HACK YOUR LEARNING

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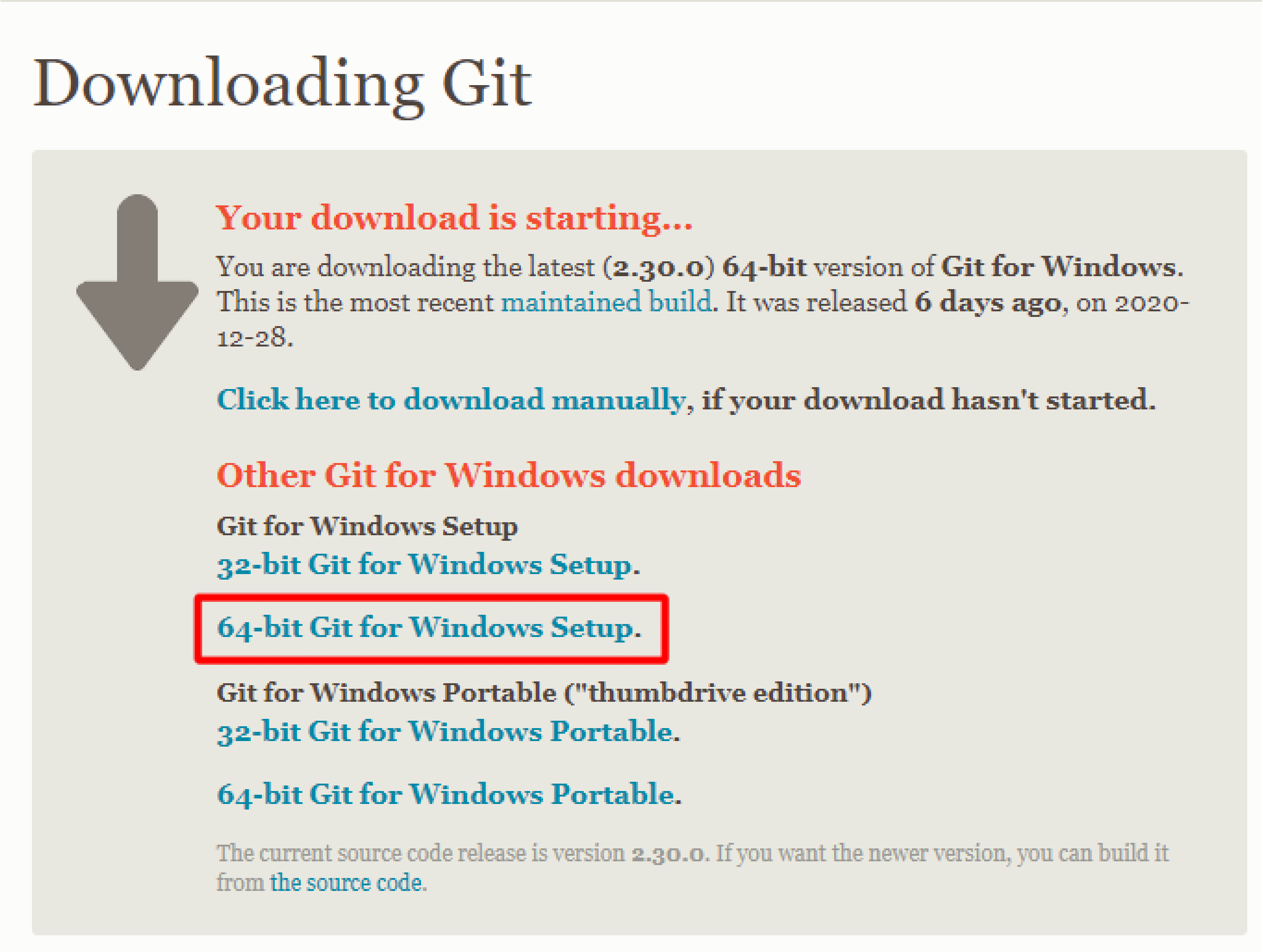
Git Install Guide - Windows

1. Download the installer from https://git-scm.com/downloads

Click the download button and your download should start immediately. If it doesn't you can manually click Windows 64 bit as shown below. Keep track of where you saved the installer.



Downloading Git

Your download is starting...

You are downloading the latest (**2.30.0**) **64-bit** version of **Git for Windows**. This is the most recent maintained build. It was released **6 days ago**, on 2020-12-28.

Click here to download manually, if your download hasn't started.

Other Git for Windows downloads

Git for Windows Setup
32-bit Git for Windows Setup.

64-bit Git for Windows Setup.

Git for Windows Portable ("thumbdrive edition")
32-bit Git for Windows Portable.

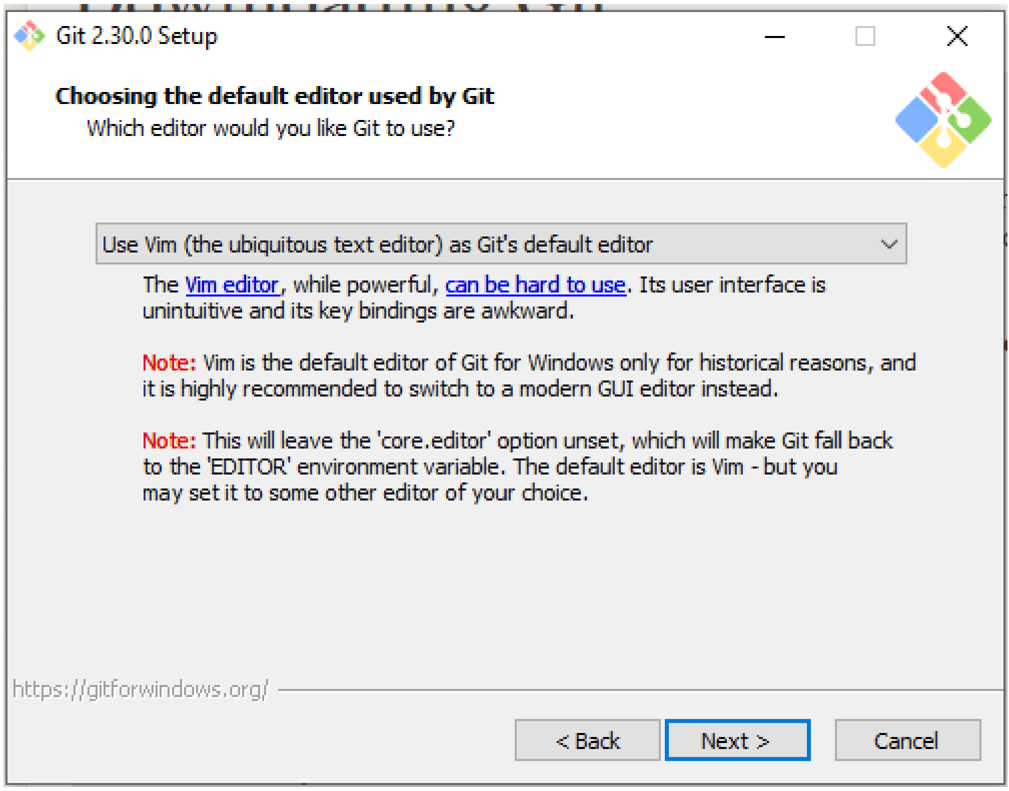
64-bit Git for Windows Portable.

