Gitlab How-To Guide

GitLab is an open source code repository application that enables lecturers and students to store code remotely. It is an open source alternative to GitHub.

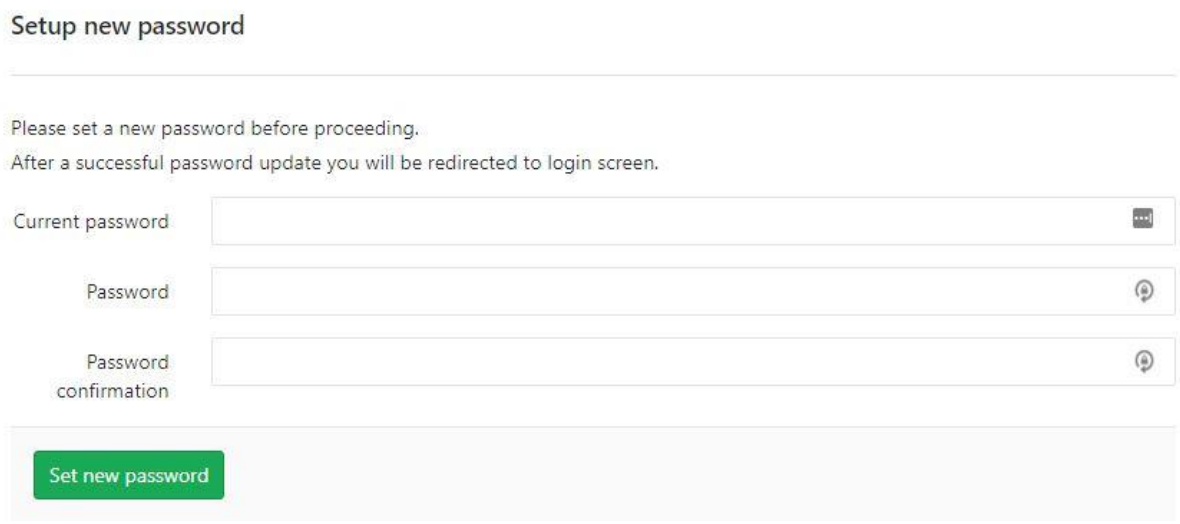
GitLab can be found at https://gitlab.op-bit.nz/ Login with your OP username and password.

Setup

Your account will be created for you. You will receive an email informing you that you have been added to a repository.

Go to GitLab and **login with your OP username and password.**

Click on the icon at the top right of the screen and click 'Settings'. From the bar of settings across the top select 'Password'. You will see a screen like this:



This password is used to send data to your GitLab repositories, **not to login to GitLab itself.**

In 'Current Password', enter the last four digits of your OP student ID number repeated. If your student ID number is 12345678 then your password will be 56785678.

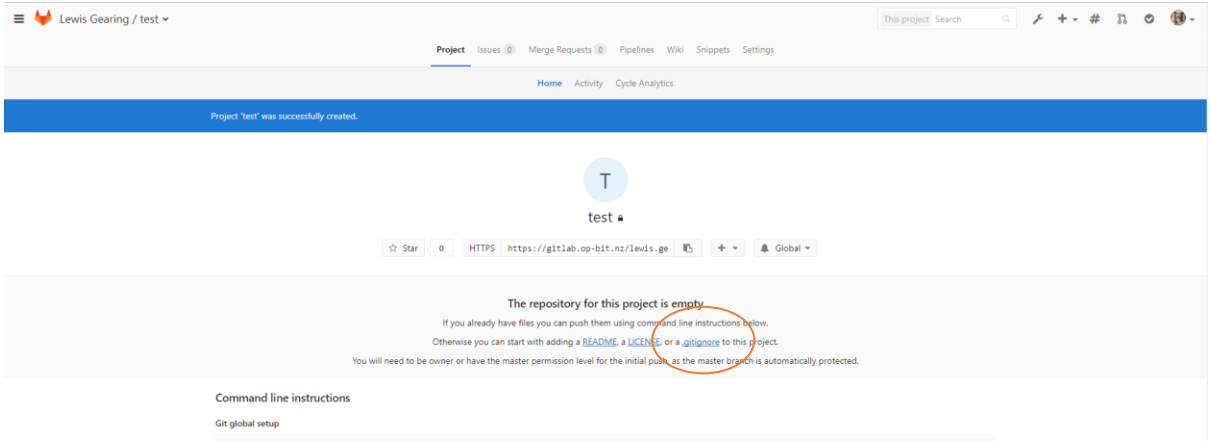
It is a good idea to set your password to the same password you use to login to your OP account.

You will also receive an email telling you that your GitLab password has been successfully changed.

