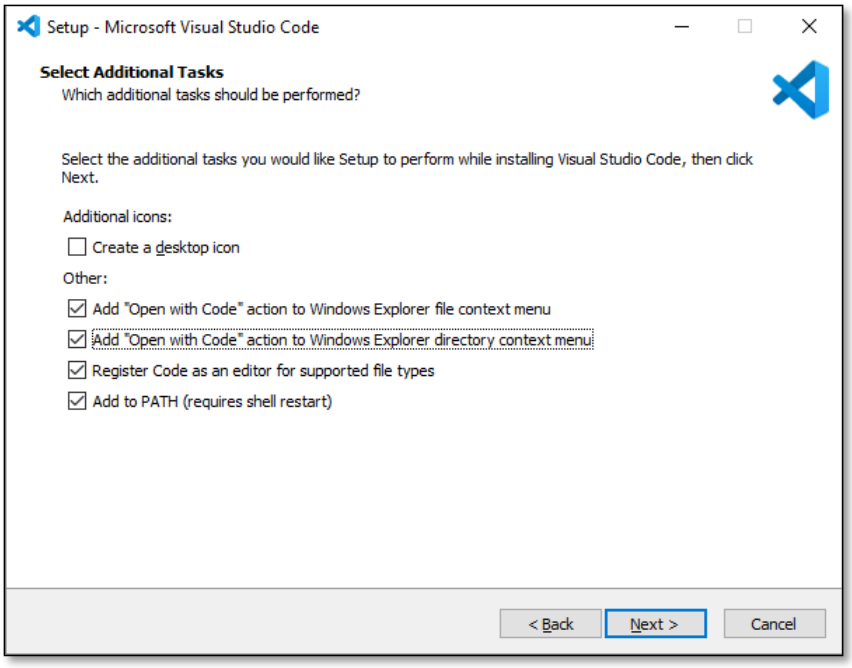
1. Fill in the necessary items.
2. The signup process changes frequently. You don't need to select anything extra.
3. Signup for the **FREE** account.
4. A confirmation link will be sent to your email address.
5. Activate your account by clicking on the received link.
6. Download, install, and sign into the GitHub Desktop. https://desktop.github.com

2: Install Visual Studio Code

Microsoft Visual Studio Code is an opensource editor sponsored by Microsoft. Microsoft also owns GitHub.

Visual Studio Code integrates with GitHub Desktop. There is extensive information on how to get started with Visual Studio Code on the Visual Studio Code website.

1. If you have already installed Visual Studio Code, you can skip to the next section.
2. Go to https://code.visualstudio.com/download.
3. Download and install the 64-bit version of Visual Studio Code for your operating system.
4. During the installation: **Select Additional Tasks**, select the following items. You can create a desktop icon if you wish.



3: GitHub Login

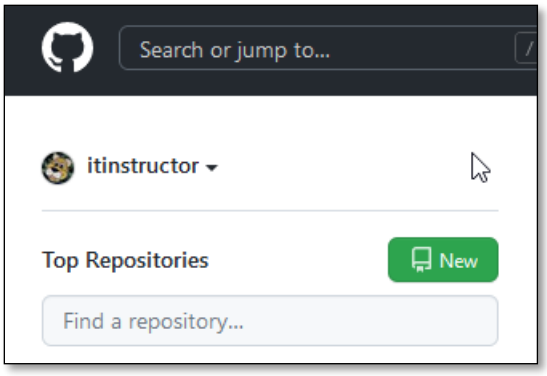
Log in to your GitHub account with a web browser to login and finish setting up your GitHub account.

1. To login to your account, click on the **Sign-in** option on the upper right corner.
2. You will be asked for your email id and password.
3. At your first login, the homepage will ask you to create your first repository and show some other options like exploring the repository.

