# C++ Starter (Games Track) - Lesson 1
### Penglais Competitive Programming Club

<u>TL;DR</u>

We will need a platform for creating programs. Most people find VS Code convenient for this purpose, and that is what we use in the club.

We do not do any programming in this lesson: the goal is to become familiar with VS Code and the other tools we need. However, we download and build a preliminary version of our first game as an exercise.

<u>Lesson</u>

The club computers have VS Code set up for you. Please log in (ask if you need help) and launch VS Code. If you are using an Ubuntu machine, you can launch by clicking on the VS Code icon on the dash:
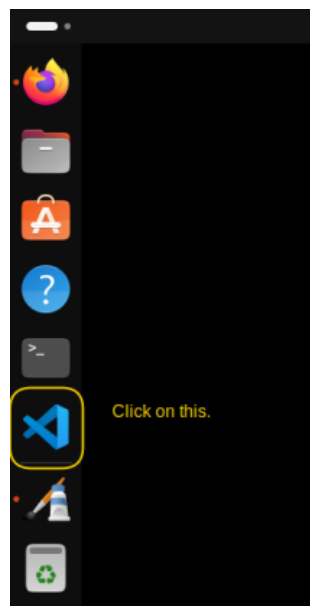


Figure 1 - VS Code Icon

 Once you have launched VS Code, please follow the following procedure:

1. Clone a repository - In these lessons, you will be adding to an existing code base rather than starting from the very beginning. You will often do this in real life, too: many types of programs start from a template of some kind. The code base will be stored in a "repository", and you begin by getting a copy ("cloning") of that code base.
    a. To clone a repository in VS Code, look on the side bar (usually on the left) and click on the Source Control icon.
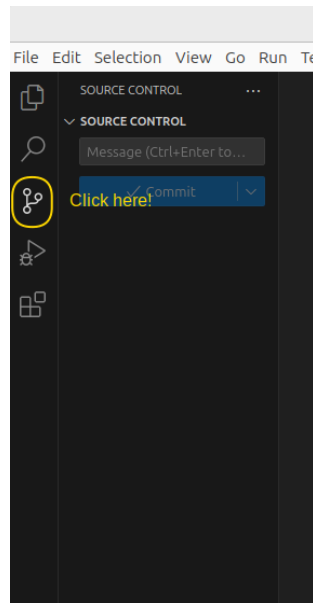
Figure 2 - Source Control

b. Once you are in the Source Control pane, go to the three horizontal dots, click, and select "Clone" from the dropdown menu.
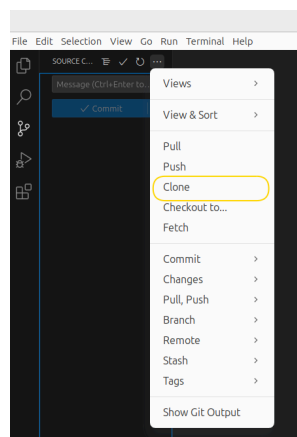

Figure 3 - Clone Command

c. You will be prompted for the repository URL. This will be different for each project. For this project, type

https://github.com/hightechhasbeen/raylib_lesson_one

d. Choose or create an appropriate folder for this project when prompted.
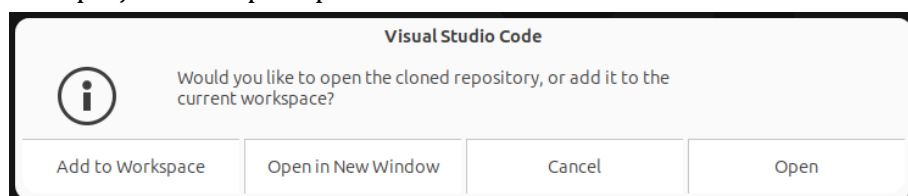e. Open the project when prompted.


Figure 4 - Prompt to Open the Project

2. Look at the code. Later on, we'll be adding to the code, but for now just take a look.
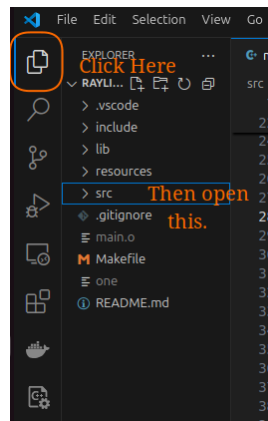   a. Open the project explorer and then open the "src" (source) directory.



Figure 5 - Project Explorer

   b. Open the main.cpp file and take a look around. You will add to this file to build the game.
3. Practise building and running the program.
   a. To build the program, hit CTRL-SHIFT-B.
   b. To run the program, hit CTRL-F5. (If that is not available on your laptop, choose RUN > Run Without Debugging from the menu bar.)

The build process is somewhat fragile because VS Code can be configured in many different ways. If you accidentally try to build using a different command, you may change how VS Code tries to run tasks. If this happens, do not worry. It can be fixed (but it is a bit faffy to do).

Recap

We have launched VS Code and used it to clone a repository. We then used it to build and run an application.