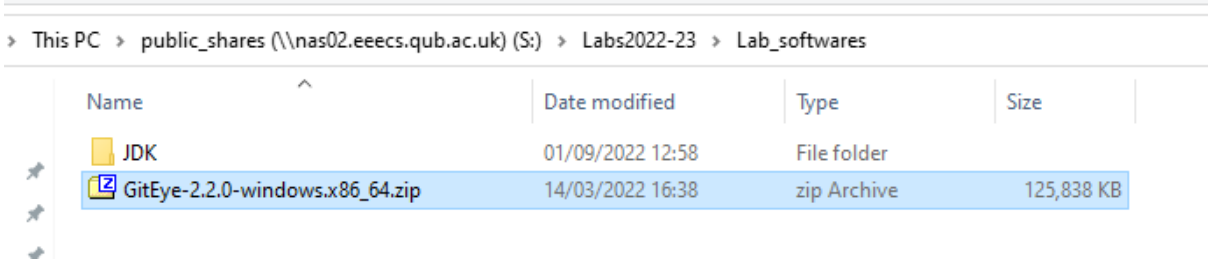
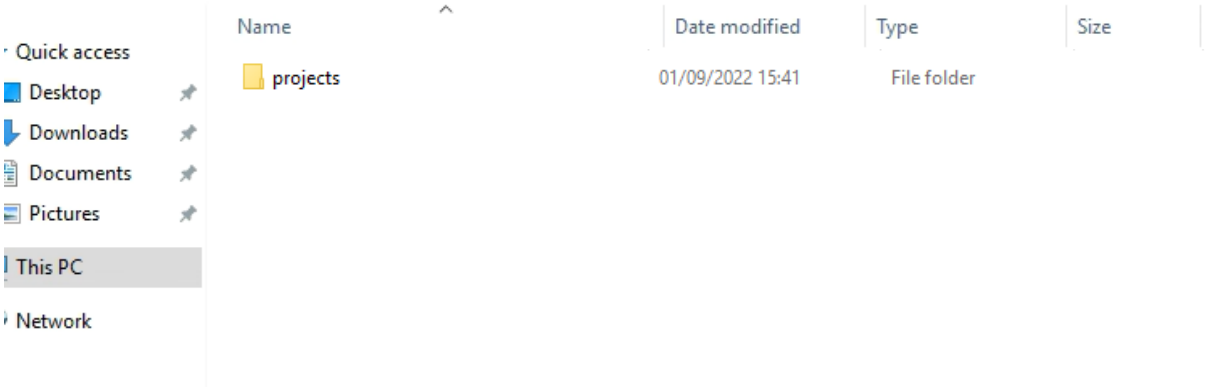
EEECS GitEye Guidance

