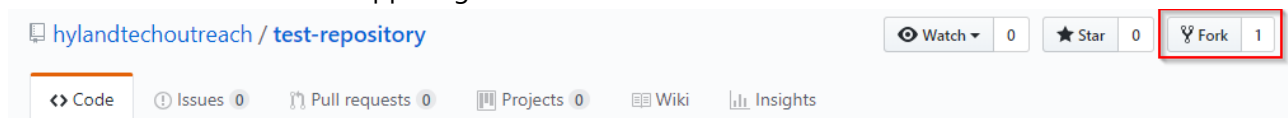# Fork and Clone a Repository

A **fork** is a copy of a repository. Forking a repository allows you to freely make changes without affecting the original project.
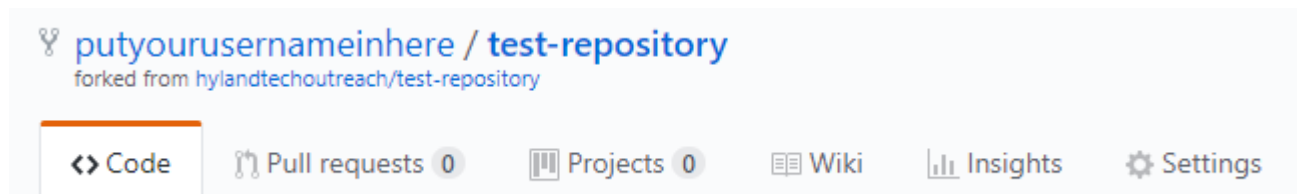
> *Note: Before forking a repository, make sure you have properly verified your GitHub email address*

Forking the repository

1. Login to GitHub
2. Navigate to the repository you'd like to fork (e.g., https://github.com/hylandtechoutreach/YOUR_COURSE_REPOSITORY)
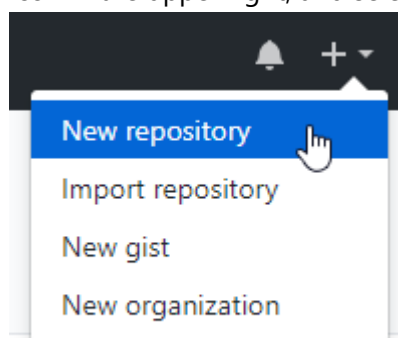3. Click the **Fork** button in the upper right

That's it! Now you have your own GitHub repository. It should look something like this:

Creating your own repository

If you do not want to fork an existing repository, you can create a totally new one! In GitHub, click the *plus* icon in the upper right, and select New Repository:
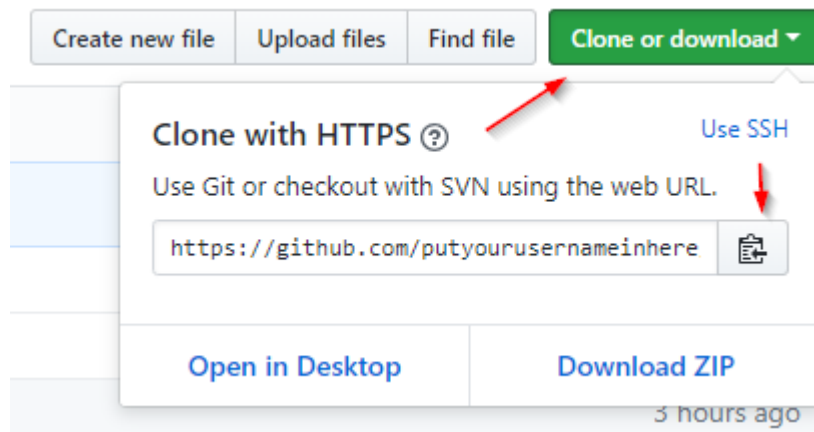

Fill out some information, and you'll have your own repository!

Cloning the repository

Once you have your own repository, you can clone it on your local machine to play around with it! A **clone** is a copy of a repository that lives on your computer instead of on a website's server somewhere.