The current source code release is version **2.30.0**. If you want the newer version, you can build it from the source code.

2. Run the installer

You can accept the default for most of the install. However, it is recommended to pause at the following critical steps to double check the information.

Text editor choice



Git 2.30.0 Setup

Choosing the default editor used by Git

Which editor would you like Git to use?

Use Vim (the ubiquitous text editor) as Git's default editor

The Vim editor, while powerful, can be hard to use. Its user interface is unintuitive and its key bindings are awkward.

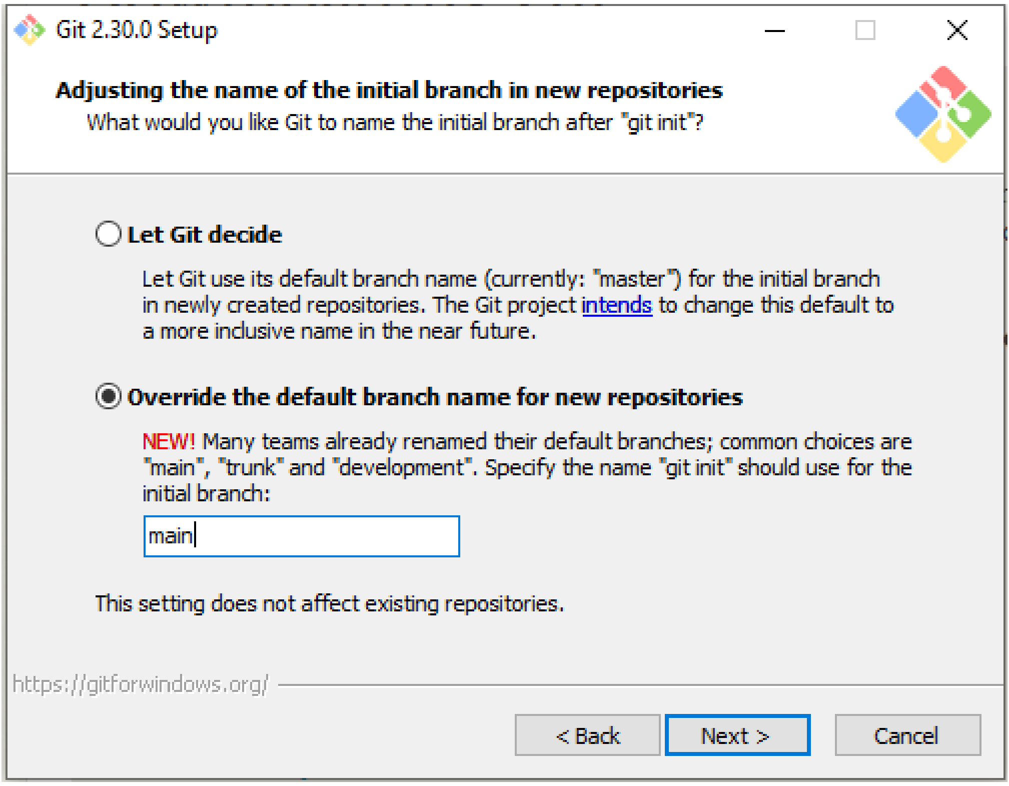
Note: Vim is the default editor of Git for Windows only for historical reasons, and it is highly recommended to switch to a modern GUI editor instead.

Note: This will leave the 'core.editor' option unset, which will make Git fall back to the 'EDITOR' environment variable. The default editor is Vim - but you may set it to some other editor of your choice.

https://gitforwindows.org/

This step is where you choose your text editor for git bash. It's ok to stick with the default, but if you have a preferred text editor you should specify that here.

Default branch



Git 2.30.0 Setup

Adjusting the name of the initial branch in new repositories

What would you like Git to name the initial branch after "git init"?

○ **Let Git decide**

Let Git use its default branch name (currently: "master") for the initial branch in newly created repositories. The Git project intends to change this default to a more inclusive name in the near future.

● **Override the default branch name for new repositories**

NEW! Many teams already renamed their default branches; common choices are "main", "trunk" and "development". Specify the name "git init" should use for the initial branch:

main

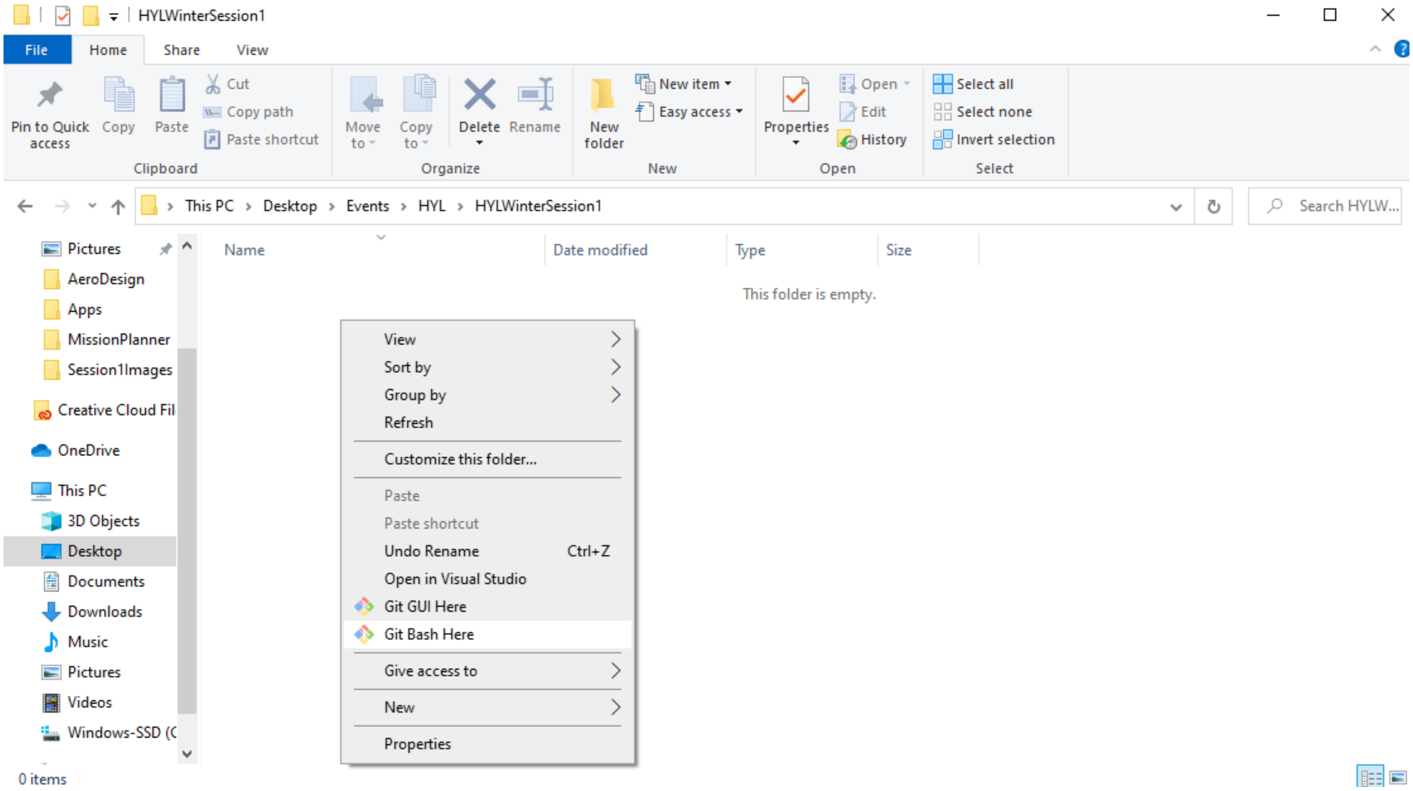
This setting does not affect existing repositories.

