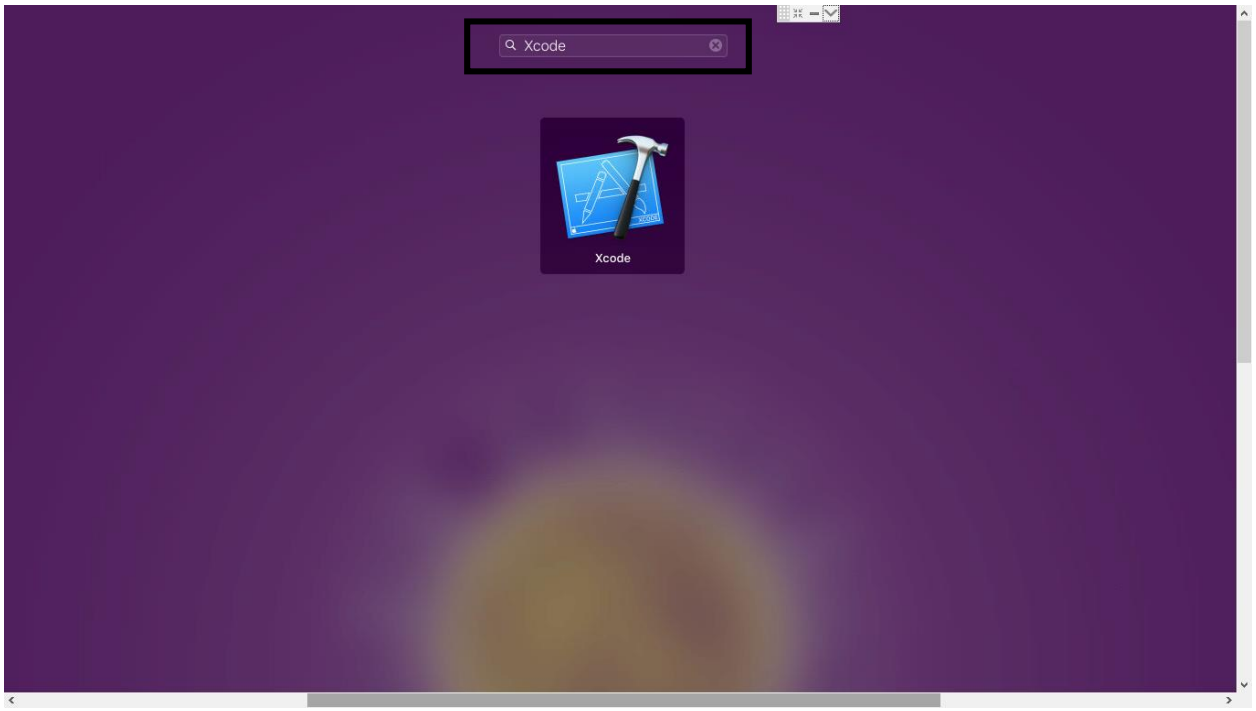
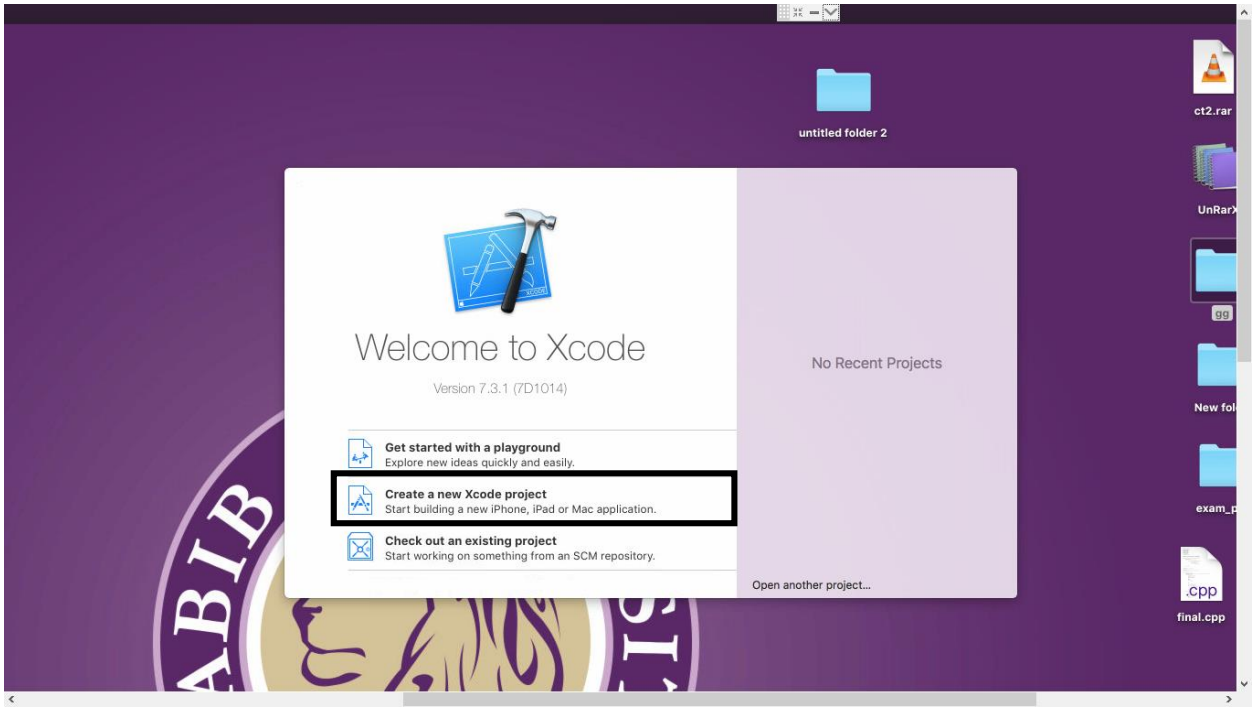
Setting up SDL 2 on XCode

1. Click on **Launchpad**.

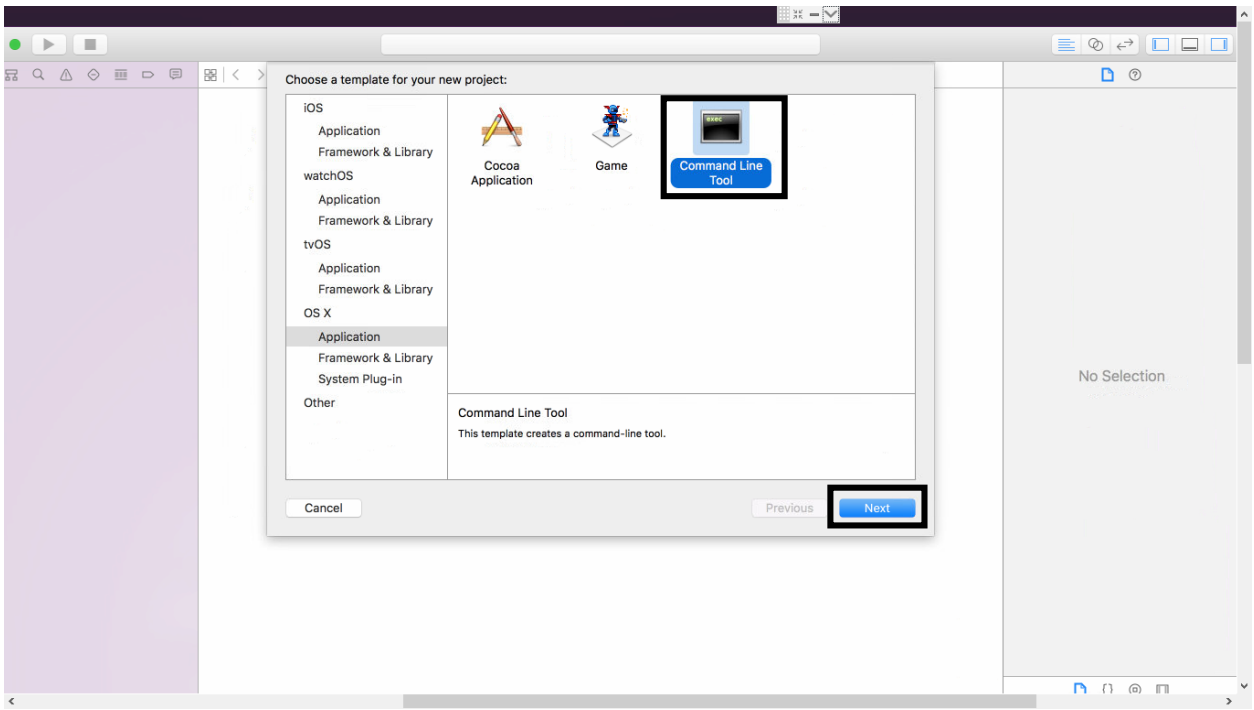
2. Type **Xcode** on Search Bar.
   Click on **Xcode**.