1. On the right side of your repository page, click the **Clone or download** button
   - Make sure you are on the **Clone with HTTPS** menu
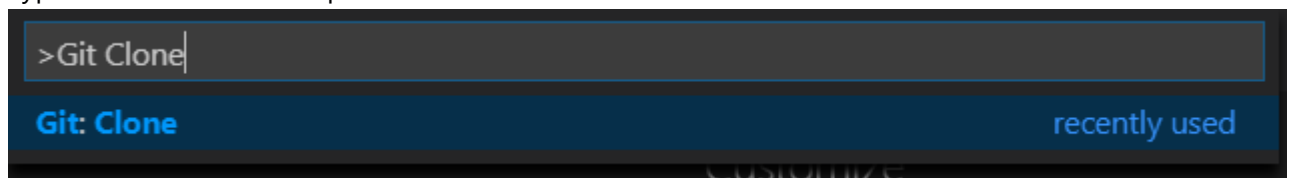2. Click the *copy* icon to copy your repository URL to your clipboard

Depending on which tool you are using, follow the instructions in one of the sections below to complete the cloning process.
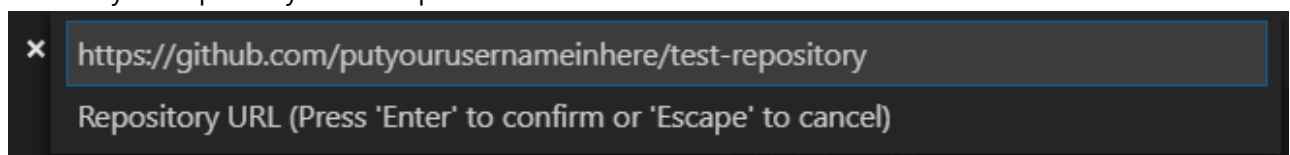
Cloning in Visual Studio Code

If you have installed Git on your machine, Visual Studio Code has built-in Git tools you can use.
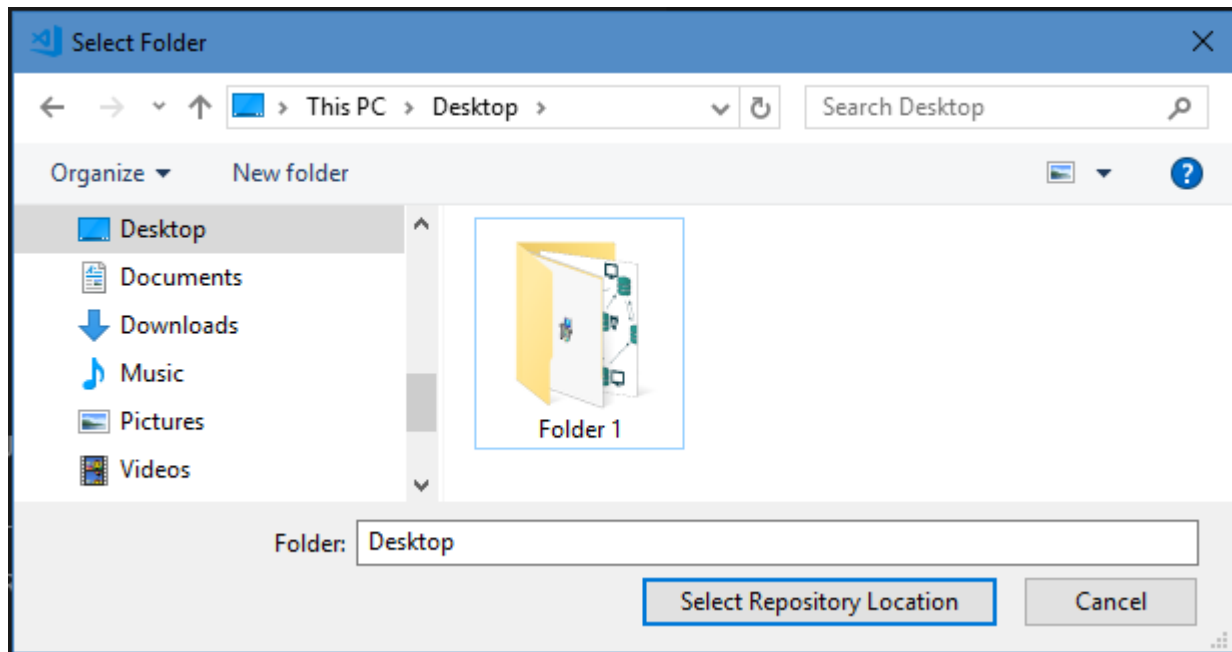
1. Open Visual Studio Code
2. Press `Ctrl`+`Shift`+`P` to open the Command Palette
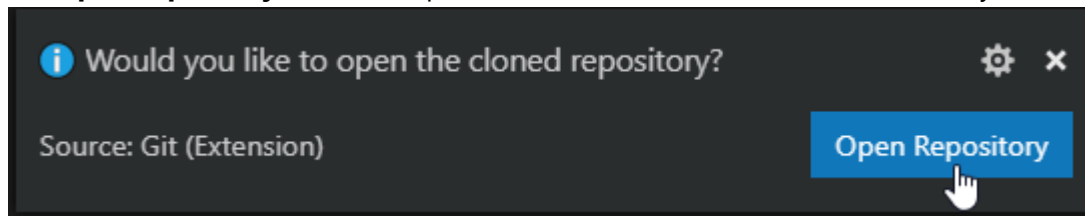3. Type in ">Git: Clone" and press `Enter` to execute the command