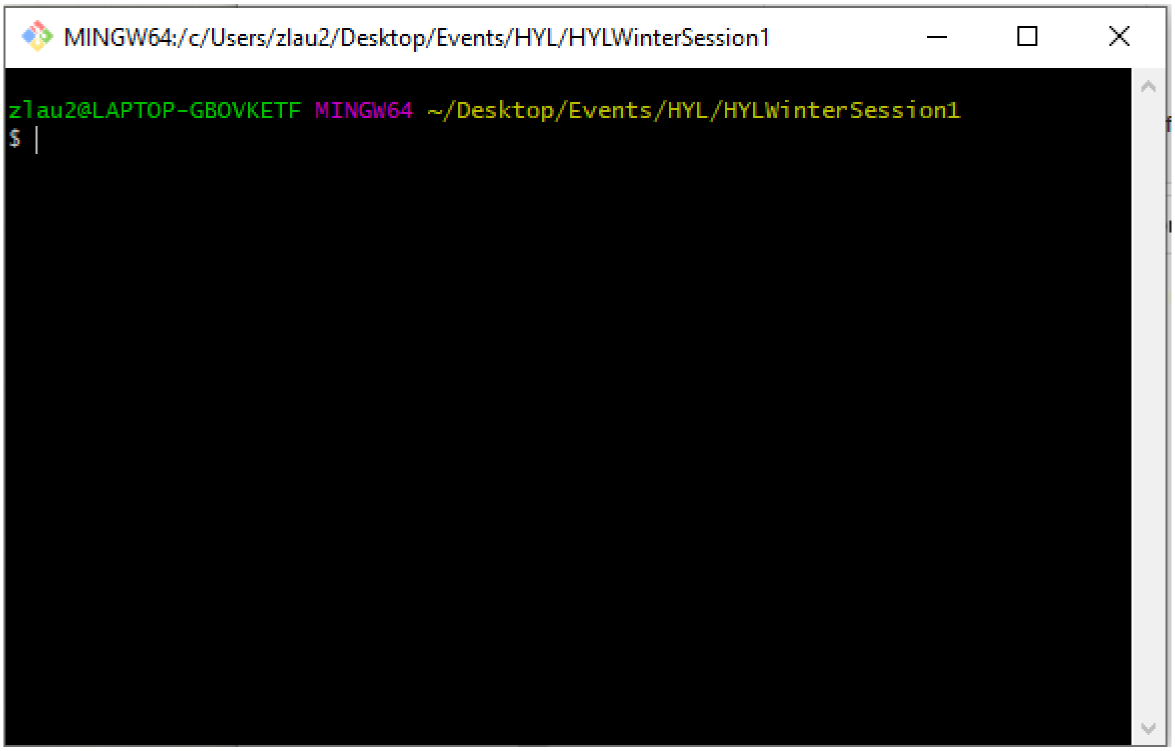
https://gitforwindows.org/

It is recommended to choose the default branch name to be "main" since this is what Github uses.

3. Start your git bash

- Create a folder to house your project. Change into this folder
- Start a git bash by right clicking and selecting "Git Bash Here". This will open a terminal like that shown below. All your commands in this workshop will be executed in the git bash terminal.

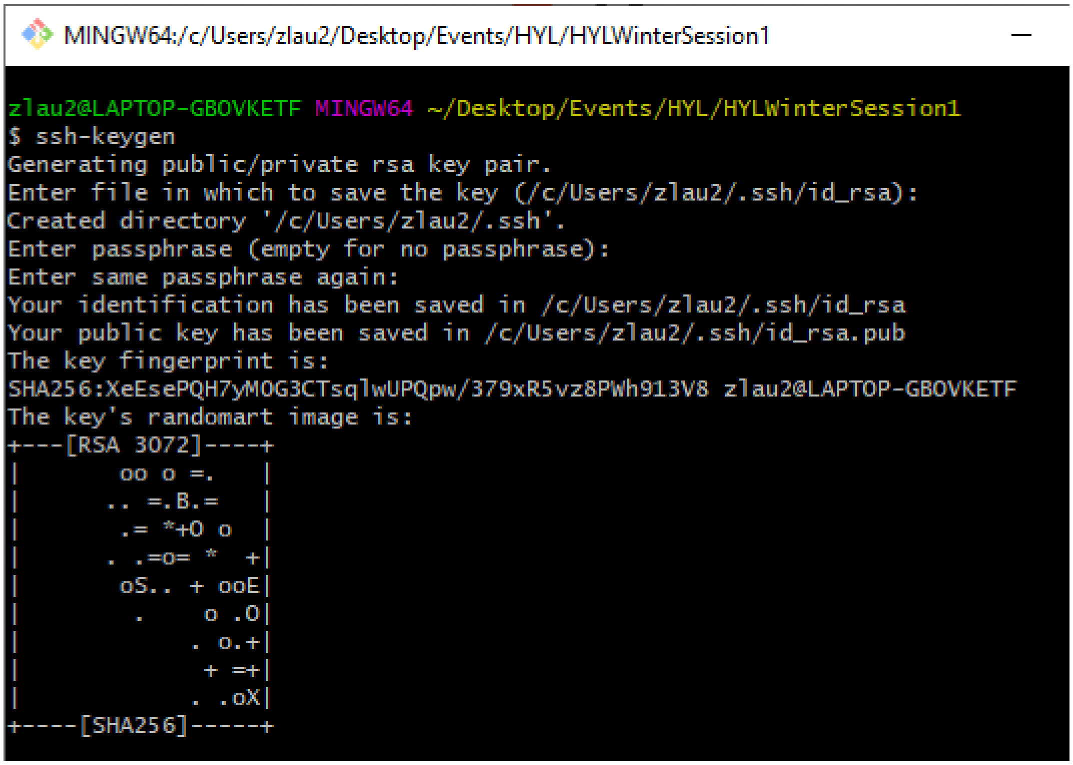



MINGW64:/c/Users/zlau2/Desktop/Events/HYL/HYLWinterSession1

```
zlau2@LAPTOP-GBOVKETF MINGW64 ~/Desktop/Events/HYL/HYLWinterSession1
$ |
```

4. Generate ssh keys

To make our GitHub experience smoother we will generate ssh keys. This allows us to securely communicate with GitHub. If you're interested in how this works you can research public/private key encryption. To generate an ssh key pair type `ssh-keygen`. Accept the defaults.