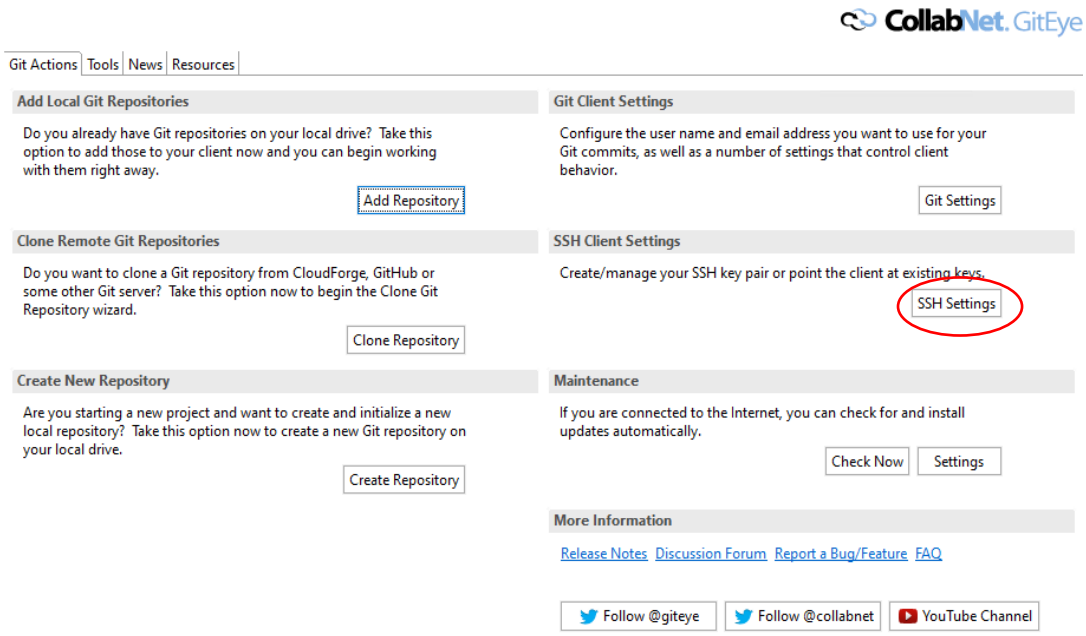
Git can be operated in two ways – via a graphical user interface (GUI) or a command line interface (CLI). This guide will teach you how to set up Git using a GUI called GitEye. GitEye is already installed on the EEECS lab computers. To install it on your personal computer, the download file is on the EEECS S: drive, S:\Labs20xx-xx\Lab_softwares where xx is the current academic year. You can either send the folder to yourself or save it on your USB. Extract the files from the folder and click the **GitEye.exe** file to start the application.



To get started, create a folder on your EEECS I: drive for your project. In the example below I have created a folder I:\projects

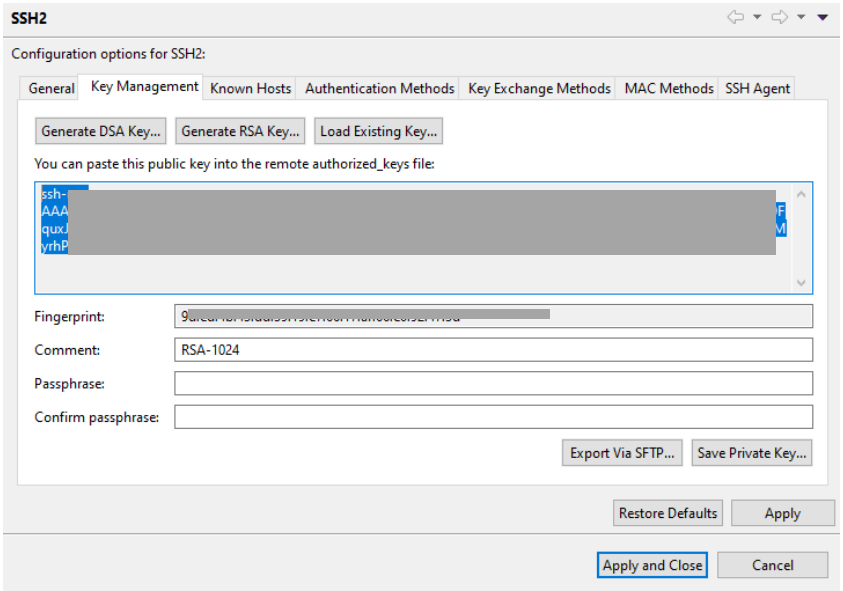


Once that is created, start up GitEye and click **SSH Settings**.