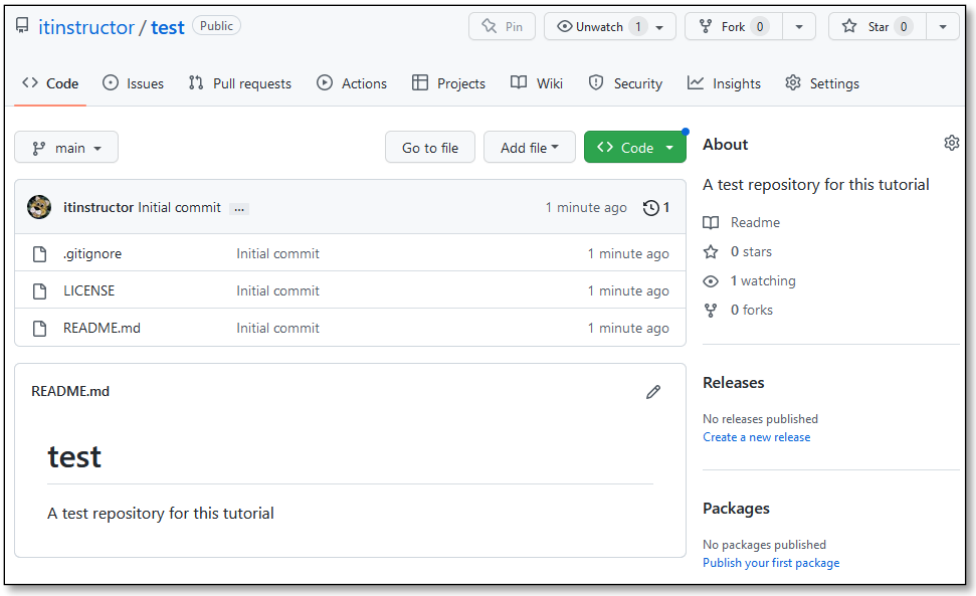
4: Create a GitHub Repository

Let's create our first GitHub repository.

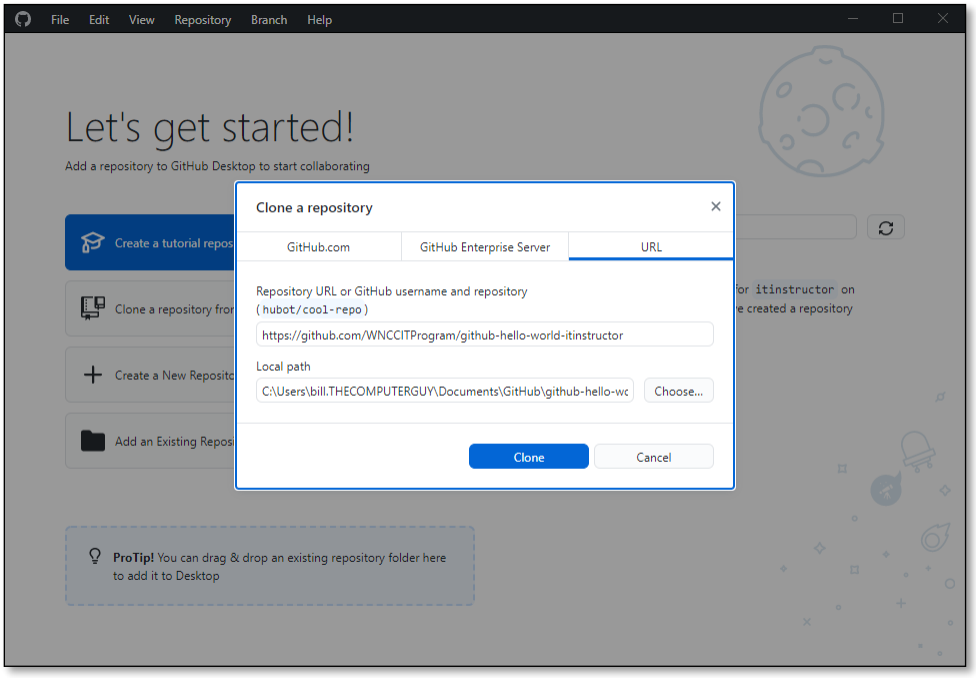
1. Login to Github.com



2. Click the green **New** button.
3. You should see **Create a new repository**.
4. Fill in **Repository name**. If you use spaces in the name, Github will put in a – (dash).
5. Enter a Description.
6. Choose Public or Private.
    a. Public: Anyone can see this repository. You can choose who can commit.
    b. Private: You can choose who can see and commit to this repository
7. Check **Add a README file**. This is important, this is where you describe the purpose of your repository.
8. Add **.gitignore**. This only commits necessary code files.
    a. If you are coding in Python, choose Python. There is a gitignore for almost all programming languages.
9. If you wish to share your code with others, **Choose a license**. Many coders allow others to use and modify their code. This is the nature of open source software. MIT License is a good general license for this.
10. Click **Create Repository**. Your empty repository will be created. It should look similar to the following image.



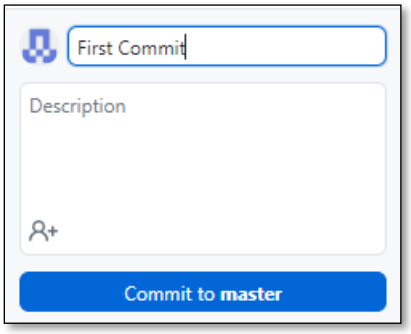
11. Click the green **Code** button → **Open with GitHub Desktop.**
12. Allow your browser to open the link. This should open **GitHub Desktop**.
13. Look at the local path. Be sure to put this somewhere you can find again.
    a. It is a good idea to store all your GitHub projects in a single folder called **GitHub**. Each project will automatically make a folder for the project.
14. Click **Clone**. This synchronizes the remote code to your local computer.