MINGW64:/c/Users/zlau2/Desktop/Events/HYL/HYLWinterSession1

```
zlau2@LAPTOP-GBOVKETF MINGW64 ~/Desktop/Events/HYL/HYLWinterSession1
$ ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/c/Users/zlau2/.ssh/id_rsa):
Created directory '/c/Users/zlau2/.ssh'.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /c/Users/zlau2/.ssh/id_rsa
Your public key has been saved in /c/Users/zlau2/.ssh/id_rsa.pub
The key fingerprint is:
SHA256:XeEsePQH7yMOG3CTsqlwUPQpw/379xR5vz8PWh913V8 zlau2@LAPTOP-GBOVKETF
The key's randomart image is:
+---[RSA 3072]----+
|       oo o =.   |
|      .. =.B.=   |
|       .= *+O o  |
|      . .=o= *  +|
|       oS.. + ooE|
|        .    o .O|
|            . o.+|
|             + =+|
|            . .oX|
+----[SHA256]-----+
```

5. Add our ssh keys to GitHub

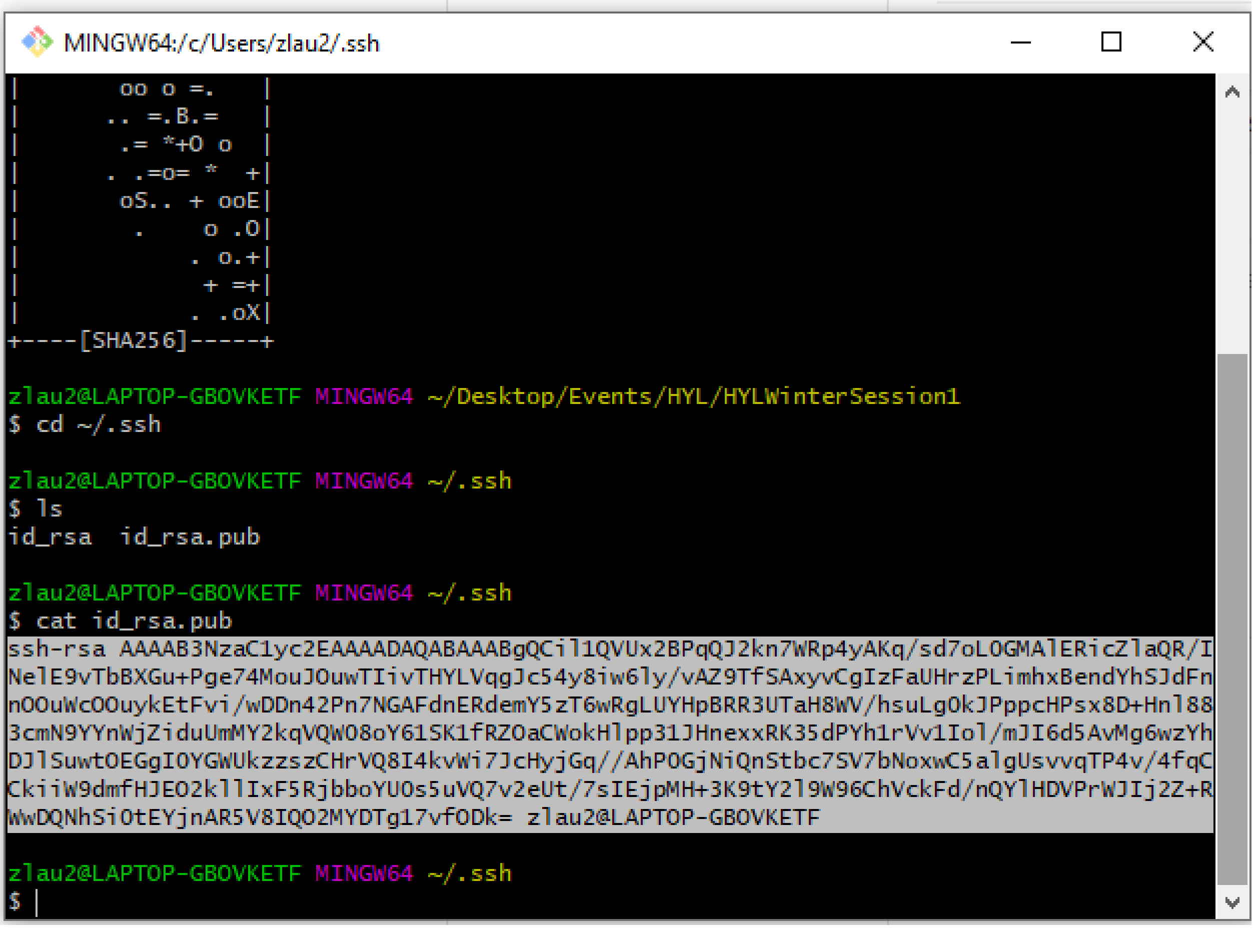
We now need to add the public key to our GitHub account.

- Type `cd ~/.ssh`. This will change directory to the folder we just made the keys in. If we type `ls` it will list the contents of this folder.
- Type `cat id_rsa.pub` to show the contents of your public key.
- Copy your public key

Next navigate to github.com and create an account if needed. To edit your ssh keys:

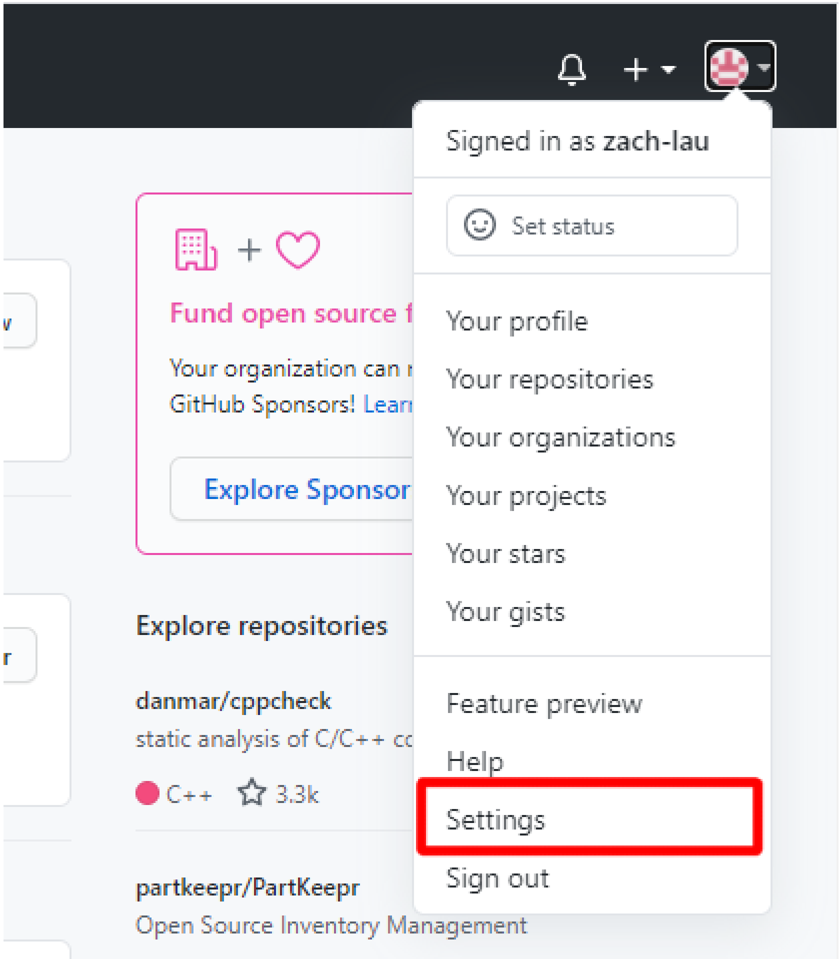
- Click your profile picture in the top right
- Go to settings
- Choose SSH and GPG keys from the sidebar
- Click "New SSH Key".
- Paste the contents of your public key in the key field. The title field doesn't really matter.
- Click "Add SSH key".

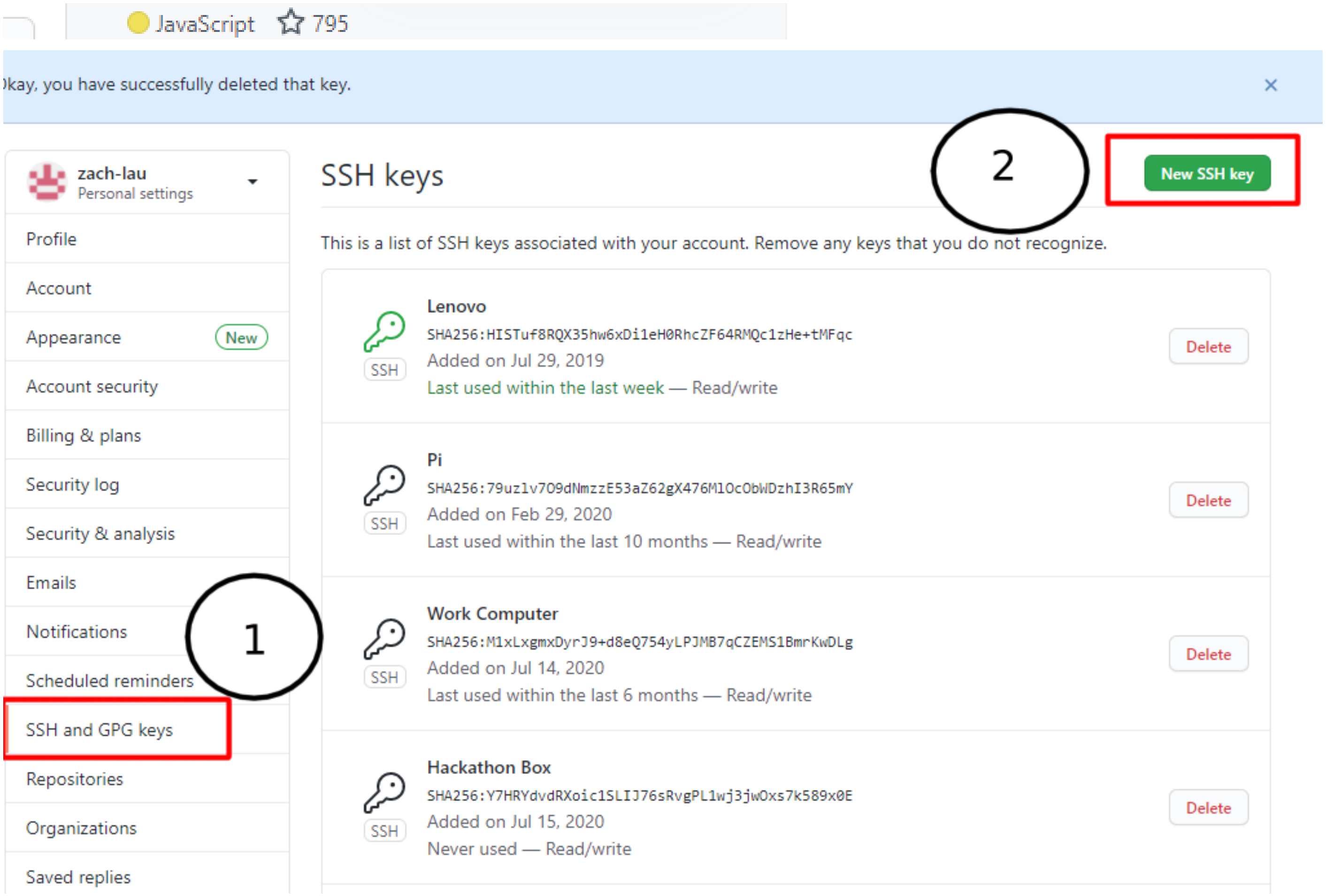
Your ssh keys are now set up.



MINGW64:/c/Users/zlau2/.ssh

```
|       oo o =.   |
|      .. =.B.=   |
|       .= *+O o  |
|      . .=o= *  +|
|       oS.. + ooE|
|        .     o .O|
|            . o.+|
|             + =+|
|            . .oX|
+----[SHA256]-----+

zlau2@LAPTOP-GBOVKETF MINGW64 ~/Desktop/Events/HYL/HYLWinterSession1
$ cd ~/.ssh

zlau2@LAPTOP-GBOVKETF MINGW64 ~/.ssh
$ ls
id_rsa  id_rsa.pub

zlau2@LAPTOP-GBOVKETF MINGW64 ~/.ssh
$ cat id_rsa.pub
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABgQCil1QVUx2BPqQJ2kn7WRp4yAKq/sd7oLOGMAlERicZlaQR/I
NelE9vTbBXGu+Pge74MouJOuwTIivTHYLVqgJc54y8iw6ly/vAZ9TfSAxyvCgIzFaUHrzPLimhxBendYhSJdFn
nOOuWcOOuykEtFvi/wDDn42Pn7NGAFdnERdemY5zT6wRgLUYHpBRR3UTaH8WV/hsuLg0kJPppcHPsx8D+Hnl88
3cmN9YYnWjZiduUmMY2kqVQW08oY61SK1fRZOaCWokHlpp31JHnexxRK35dPYh1rVv1Iol/mJI6d5AvMg6wzYh
DJlSuwtOEGgIOYGWUkzzszCHrVQ8I4kvWi7JcHyjGq//AhPOGjNiQnStbc7SV7bNoxwC5algUsvvqTP4v/4fqC
CkiiW9dmfHJEO2kllIxF5RjbboYUOs5uVQ7v2eUt/7sIEjpMH+3K9tY2l9W96ChVckFd/nQYlHDVPrWJIj2Z+R
WwDQNhSiOtEYjnAR5V8IQO2MYDTg17vfODk= zlau2@LAPTOP-GBOVKETF

zlau2@LAPTOP-GBOVKETF MINGW64 ~/.ssh
$ |
```





)kay, you have successfully deleted that key.