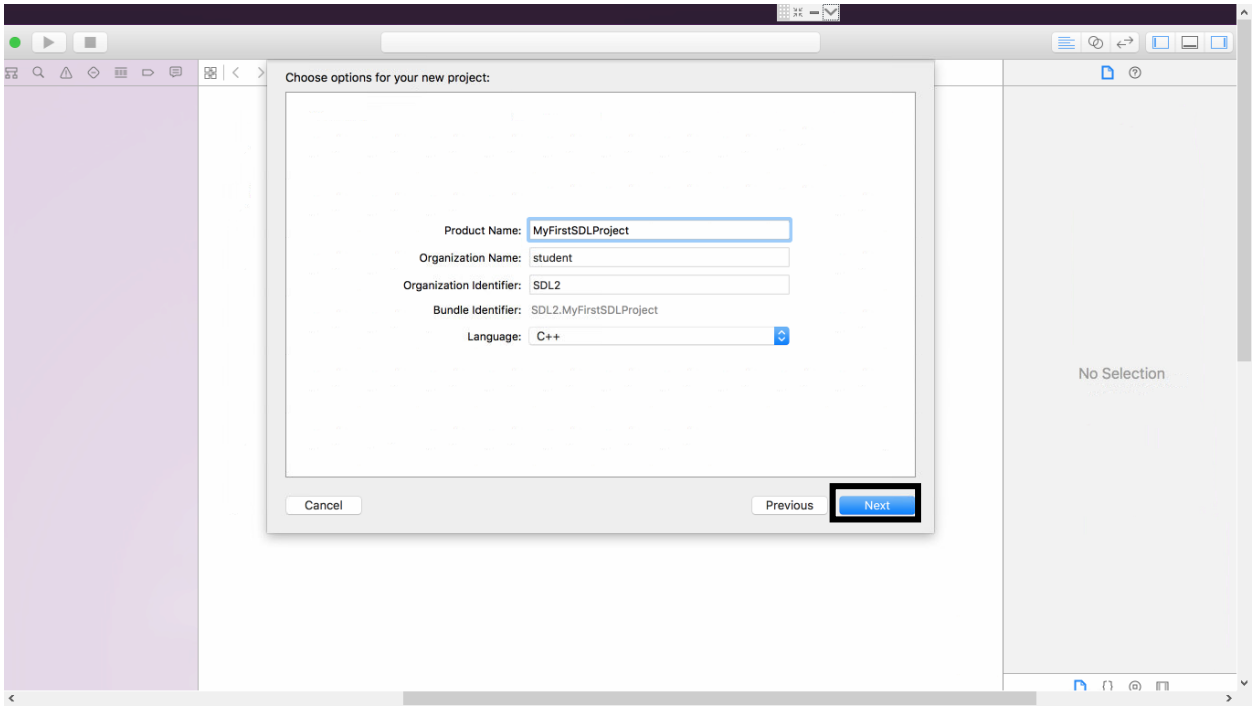
3. Click on **Create a new Xcode project**.



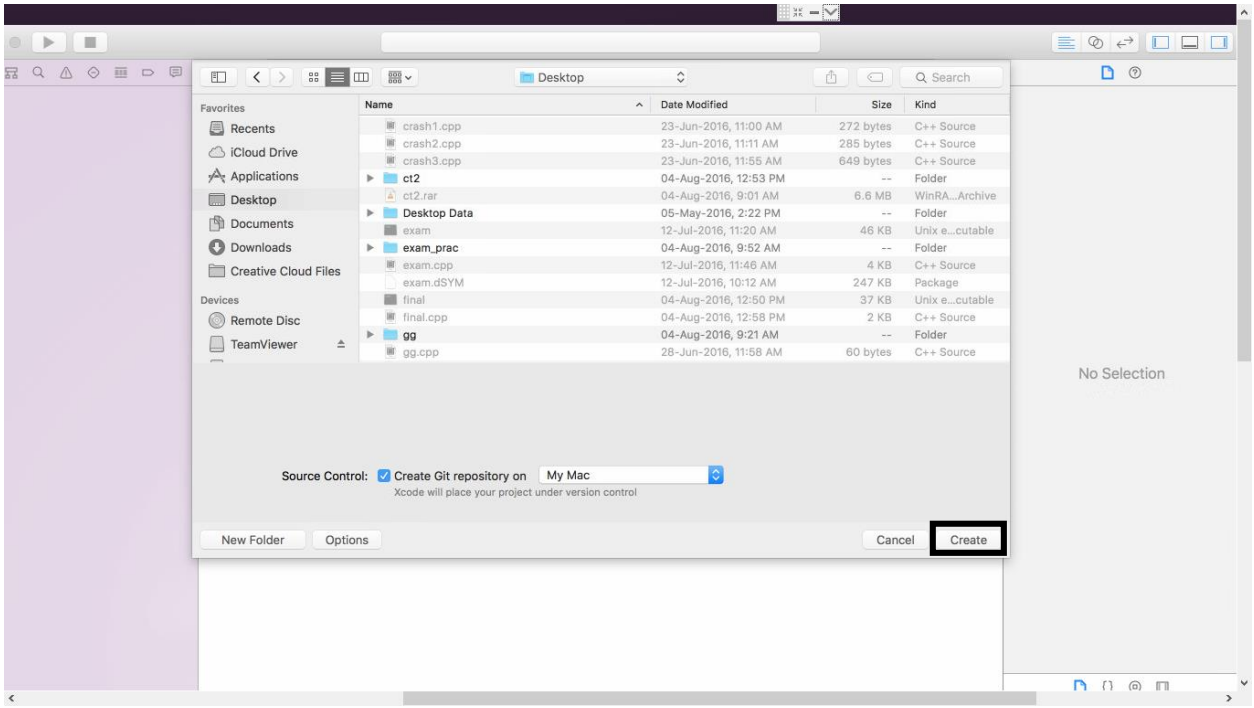
4. Click on **Command Line Tool**.
   Click on **Next**.