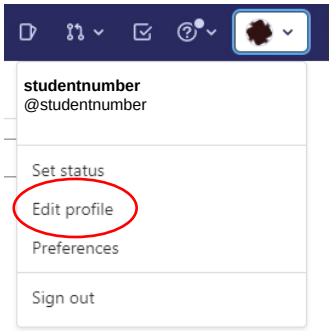


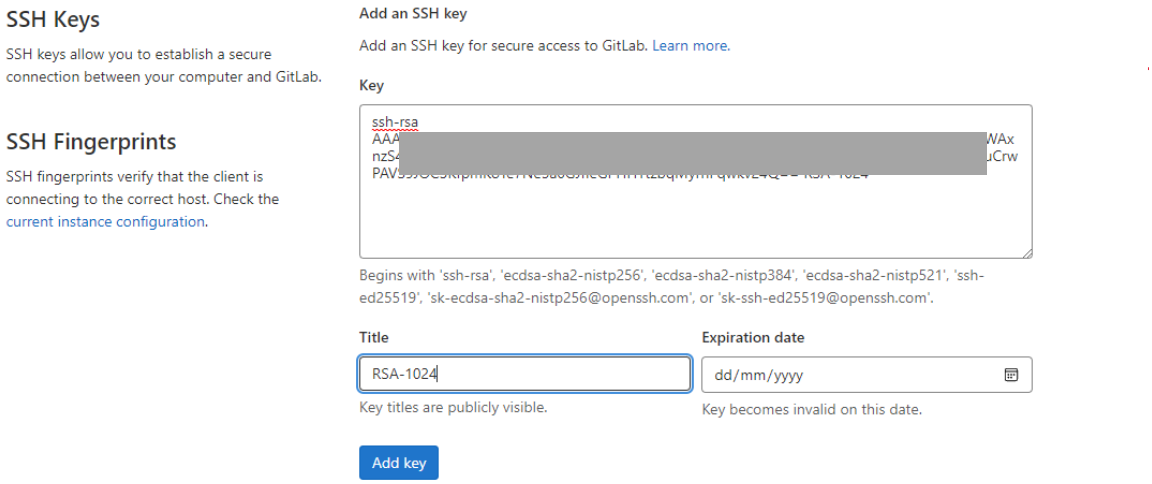
Make sure the SSH2 home points to your EEECS I: drive, if not click **browse** to change it. Click on the **Key Management** tab then **Generate RSA Key**. This will generate some text in the textbox below. Make sure you save the key by clicking **Save Private Key**. It will ask you for confirmation, click **OK** twice. It should automatically direct you to I:\.ssh if not browse for it and click **save**. Copy the key and then click the **Apply** button and then **Apply and Close** button.

(Note: you will need to generate a new SSH key and save it every time you use a different computer!)

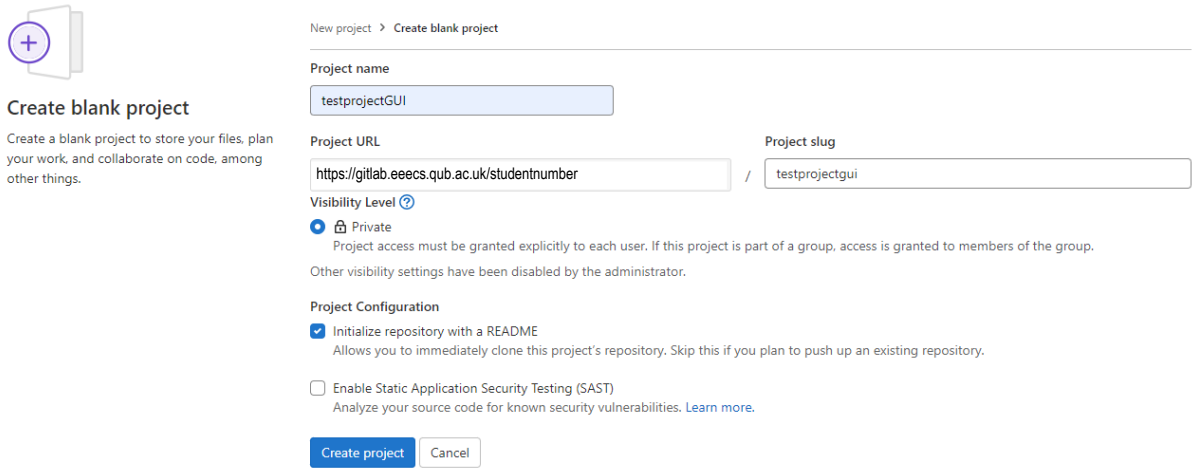


Next, log onto your EEECS Gitlab. Once your logged in, click on your profile icon located in the top right corner and then select **Edit profile**. Visit the **SSH Keys** tab and paste the SSH key into the space provided and click '**Add Key'**. It will automatically give the SSH key a title, if not give it a title so you will know which computer it was generated on.