4. Paste in your repository URL and press `Enter` to confirm

5. Navigate to a suitable location for your repository folder, and click the **Select Repository Location** button
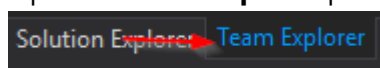
6. Once your repository is cloned, a popup should appear in the lower right corner of the window. Click the **Open Repository** button to open a new instance of VS Code with the newly cloned repository
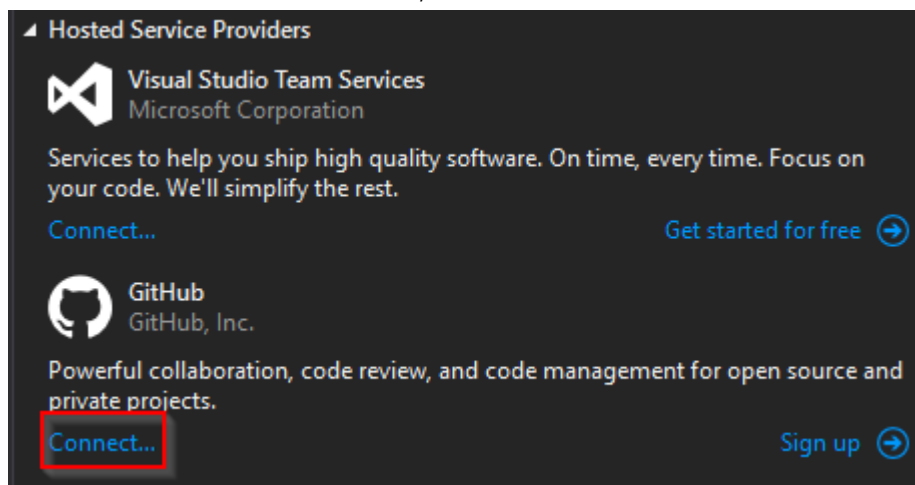

Cloning in Visual Studio

If you have Git installed on your machine, Visual Studio has built-in Git tools you can use.
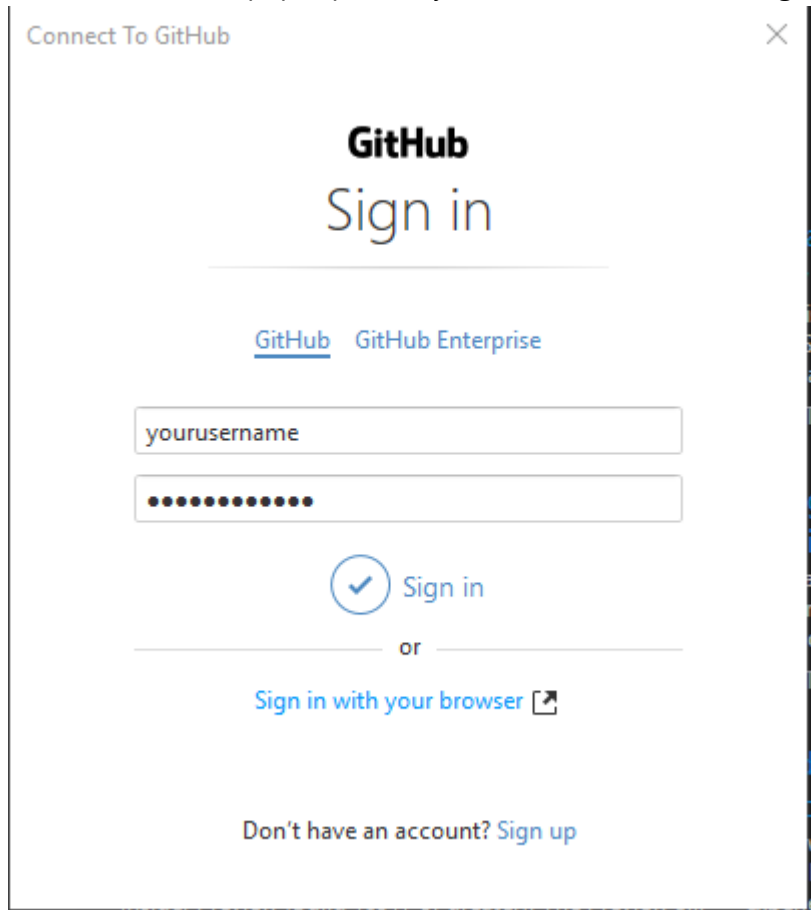
1. Open Visual Studio
2. Open the **Team Explorer** pane
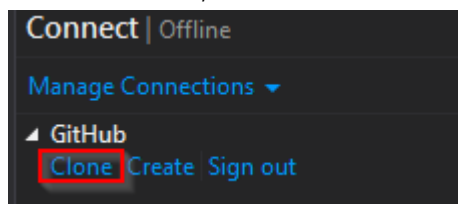