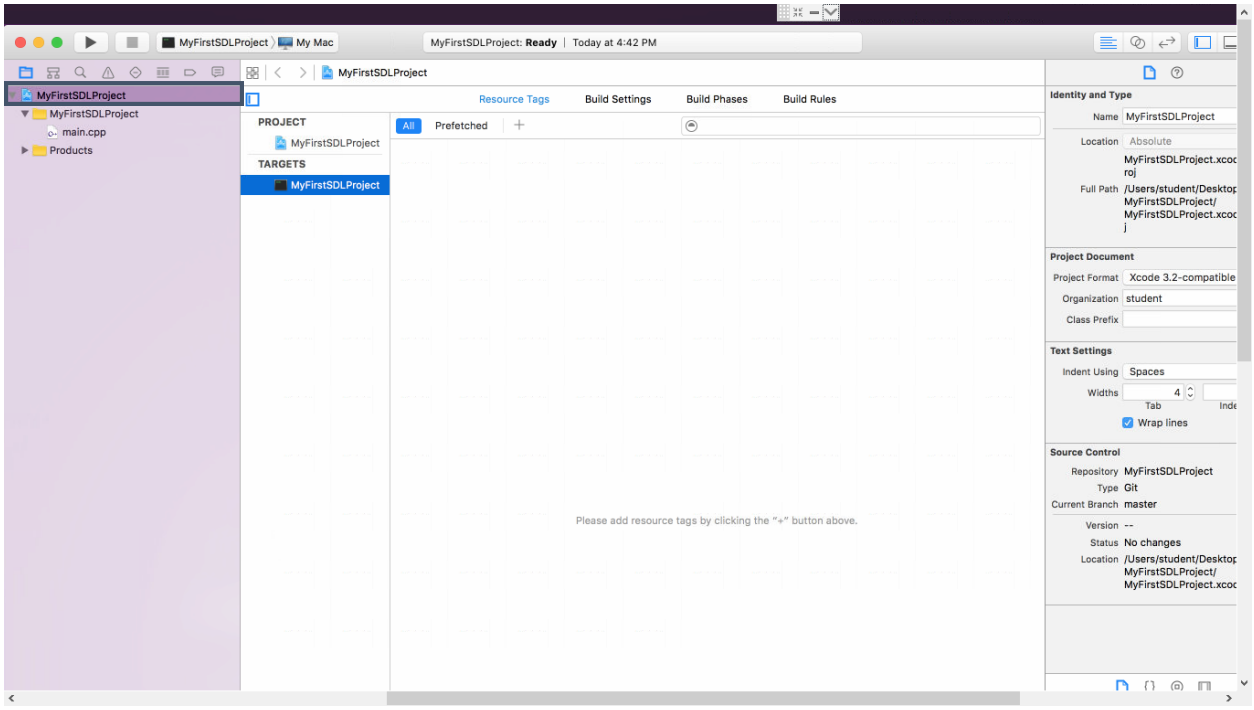
5. Type Product Name – **MyFirstSDLProject** (It can be any name. For this tutorial, we are keeping this name). Make sure Language is set to **C++**.
   You can set up this part of the project however you want, but do make sure to set it up as **C++** project.



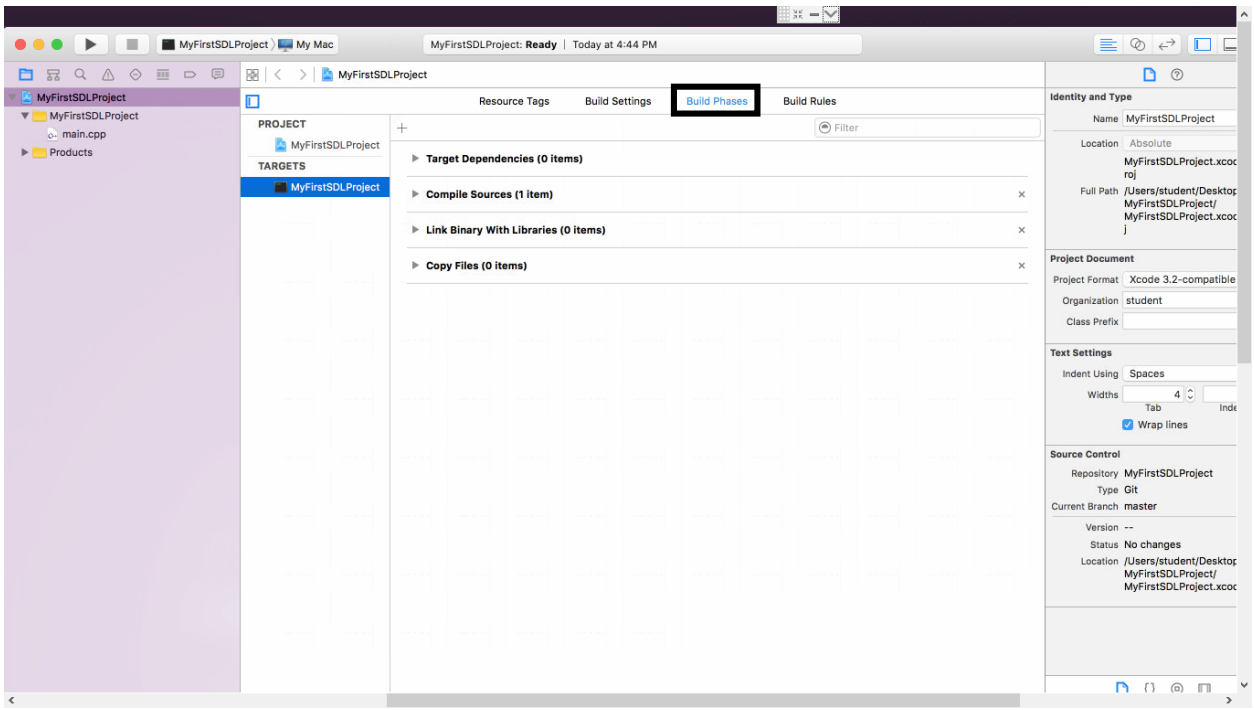
6. Click on **Create**.



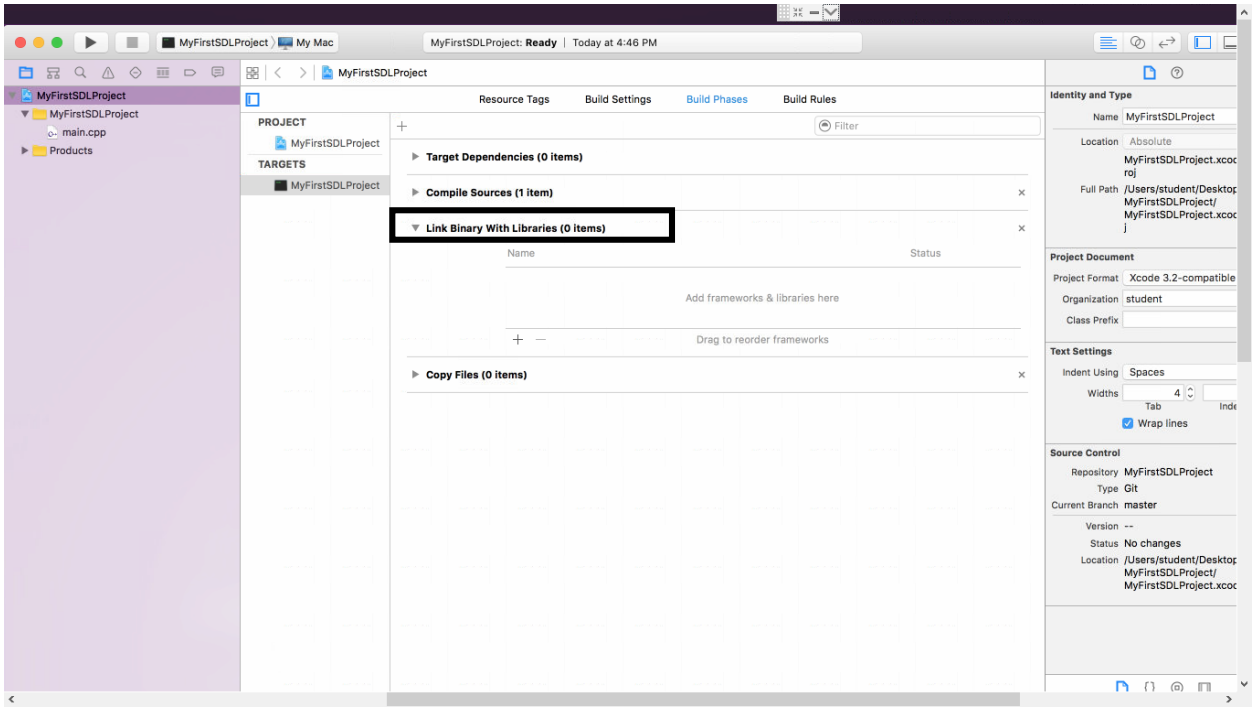
7. Select your SDL Project.