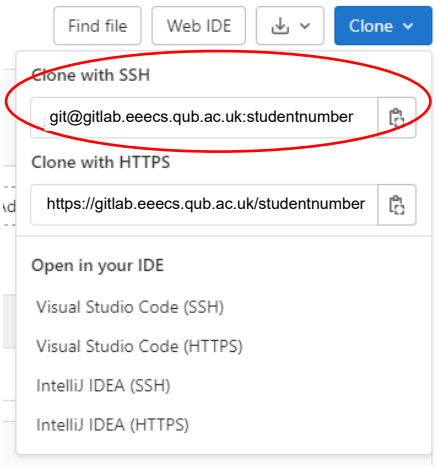




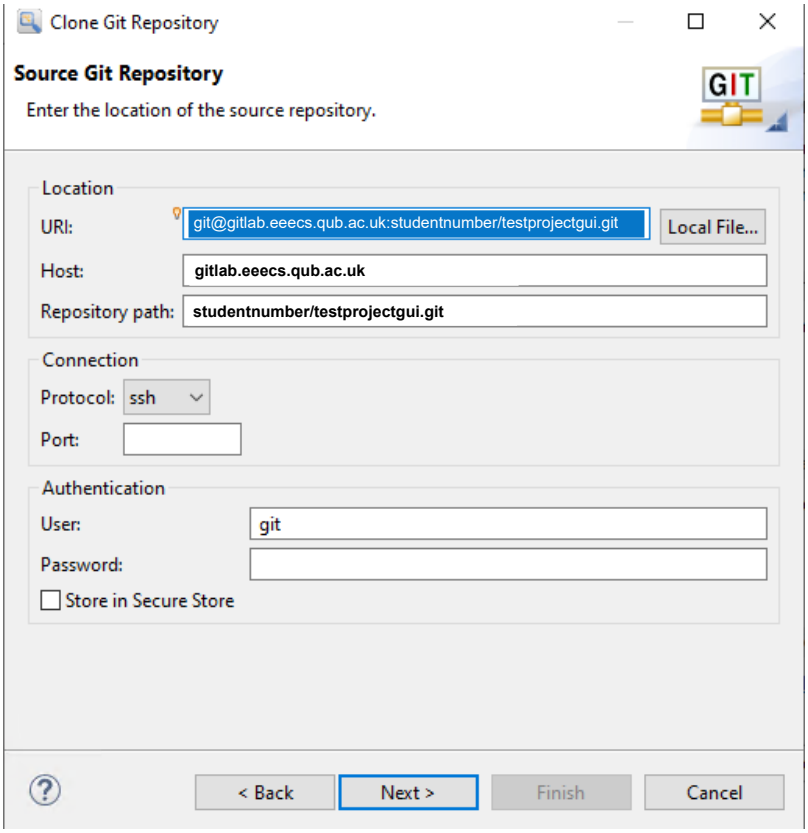
After that, create a blank project on GitLab.