SSH keys

This is a list of SSH keys associated with your account. Remove any keys that you do not recognize.

Lenovo
SHA256:HISTuf8RQX35hw6xDi1eH0RhcZF64RMQc1zHe+tMFqc
Added on Jul 29, 2019
Last used within the last week — Read/write

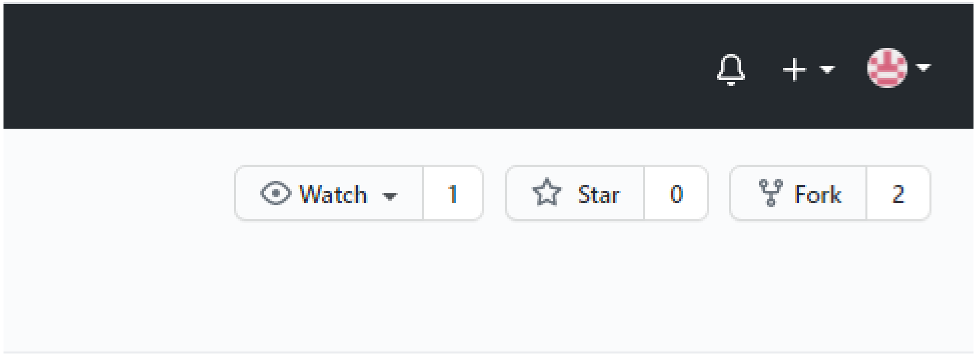
Pi
SHA256:79uz1v709dNmzzE53aZ62gX476Ml0cObWDzhI3R65mY
Added on Feb 29, 2020
Last used within the last 10 months — Read/write

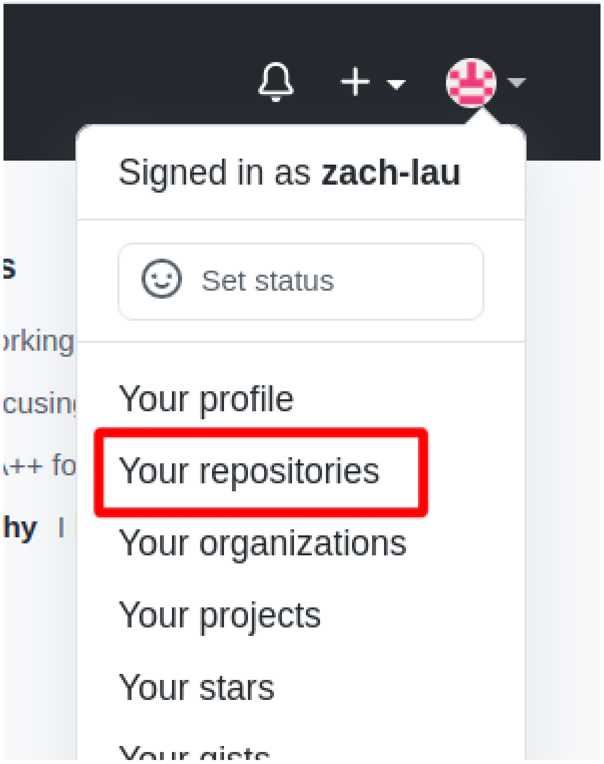
Work Computer
SHA256:M1xLxgmxDyrJ9+d8eQ754yLPJMB7qCZEMS1BmrKwDLg
Added on Jul 14, 2020
Last used within the last 6 months — Read/write

Hackathon Box
SHA256:Y7HRYdvdRXoic1SLIJ76sRvgPL1wj3jwOxs7k589x0E
Added on Jul 15, 2020
Never used — Read/write

6. Fork the HYL Repository - only one team member needs to do this!

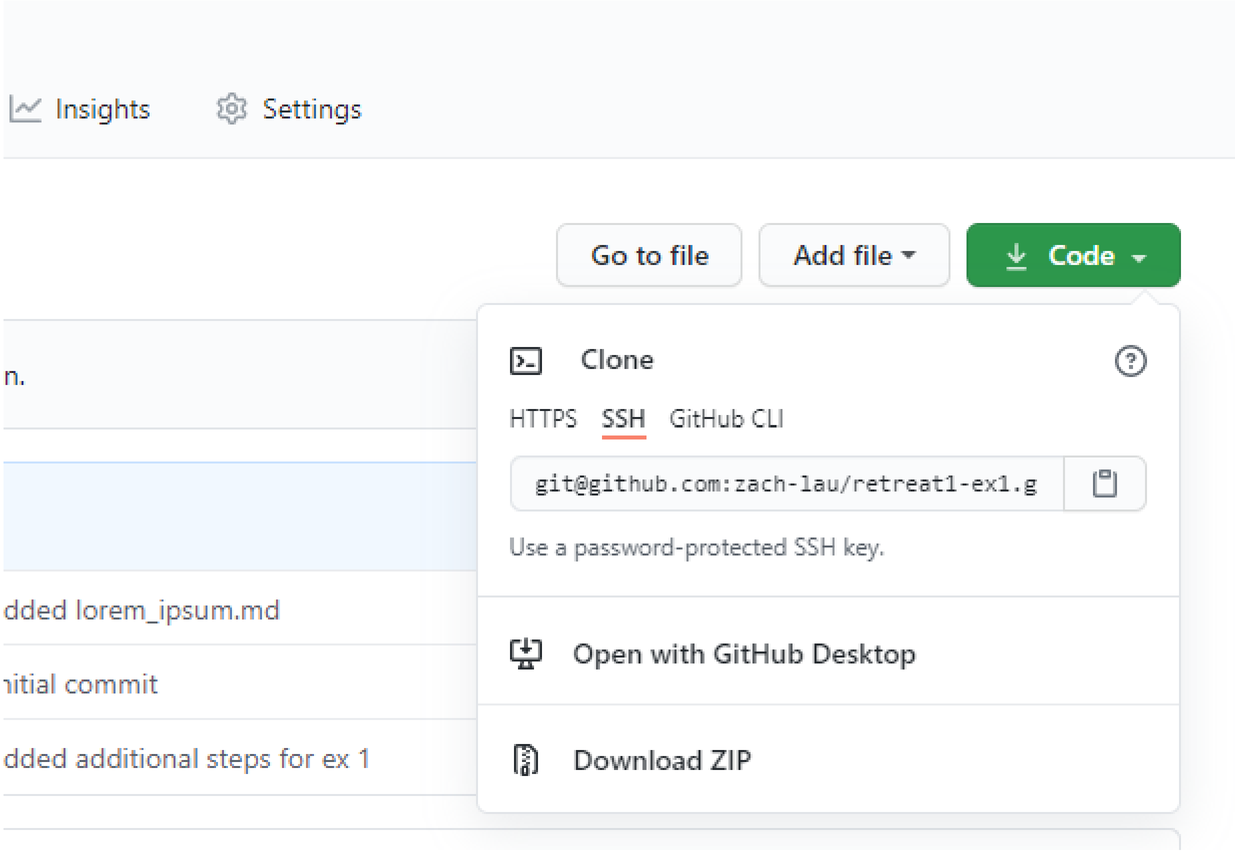
To work on the HYL project one member of your team will need to fork the repository. To do so, navigate to https://github.com/Hack-Your-Learning/retreat1-ex1. Click "Fork" in the top right corner. This will create a copy of this repository for your team to work on. GitHub should redirect you to your copy when you create it. If it did not you can find your copy by clicking on your profile picture and then "your repositories".