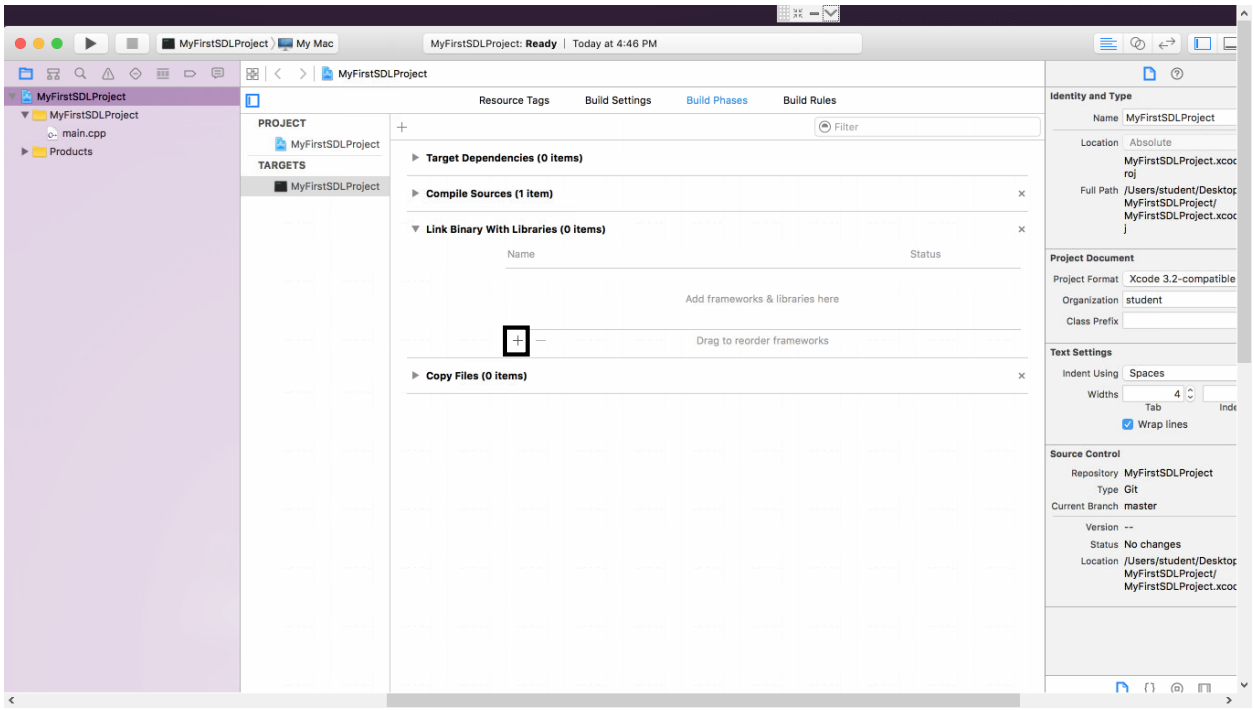
8. Go to the **Build Phases** tab.



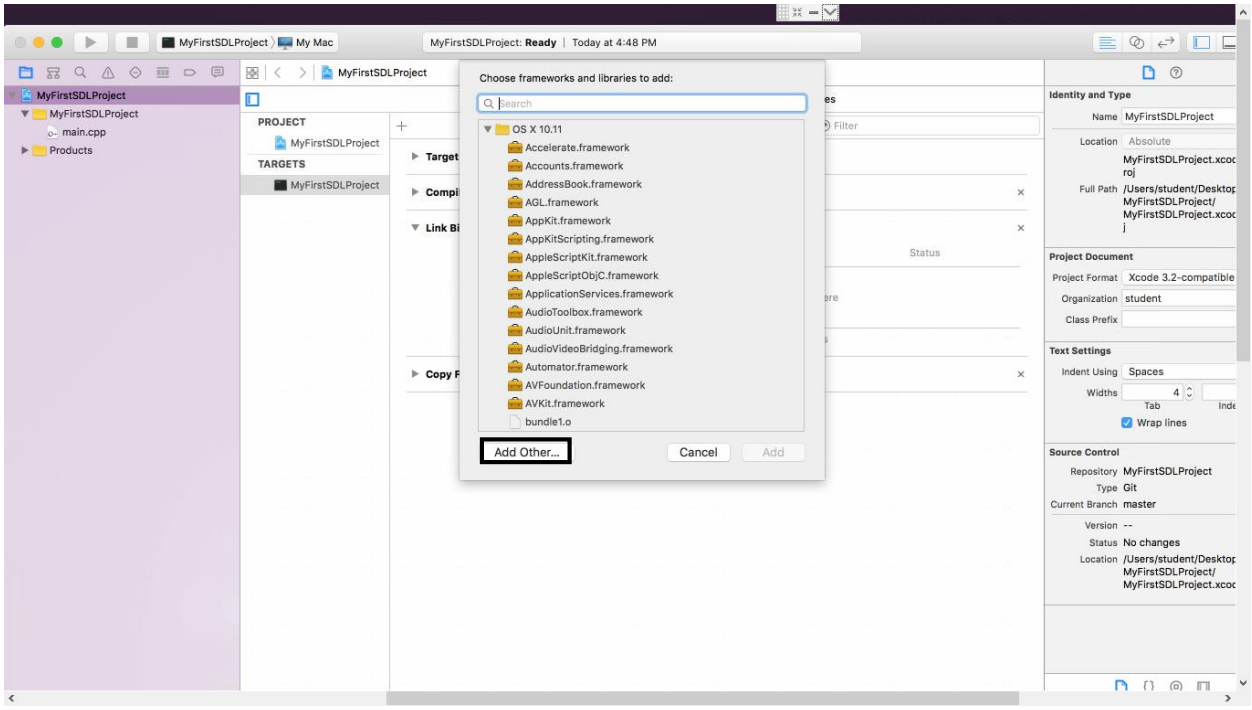
9. Click on **Link Binary With Libraries** Section.