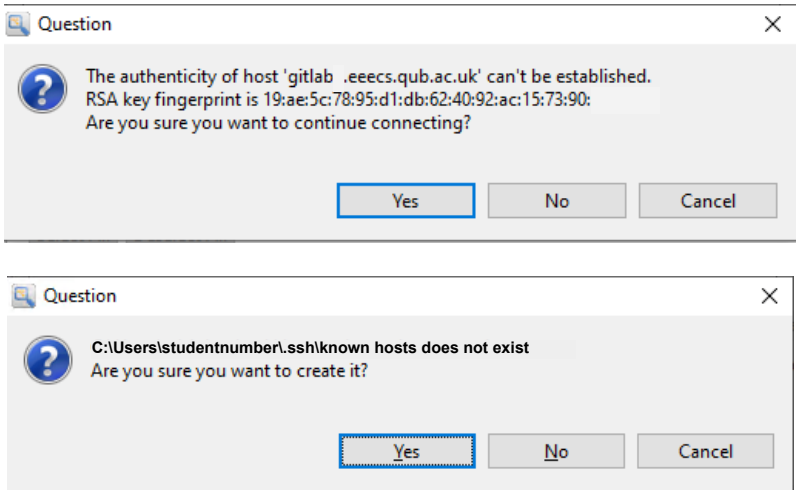
After creating your remote repository on the EEECS Gitlab service locate the address of the project and click the **Clone** button and then copy the **Clone with SSH** address as shown.



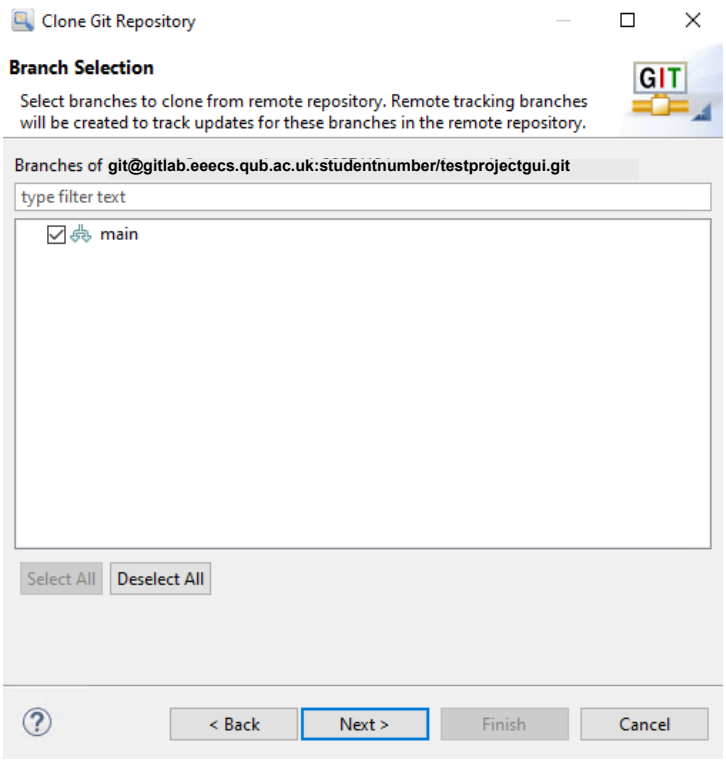
We now need to copy down the Git repository onto our local machine. Back onto GitEye, click on **Clone Repository** then **Clone URI**. The SSH address we copied should've automatically pasted in. If not, paste it into the **URI textbox** then click **Next**.