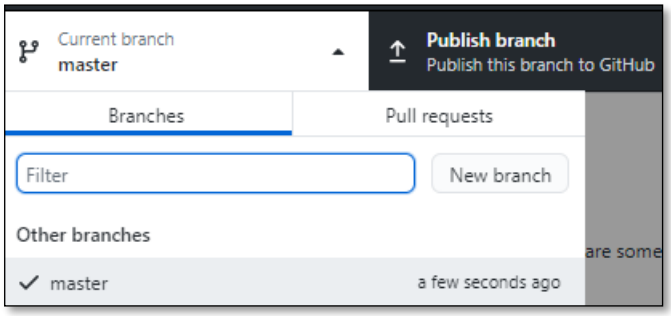
15. On the right-hand side of GitHub Desktop Click: **Open in Visual Studio Code**.
    a. If VSCode asks about enabling git, just say no. We will use GitHub Desktop for with with GitHub.

Let's edit the standard **README.md** file that was created in your repository.

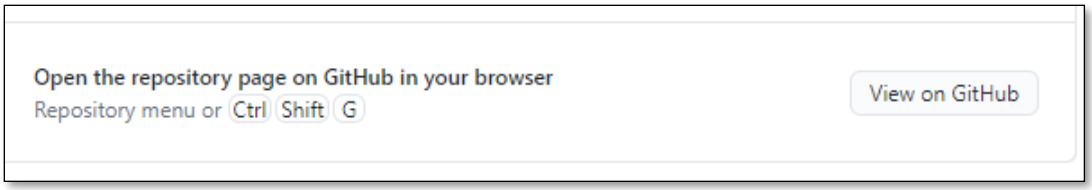
1. In the repository folder on your computer, Double Click the text file named: **README.md**
2. Type in a brief description of your program. Add your name, personalize the assignment. Save the file.
3. Go back to **GitHub Desktop**. Your updates should show up.
4. In the lower left side, enter a **Summary** as shown. Click **Commit to Master**.



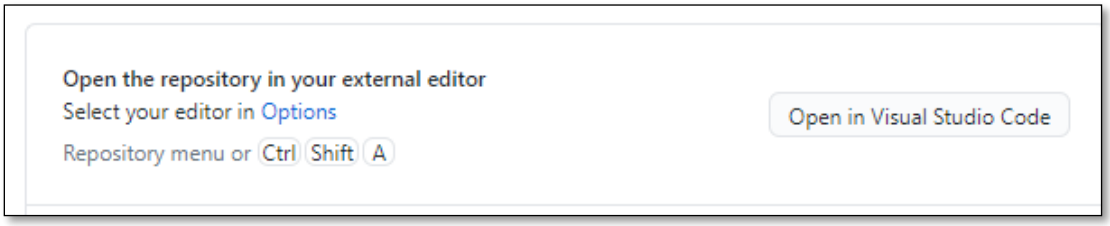
5. Click **Publish branch**.



6. Confirm that your code has been committed to github.com. In GitHub Desktop → Click **Open the repository page on GitHub in your browser**.



7. Go back to GitHub Desktop.
8. Click **Open the repository in your external editor**.



9. Create a simple **Hello World** program in the language of your choice.
10. In **GitHub Desktop** → **Commit** → Write a **Summary** → **Push Origin** to publish the changes to the online repository.
11. Click **View on GitHub** to see your submitted assignment.

GitHub Desktop Coding Workflow Video Walkthrough

Video walkthrough: [GitHub Workflow]() (Do this every time you work on the project.)

GitHub Desktop Coding Workflow

1. **In GitHub Desktop** → **Fetch Origin**
2. Click **Open in Visual Studio Code**
3. Make changes to the code
4. Return to **GitHub Desktop**
5. Type in a summary of your changes.
6. **Fetch origin** again.
7. **Commit to Master**
8. **Push origin**

Optional: GitHub Student Developer Pack

This is an optional step you can take if you wish to take advantage of more GitHub resources.

If you have an account without an edu email address, you can add your wncc.edu email address to your account. That will give you the best chance to be approved for the GitHub student developer pack.

Add WNCC edu email address to Existing GitHub Account

1. Go to the account icon in the upper right side. Click **Settings**.
2. Click **Emails**.
3. **Add email address:** Add your WNCC edu email address.
4. Confirm your email address.

Apply for the Student Developer Pack

1. Go to: Get your pack
2. There will be a list of the benefits, including access to the professional features of GitHub and other offers.
3. Click **Get your pack**.
4. Your WNCC edu email address should be in the list: **What e-mail address do you use for school?**
5. Follow the directions.

