

## Install Xcode

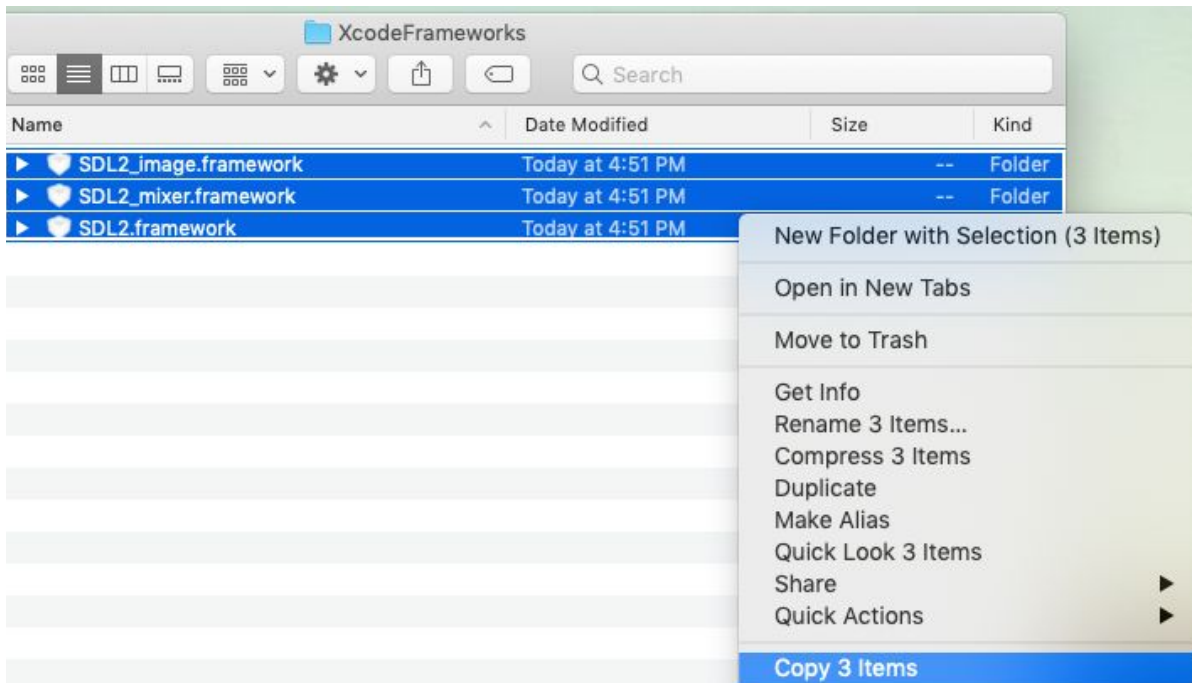
Open “App Store” from the Applications Folder

Install Xcode

## Install Libraries

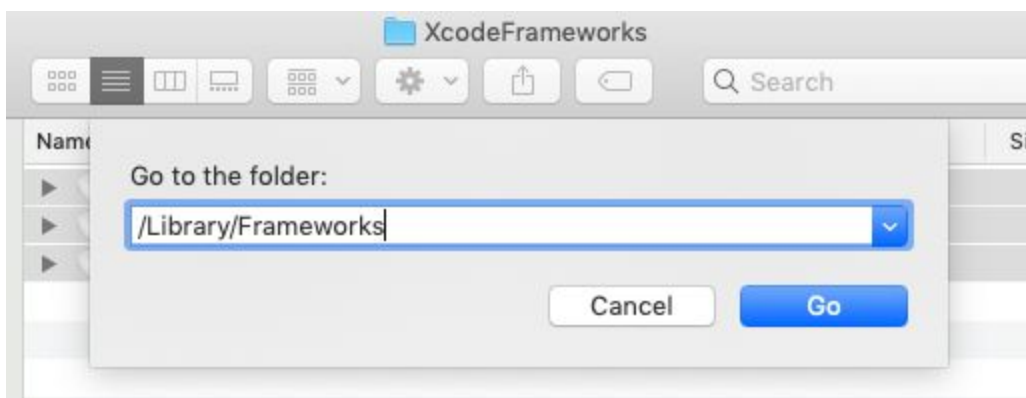
Find the **XcodeFrameworks** folder in the Libraries folder (downloaded from github).