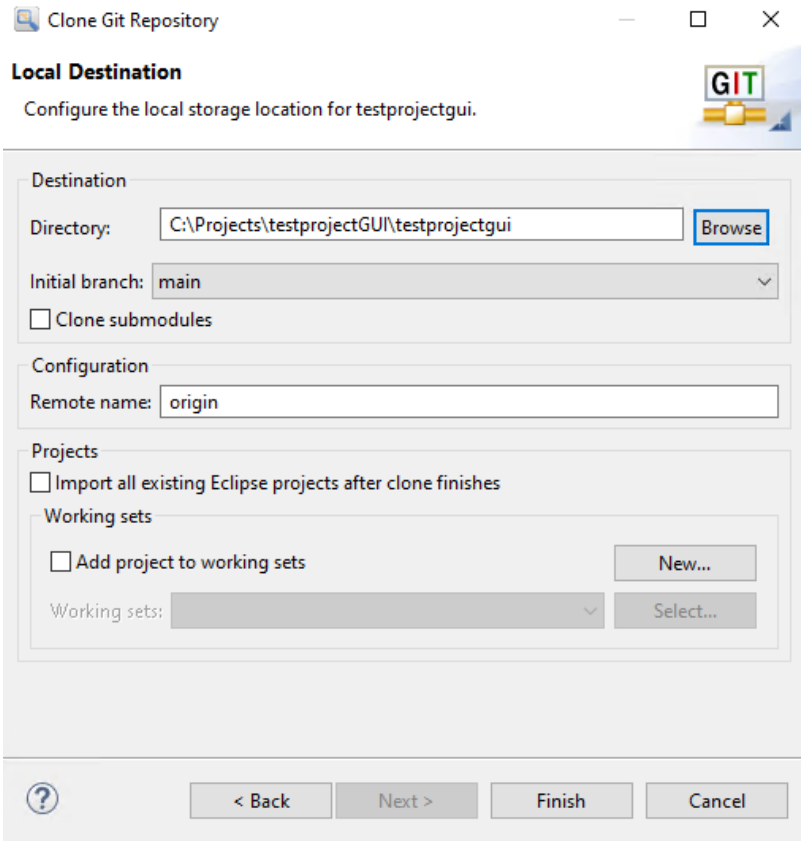
Two popups will appear asking are you sure you want to continue connecting and SSH known hosts does not exist. Click **Yes** for both.



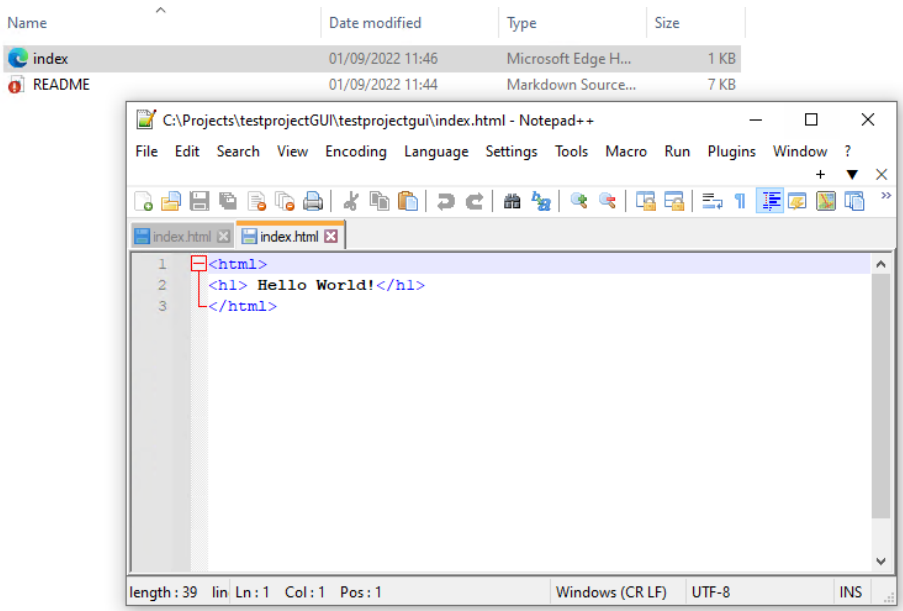
Once connected successfully, you will be able to see your Branch selection, just click **Next**



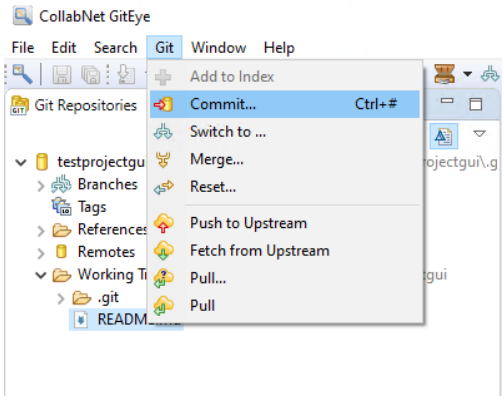
In the Directory textbox, click **browse** and locate to the folder you want the Git project to be stored in then **Finish**.