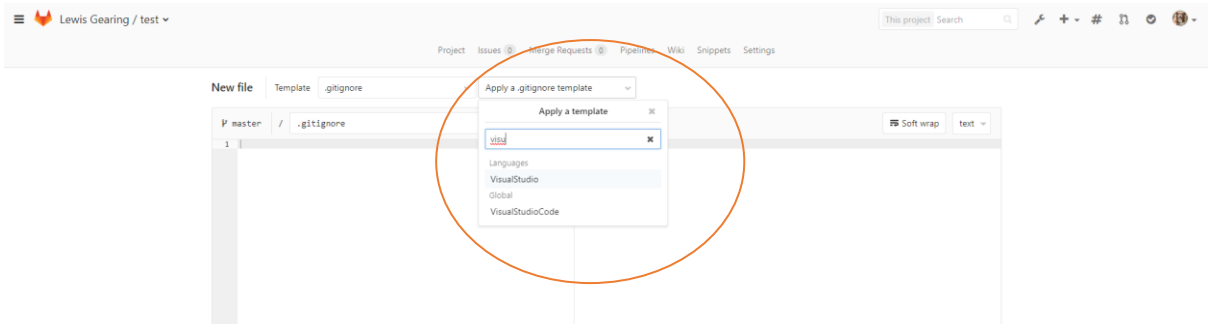
Creating a .gitignore file

It is best to make a .gitignore file before using your repository for the first time.

From the home page of your repository, click the .gitignore button.



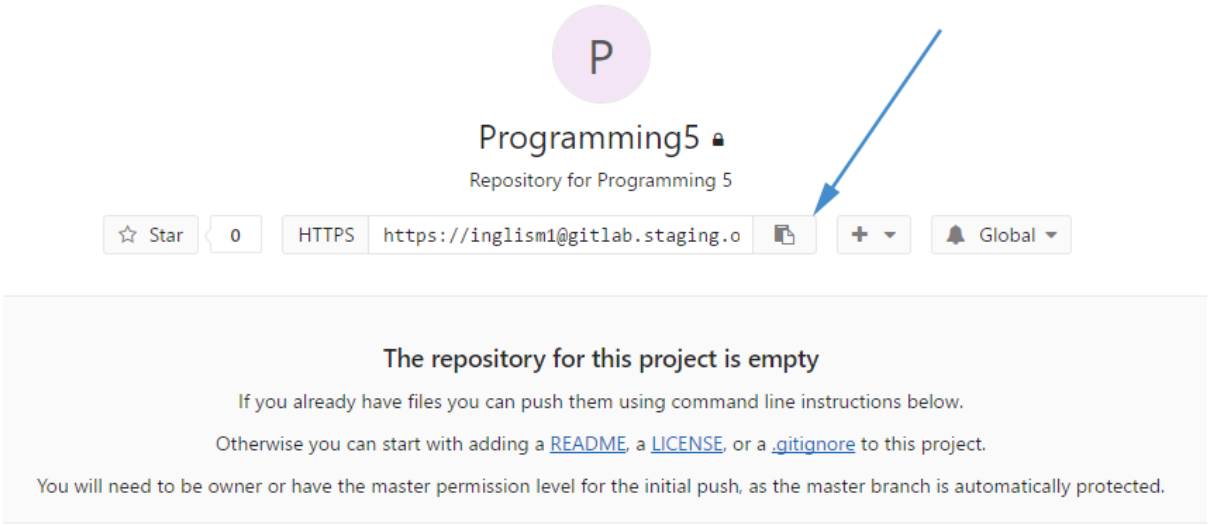
Select Apply a .gitignore template. Select Visual Studio (or Relevant) from the menu.



Click Commit changes.

Cloning your repository to your computer

1. When you access your repository, you will see the following screen. Click the **Copy** button shown below.



2. If you don't have Git installed, get it from https://git-scm.com/ You can also use GitHub's Git Shell if you have GitHub installed.

1. Navigate to the folder where you want to clone your repository. Open a Git shell/Git bash by right clicking in the folder and selecting 'Git CMD' or 'Git Bash' from the menu (or opening GitHub's Git Shell and navigating to the folder).
2. Type the following command:
   `git clone <link from screen above>`
   For example, the link to clone the repository shown above would be:
   `git clone https://inglism1@gitlab.op-bit.nz/inglism1/Programming5.git`
3. Enter your username and **the password you set above** at the login prompt.
4. A folder with the same name as the repository will have been created inside the folder that you have selected. **Make your projects inside this folder**.

Pushing files from your computer to your repository

1. Open a Git shell inside the folder that was created when you cloned your repository.
2. Type the following commands:
   ```
   git add *
   git commit -m "<add a comment to indicate project status>"
   git push
   ```
3. You should get feedback indicating that the push was successful.