Go inside the folder, select the 3 items, Right-Click (or control-click) then select: Copy 3 Items



From the Finder menu (on top) select Go -> Go to Folder

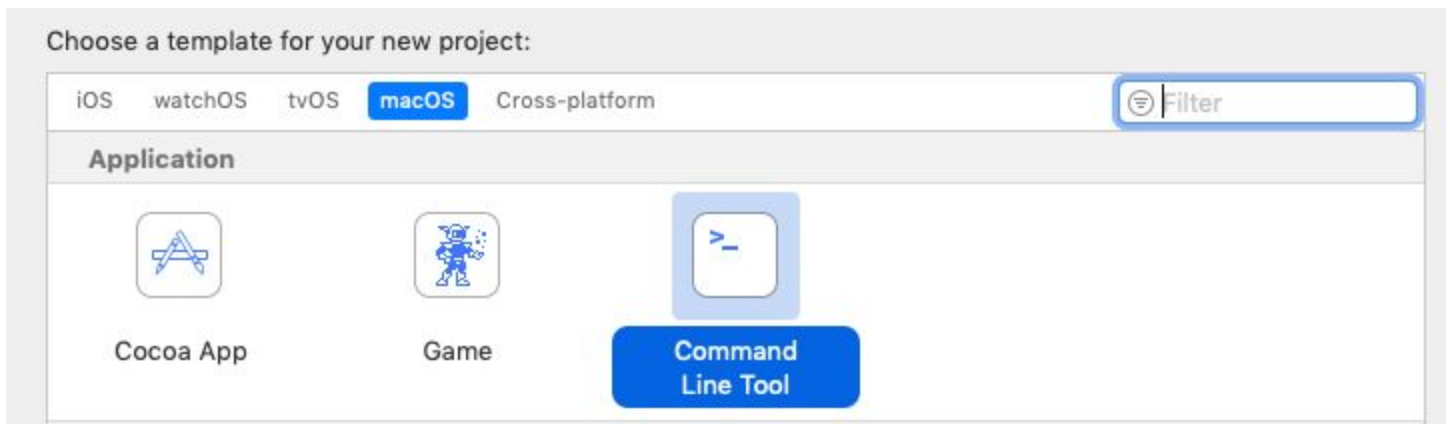
Type in /Library/Frameworks:



Right-Click (or control-click) and select: Paste 3 Items

# Setup Your Project

Open Xcode and create a new project (you may have to go to File->New->Project)  
Select **macOS** and a **Command Line Tool**



For Product Name, enter: **SDLSimple**

Organization Identifier, enter "com.your\_nyu\_id", for instance, mine is: **com.ctg303**

Language: **C++**

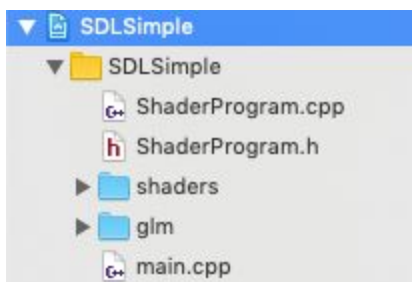
Hit Next and select where you want to save it.

Drag the following from the Libraries folder in the GitHub Repository into the SDLSimple folder.

Make sure **Copy Items if Needed is checked!**

- glm (folder)
- ShaderProgram.cpp
- ShaderProgram.h
- shaders (folder)

The end result should look like this:



## Configure Build Settings

Click on your project (**SDLSimple**) on the top left, then click on the project under **Targets**.

Select **Build Settings** (it's in the top-middle), then click **All**

Scroll down to "Search Paths"

Double click on Header Search Paths.

Click + and enter: /Library/Frameworks/SDL2\_image.framework/Versions/A/Headers

Click + and enter: /Library/Frameworks/SDL2.framework/Versions/A/Headers

Select **Build Phases** (it's next to Build Settings)

Under **Link Binary With Libraries...**

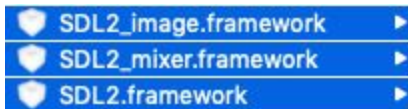
Click + search for **opengl** and select OpenGL.framework then [Add]

Click + search for **cocoa** and select Cocoa.framework then [Add]

Click + Click "Add Other..."

Hit Command-Shift-G then type in /Library/Frameworks

Select all of the SDL Libraries:



Under **Copy Files ...**

Set Destination to **Executables**

Make sure subpath is **blank**. Remove anything that is there.

Drag the shaders folder from the left side into the add your files here area.

## Let's Code!

Open your **main.cpp**. In the GitHub repository, there is code to test your environment located inside Examples/Minimal

**Do not copy and paste! You will learn more typing it out.** The program should open up a window centered on the screen. It will stay open until you close the window.

After the code successfully runs, you can modify the values in **glClearColor**. The first 3 floats are the red, green and blue values. They can range from 0.0 to 1.0 and will set the background color drawn by **glClear**.