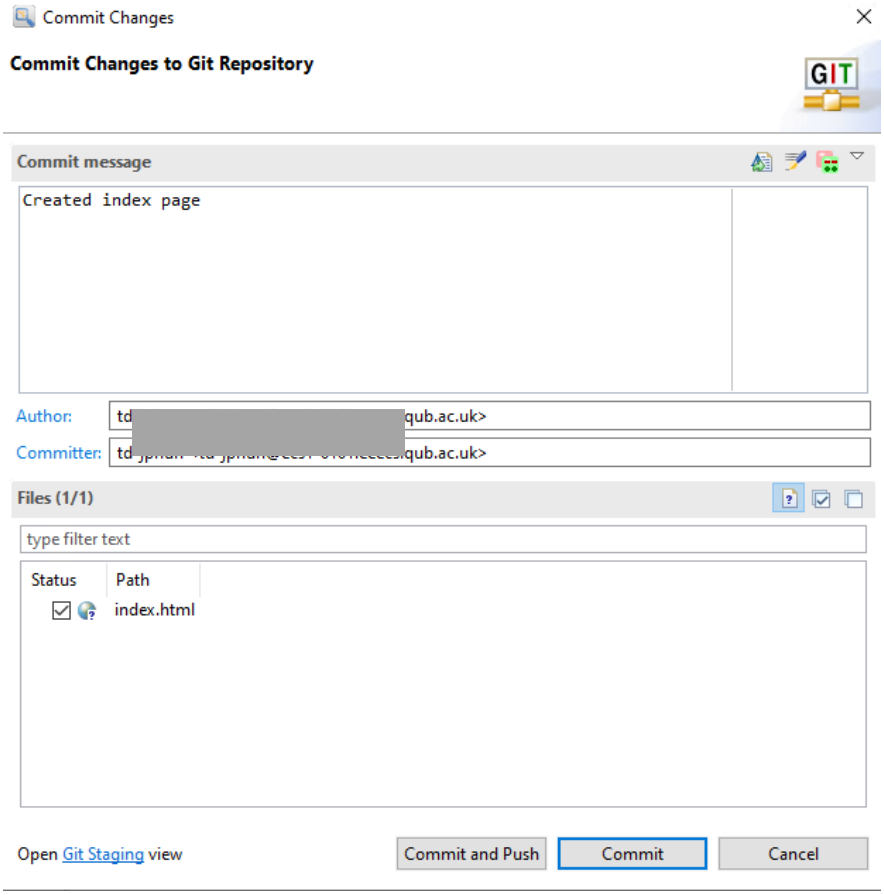
Now that the repository has been cloned, it's time to add some code to the project. Below I have created an HTML file as an example and saved it into the projects folder.



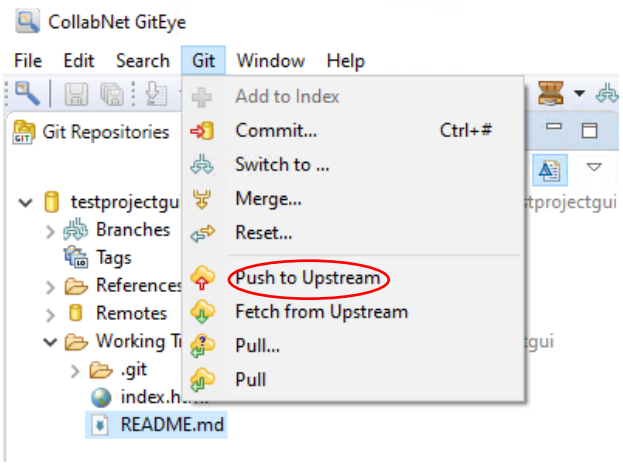
We then need to commit that file or any other files that have been created/modified. Git commit creates a commit which is like a snapshot of your repository. These commits are snapshots of your entire repository at specific times. You should make new commits often, based around logical units of change. Over time, commits should tell a story of the history of your repository and how it came to be the way that it currently is. Go to the **Git** tab and then **Commit**