10. Click on **+** Sign.

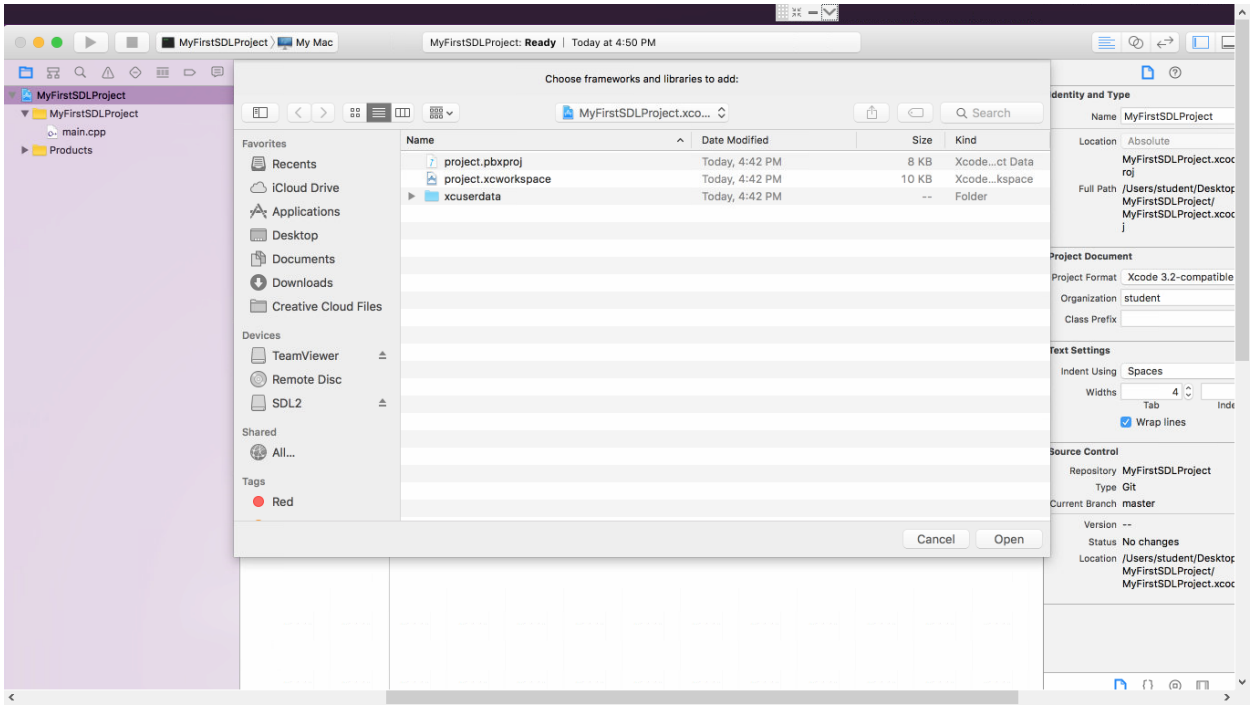


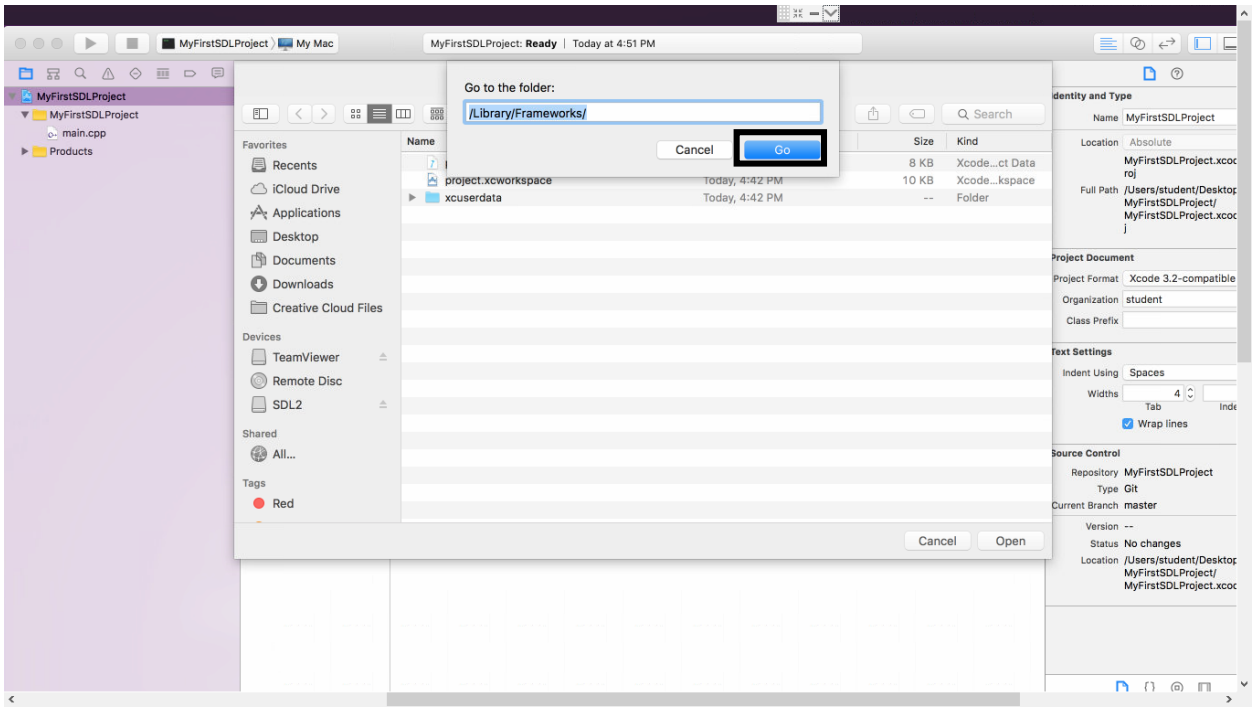
11. Click on **Add Other**.



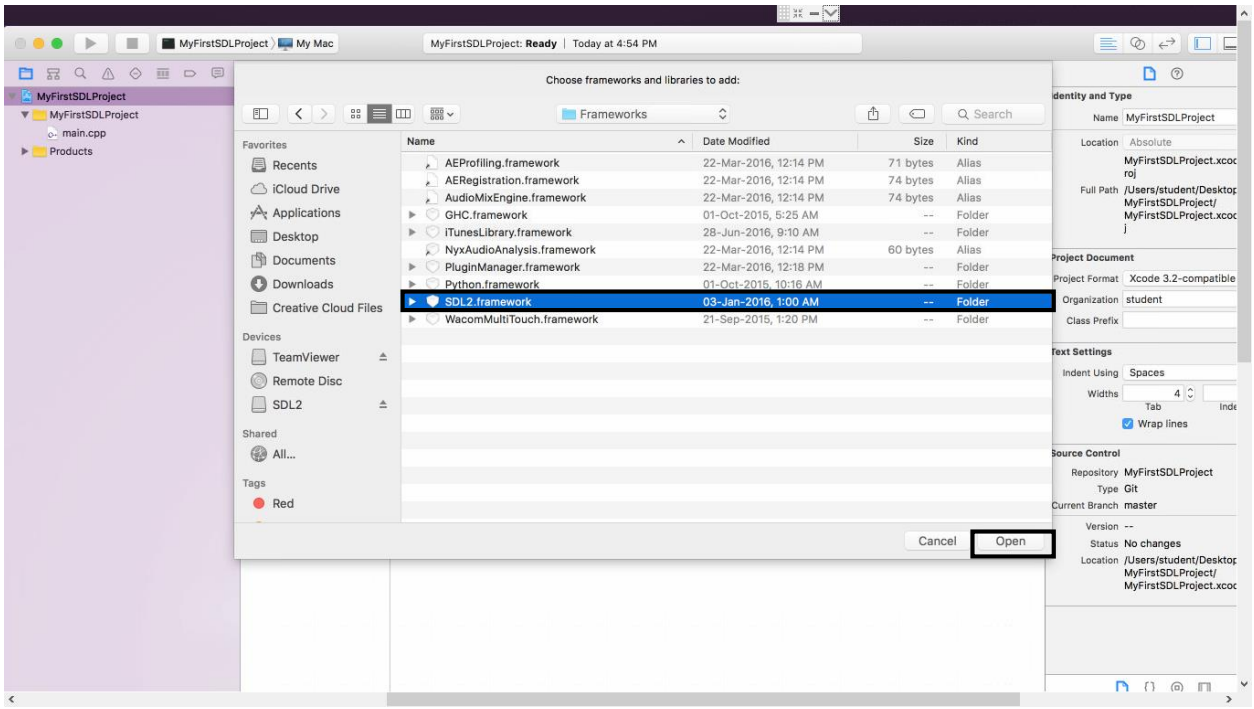
12. Go to ***/Library/Frameworks/*** using ***command+shift+g***.