3. Click the *Manage Connections* icon (plug)

4. Under "Hosted Service Providers", find "GitHub" and click **Connect**

5. In the window that pops up, enter your credentials and click **Sign in**
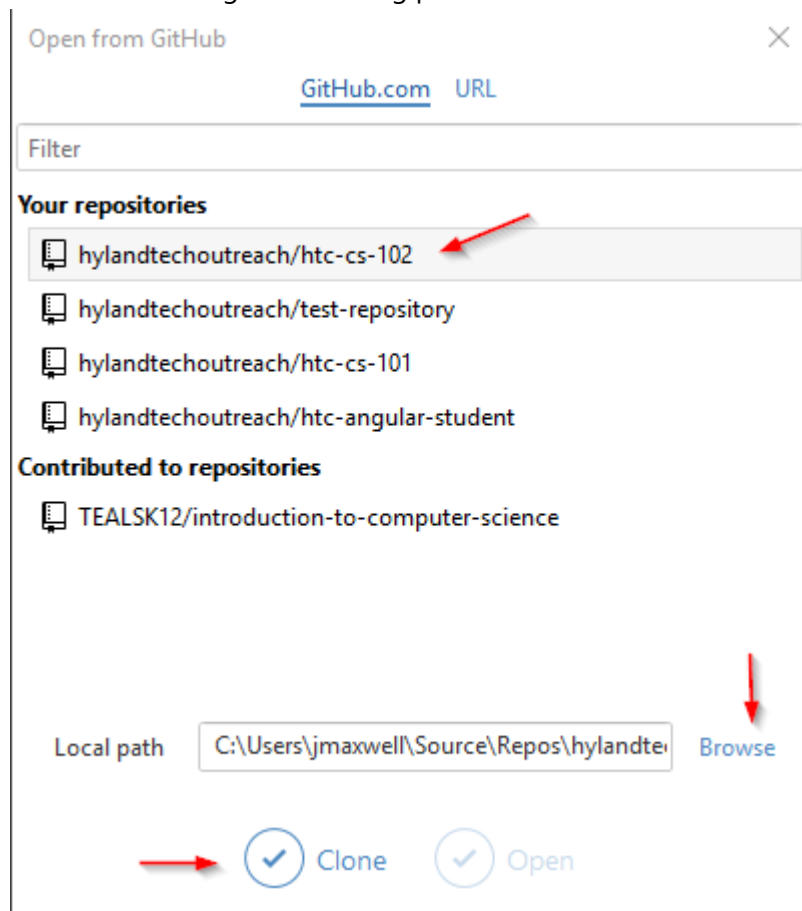

6. Under "GitHub", click **Clone**

7. In the window that pops up, select the repository you wish to clone
8. Click **Browse** to find a proper folder in which to clone the repository

9. Click **Clone** to begin the cloning process

Cloning via the Command Line

If you have Git Bash installed on your machine (or another shell), you can use that for all Git commands.

1. Open your shell application (e.g. Git Bash)
2. Change your directory to wherever you'd like the repository to live

```
cd /path/to/folder/
```

3. Use the `clone` command to clone the repository (paste in the repository's url after `clone`)

```
git clone https://github.com/YOUR_REPO_URL.git
```

That's it! Now you have a local clone of your repository.