Pulling files to your computer from your repository

1. Open a Git shell inside the folder that was created when you cloned your repository.
2. Type `git pull.`

Creating wiki pages

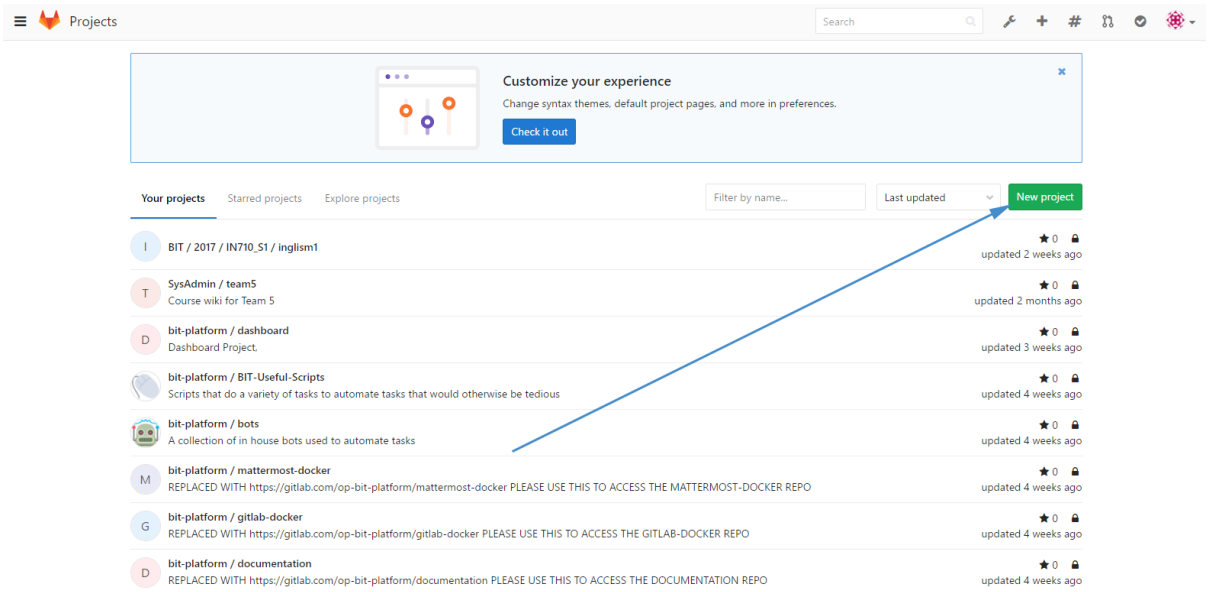
A wiki contains information about your project, organised into various pages. The content is written in a format known as Markdown, where symbols are used to designate text features like bold, italic and bulleted lists. A more comprehensive guide to Markdown can be found here.

1. Click on 'Wiki' in the navigation bar.
2. Enter your content in the Content window, correctly formatted with Markdown
3. Type a commit message for version control.
4. Click 'Create page' and you will be taken to your page.
5. If you want to create another page, click 'New page'.

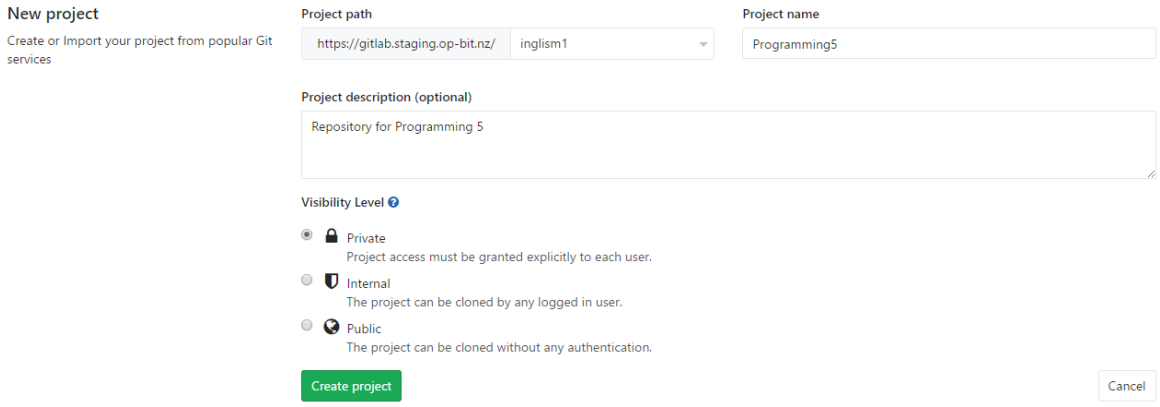
Creating a new repository

Students are permitted to create up to four repositories for their own use. These are “sandbox” repositories and are used for testing purposes.

1. From the home screen (which contains a list of your repositories) click **New Project.**



2. Type a unique project name in the **Project name** field, ensuring that there are no spaces. Give your project a description in the **Project description** field and choose the visibility level (private, internal, public). When you have set all the options, click **Create project**.



3. Clone your repository to your computer as described above.

Trouble with pulling or pushing

If you cannot push to or pull from your repository using a Git command prompt or bash, make sure you are using **the password that you set in GitLab itself**, NOT the password that you use to login to the GitLab website (unless the password you chose is the same).