- Press **command+shift+g**
- Type **/Library/Frameworks**
- Click on **Go**.

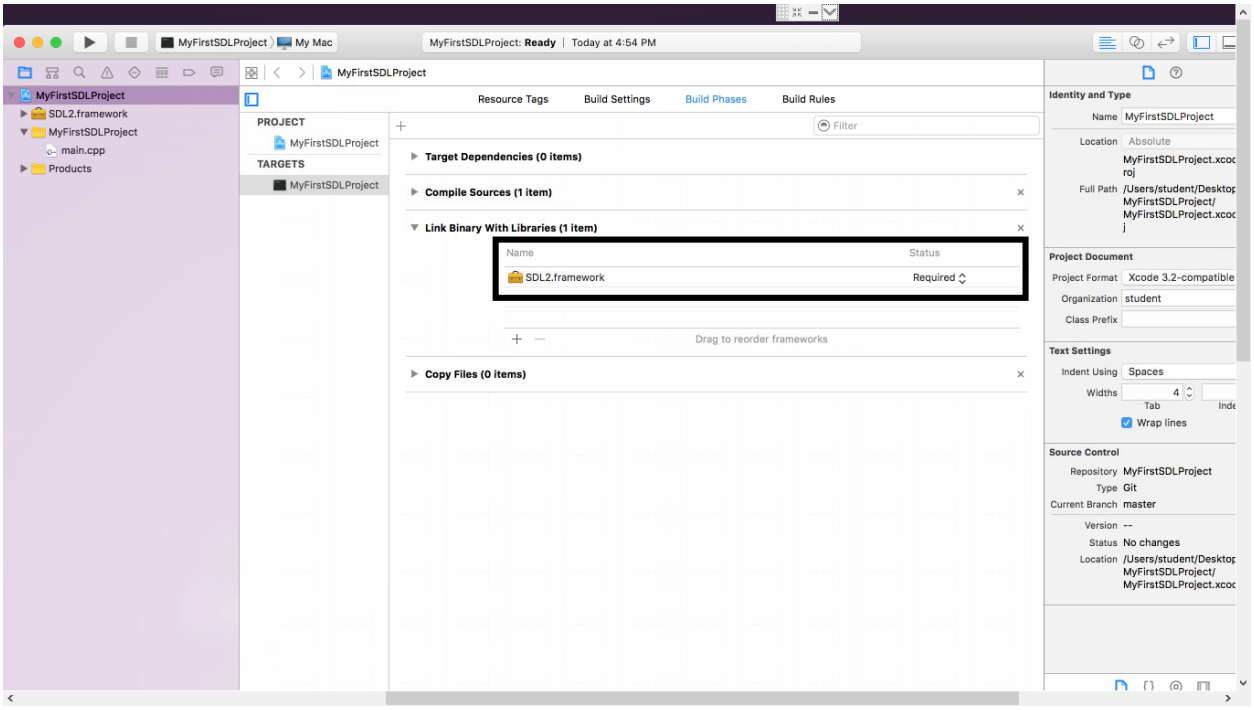




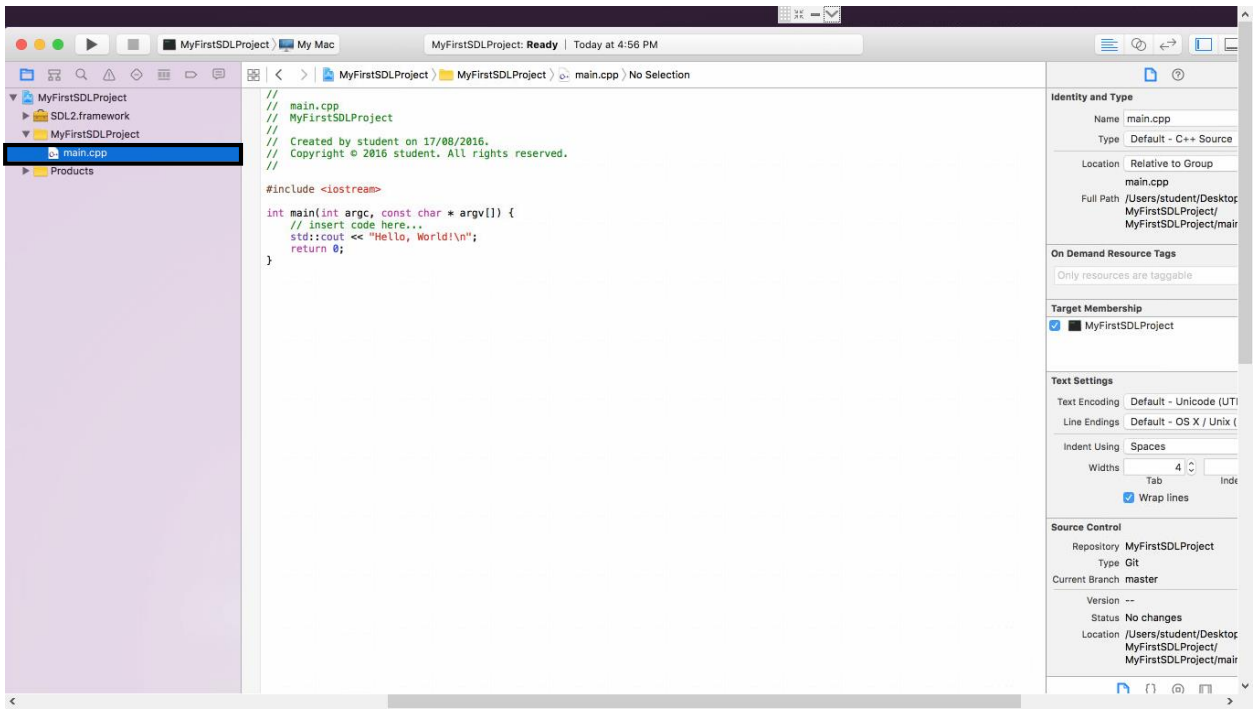
13. Select the **SDL2.Framework** and hit **Open**.