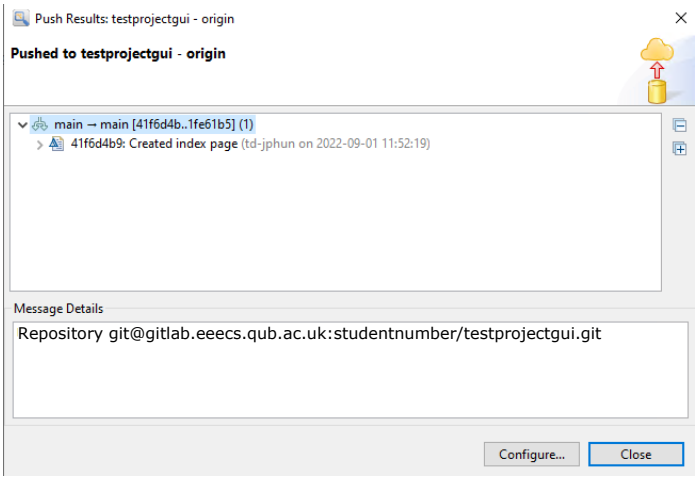
Add a message in the Commit message box to state whether it's a new feature, a bug fix, or anything else. Commits remain in the repository, and they are rarely deleted, so an explanation of what you changed helps other developers working on the project or help you keep track of all the changes. **Select all the files** you want to commit and then click the **Commit** button.

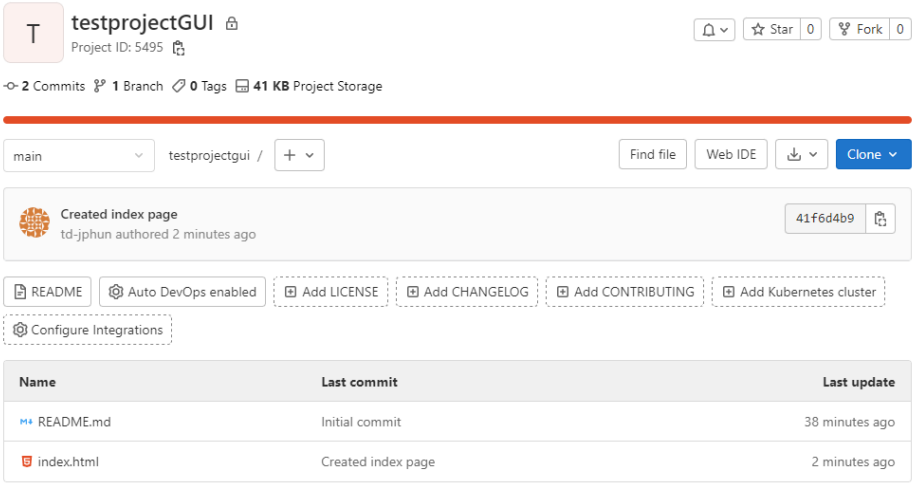


Once that has been committed, we can now push it up to the remote repository. Git push is used to upload local repository content to a remote repository. On the Git tab, click **Push to Upstream**.



You can see the push results and that it has been pushed successfully. If you go onto your EEECS Gitlab projects page, the file/files should have uploaded.





Every time you create any new files or modify files, you will need to go through that process again; commit and push. If you are working on a project with others, you would need to clone that project down. Each time someone makes a change and pushes it to the remote repository, you will have to pull the changes that they made into your local repository to make sure you are working on the latest version of the Git repo. To do this, click **Pull**