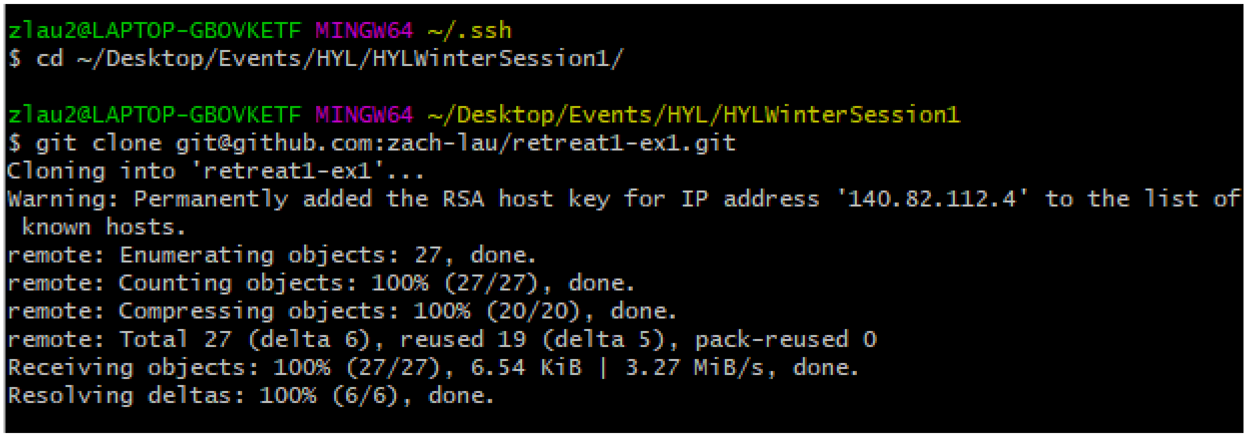
7. Clone the repository

Now that we have our fork on GitHub we need a local copy. We get this copy with the "clone" command. First copy the ssh link by clicking the green "Code" button, choose ssh and then copy the link. Go back to your git bash and `cd` to your project directory. We can clone the project with `git clone <your link>`. If it asks you about adding to known hosts say yes.



git@github.com:zach-lau/retreat1-ex1.g

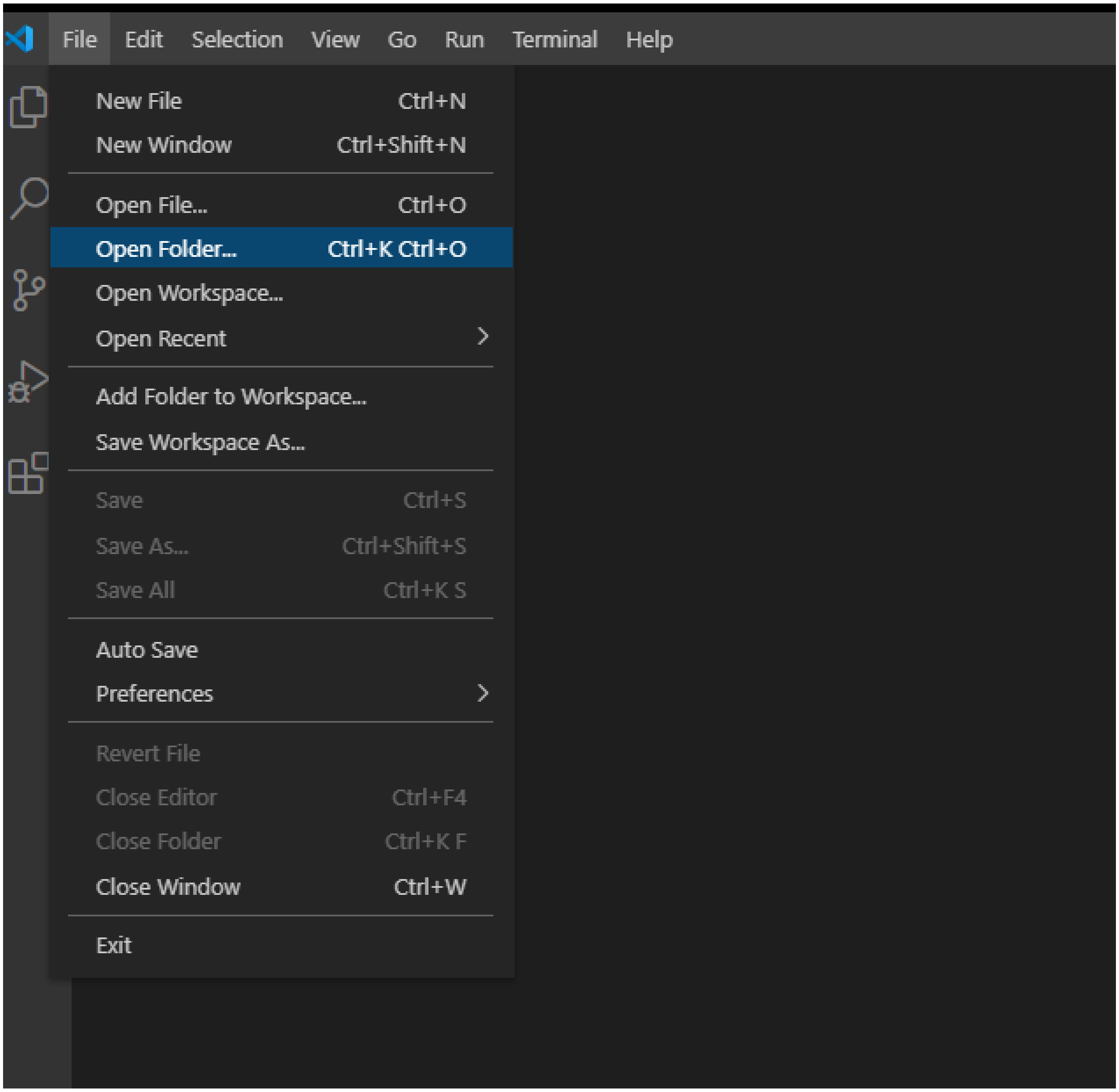
Use a password-protected SSH key.