14. SDL2.framework will appear inside **Link Binary With Libraries** Section.

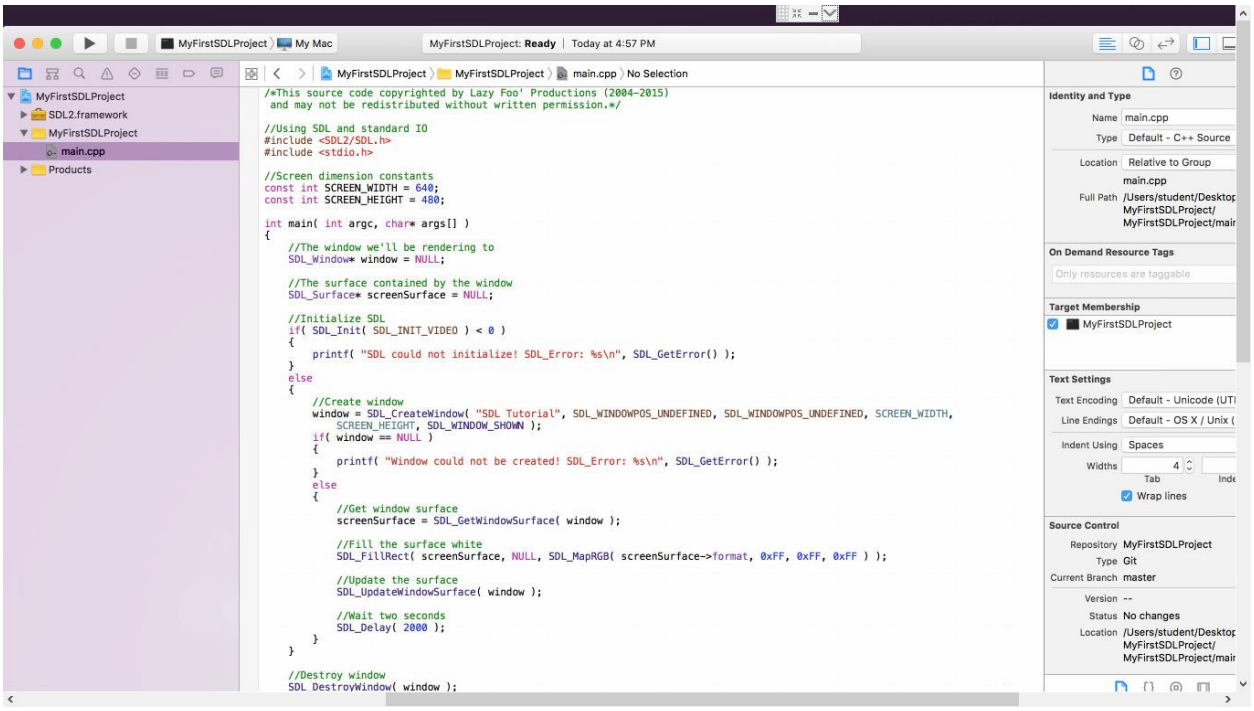


15. Click on **main.cpp**

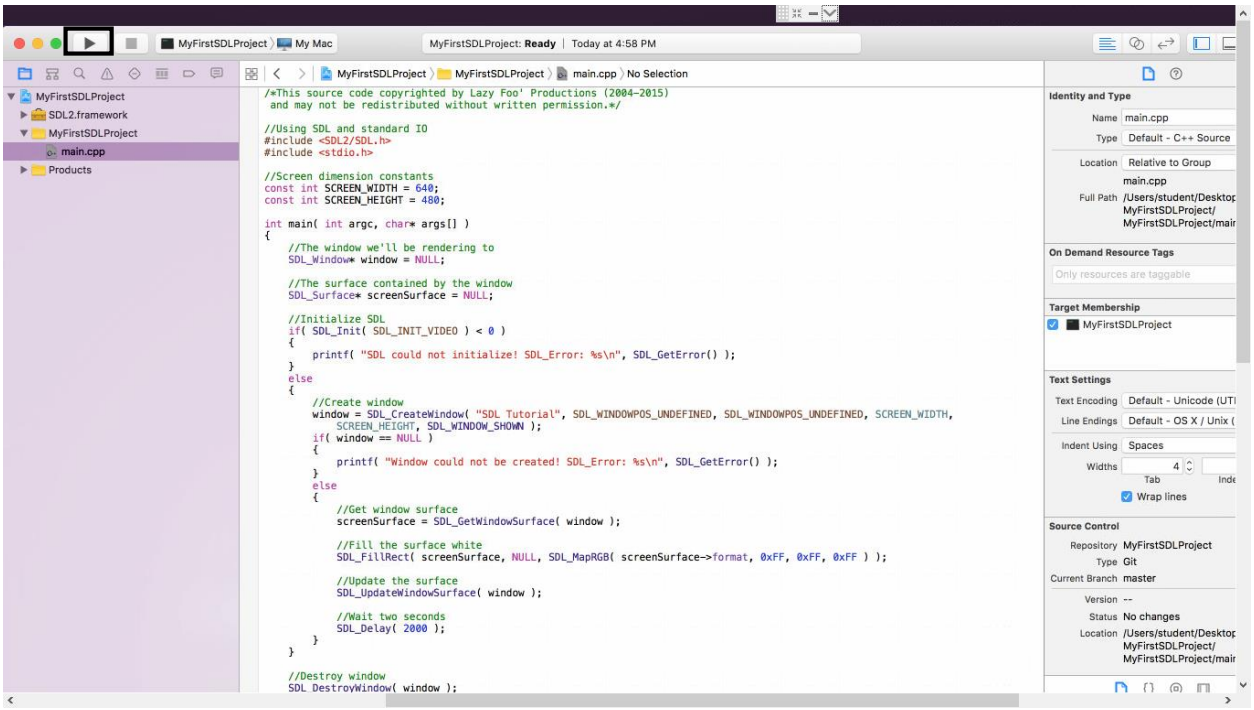


16. Copy the following code on **main.cpp**.

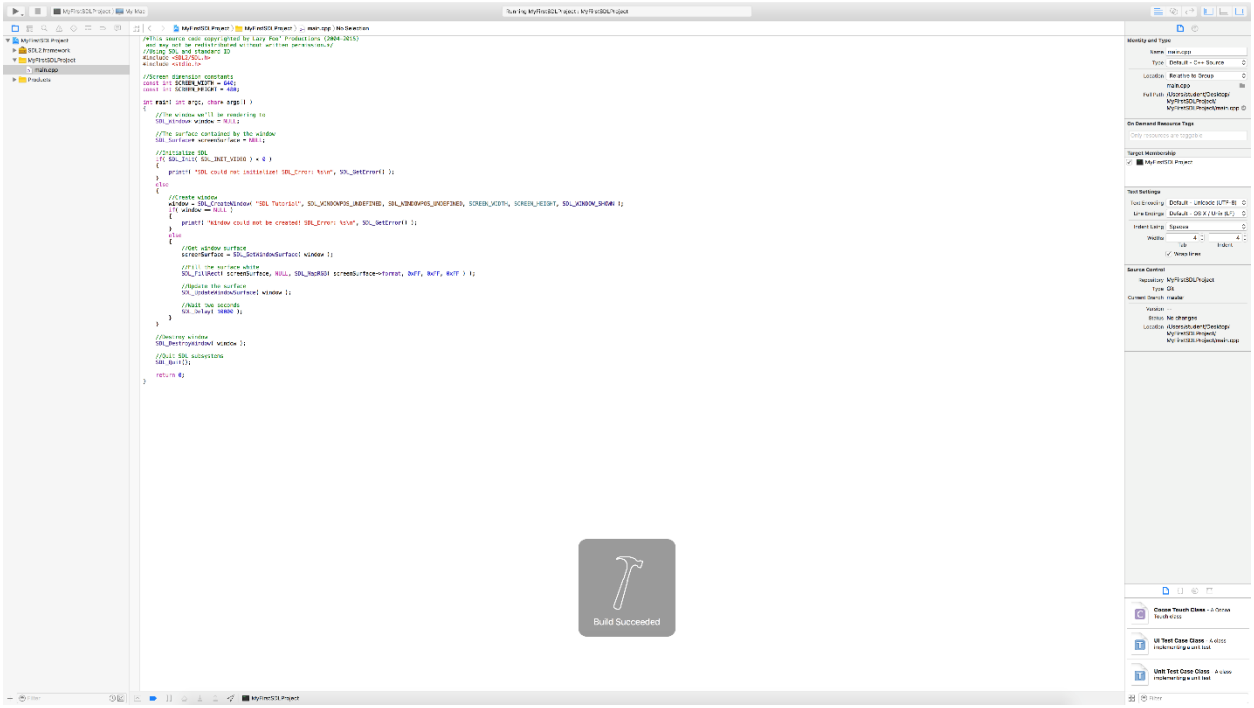
```
#include <SDL2/SDL.h>
#include <stdio.h>

//Screen dimension constants
const int SCREEN_WIDTH = 640;
const int SCREEN_HEIGHT = 480;

int main( int argc, char* args[] )
{
    //The window we'll be rendering to
    SDL_Window* window = NULL;

    //The surface contained by the window
    SDL_Surface* screenSurface = NULL;

    //Initialize SDL
    if( SDL_Init( SDL_INIT_VIDEO ) < 0 )
    {
        printf( "SDL could not initialize! SDL_Error: %s\n", SDL_GetError() );
    }
    else
    {
        //Create window
        window = SDL_CreateWindow( "SDL Tutorial", SDL_WINDOWPOS_UNDEFINED,
SDL_WINDOWPOS_UNDEFINED, SCREEN_WIDTH, SCREEN_HEIGHT, SDL_WINDOW_SHOWN );
        if( window == NULL )
        {
            printf( "Window could not be created! SDL_Error: %s\n", SDL_GetError() );
        }
        else
        {
            //Get window surface
            screenSurface = SDL_GetWindowSurface( window );

            //Fill the surface white
            SDL_FillRect( screenSurface, NULL, SDL_MapRGB( screenSurface->format, 0xFF, 0xFF,
0xFF ) );

            //Update the surface
            SDL_UpdateWindowSurface( window );

            //Wait two seconds
            SDL_Delay( 2000 );
        }
    }

    //Destroy window
    SDL_DestroyWindow( window );

    //Quit SDL subsystems
    SDL_Quit();

    return 0;
}
```