The GitHub student developer pack is one of the best resources to start as a developer. A student can apply for the GitHub Student Developer Pack. It offers benefits from GitHub partners. It also provides free access for the GitHub pro account as well as 20 developer's tools and courses.

Eligibility for GitHub Student developer pack

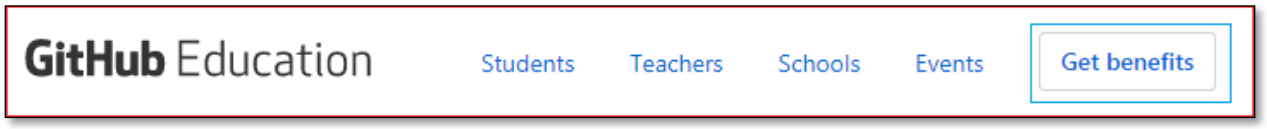
Following are some eligibility criteria to apply for the GitHub student developer:

- You must have a GitHub account.
- You are currently enrolled in a degree or diploma-granting courses like high school, secondary school, university, college, homeschool, or any other educational institution.

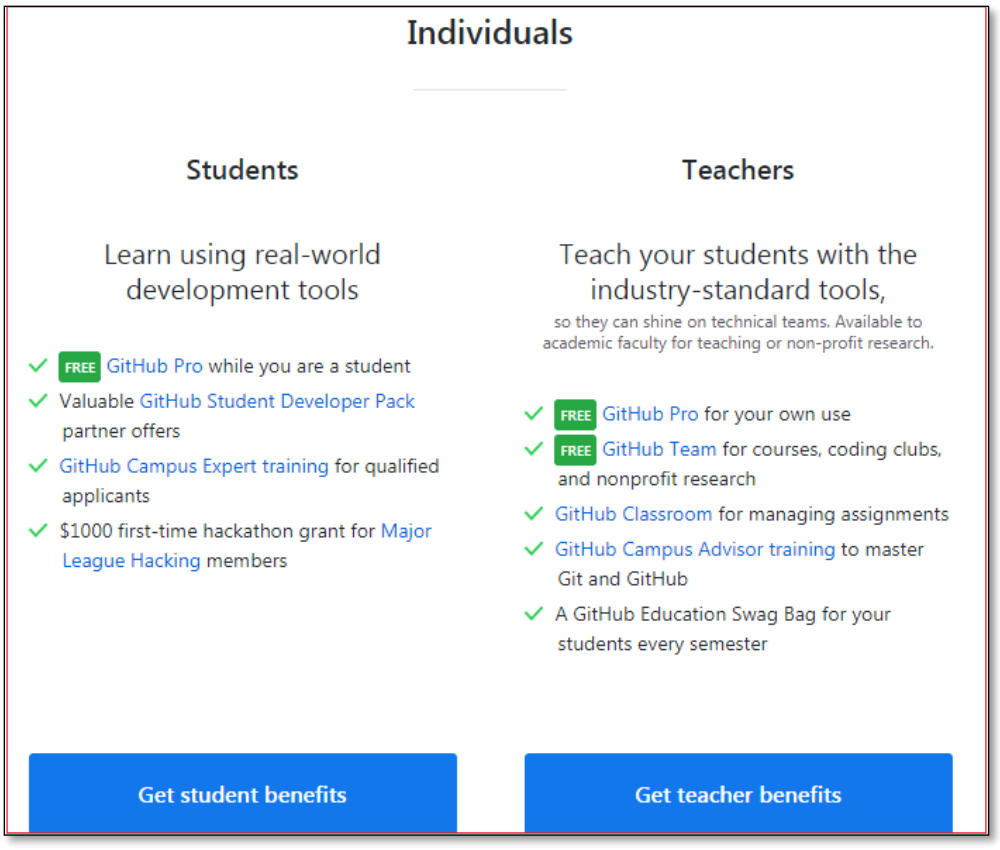
- You must have a school or college issued valid email address or any document that can prove your student data.
- You must be 13 years of age or older.

How to apply for the GitHub Student Developer pack

Step1: Visit GitHub Education and click in the top right option **Get Benefit**.



Step2: Under getting benefit option, describe yourself whether you are a student or faculty.



Step3: Add your academic email address. You will next be prompted for academic proof.

Step4: Upload academic proof. You can capture an image from your device in place of uploading it.

Place your valid academic ID or any other proof of current academic status in the frame, then click Take photo.

Step5: Enter your details like your name and fill the description of what's your plan for using GitHub.

Step6: Verify application details, then click on Submit option.

If your application is approved, you will be notified by a confirmation email. It will be processed within a few days.