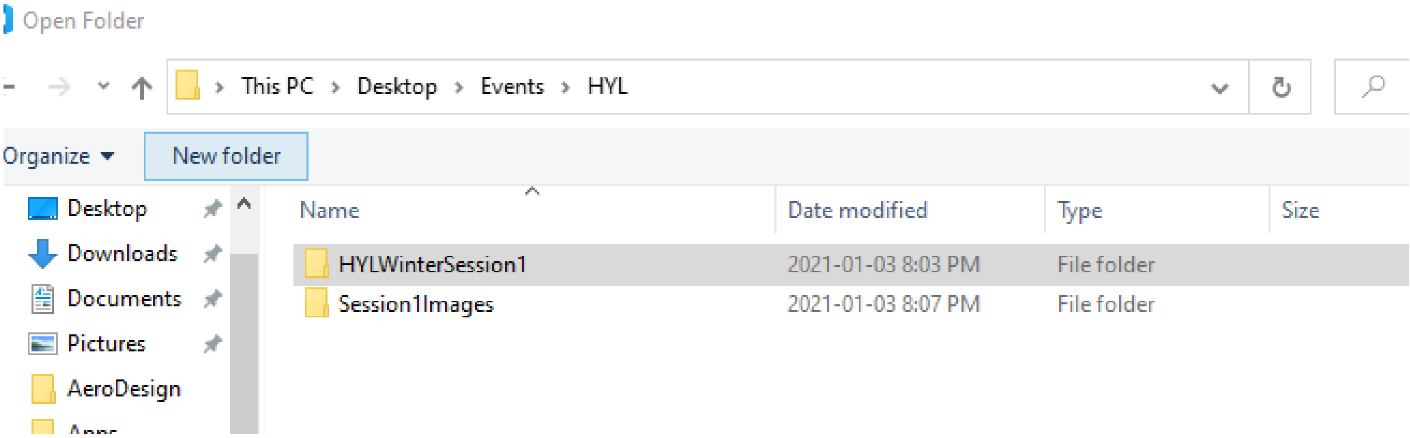


```
zlau2@LAPTOP-GBOVKETF MINGW64 ~/.ssh
$ cd ~/Desktop/Events/HYL/HYLWinterSession1/

zlau2@LAPTOP-GBOVKETF MINGW64 ~/Desktop/Events/HYL/HYLWinterSession1
$ git clone git@github.com:zach-lau/retreat1-ex1.git
Cloning into 'retreat1-ex1'...
Warning: Permanently added the RSA host key for IP address '140.82.112.4' to the list of
 known hosts.
remote: Enumerating objects: 27, done.
remote: Counting objects: 100% (27/27), done.
remote: Compressing objects: 100% (20/20), done.
remote: Total 27 (delta 6), reused 19 (delta 5), pack-reused 0
Receiving objects: 100% (27/27), 6.54 KiB | 3.27 MiB/s, done.
Resolving deltas: 100% (6/6), done.
```

8. Open in your preferred text editor

You will now be able to open the files in your favourite text editor. Below you can see how to open it in VSCode.





Name	Date modified	Type	Size
HYLWinterSession1	2021-01-03 8:03 PM	File folder	
Session1Images	2021-01-03 8:07 PM	File folder	

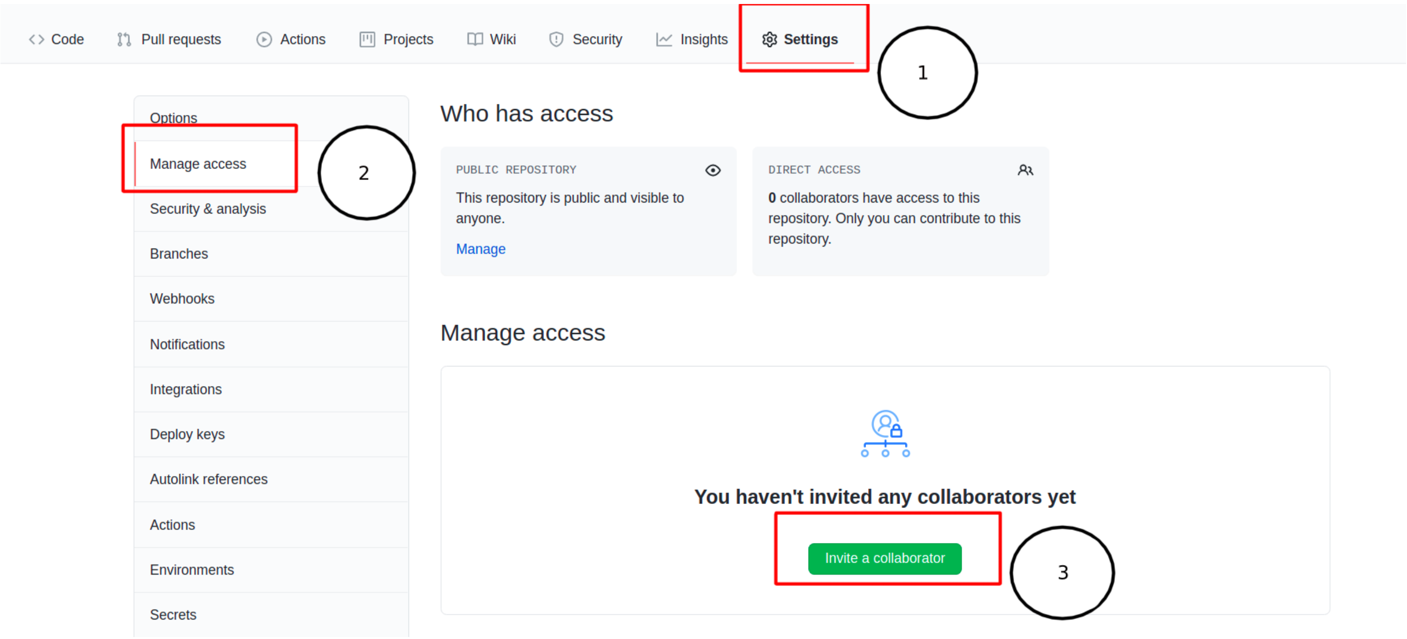
9. Add collaborators

If you're working with a team you will want to add collaborators. From your repository's page on GitHub, click

- Settings

- Manage Access
- Invite Collaborator

You can add your collaborators by email or GitHub username. To contribute they should clone the repository as described above. Note that there is no need for your teammates to fork either the HYL repository or your repository! They should *clone* the repository that you have just *forked*.



This repository is public and visible to anyone.

0 collaborators have access to this repository. Only you can contribute to this repository.

You haven't invited any collaborators yet