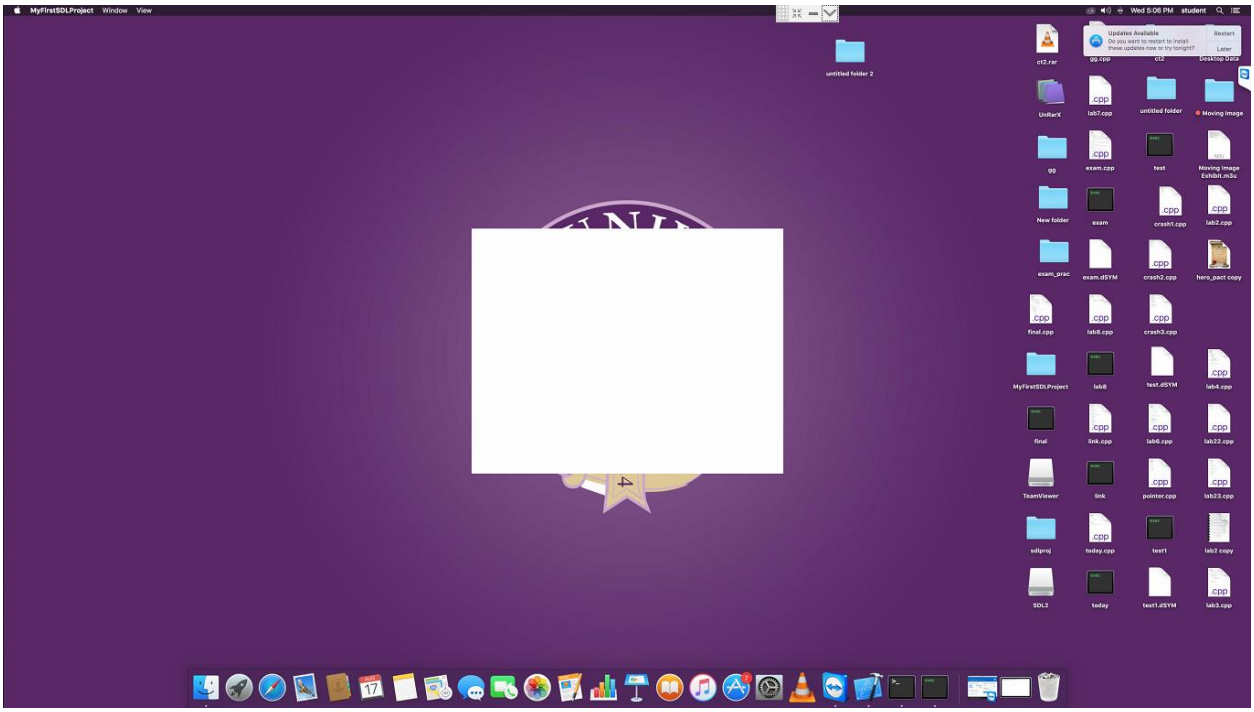
17. Click on **Run** (▶ Sign)



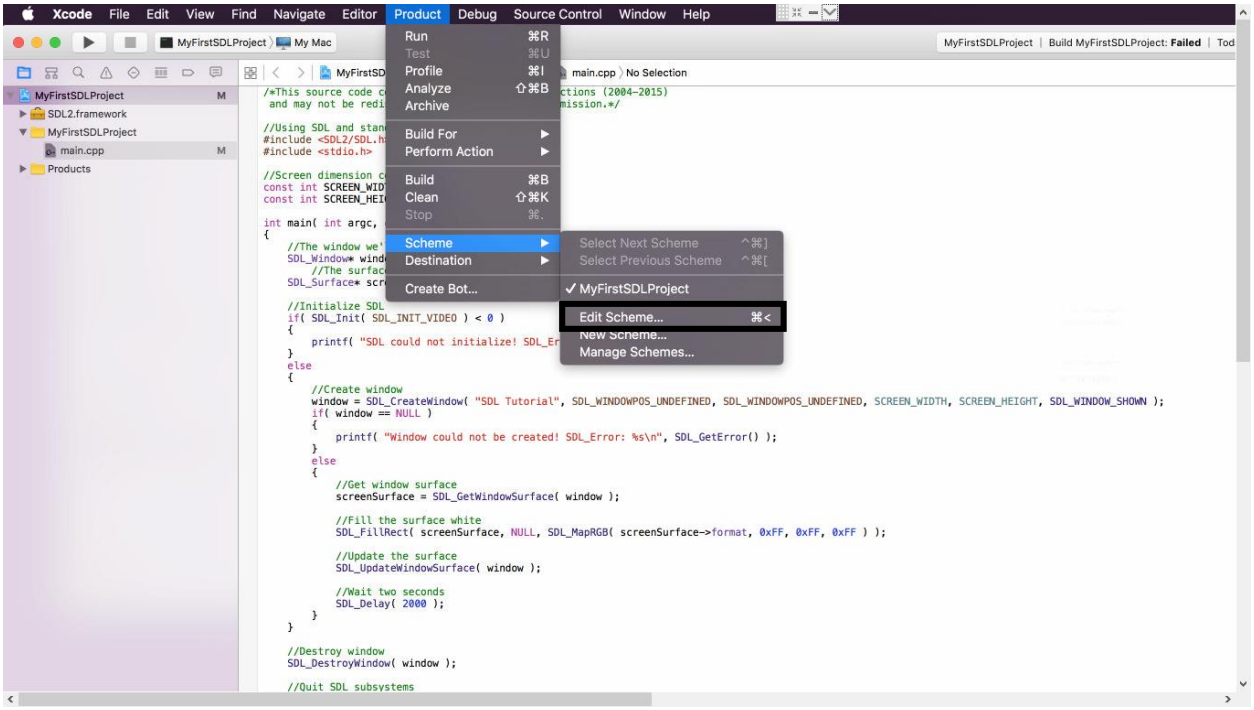
18. Build will be successful.



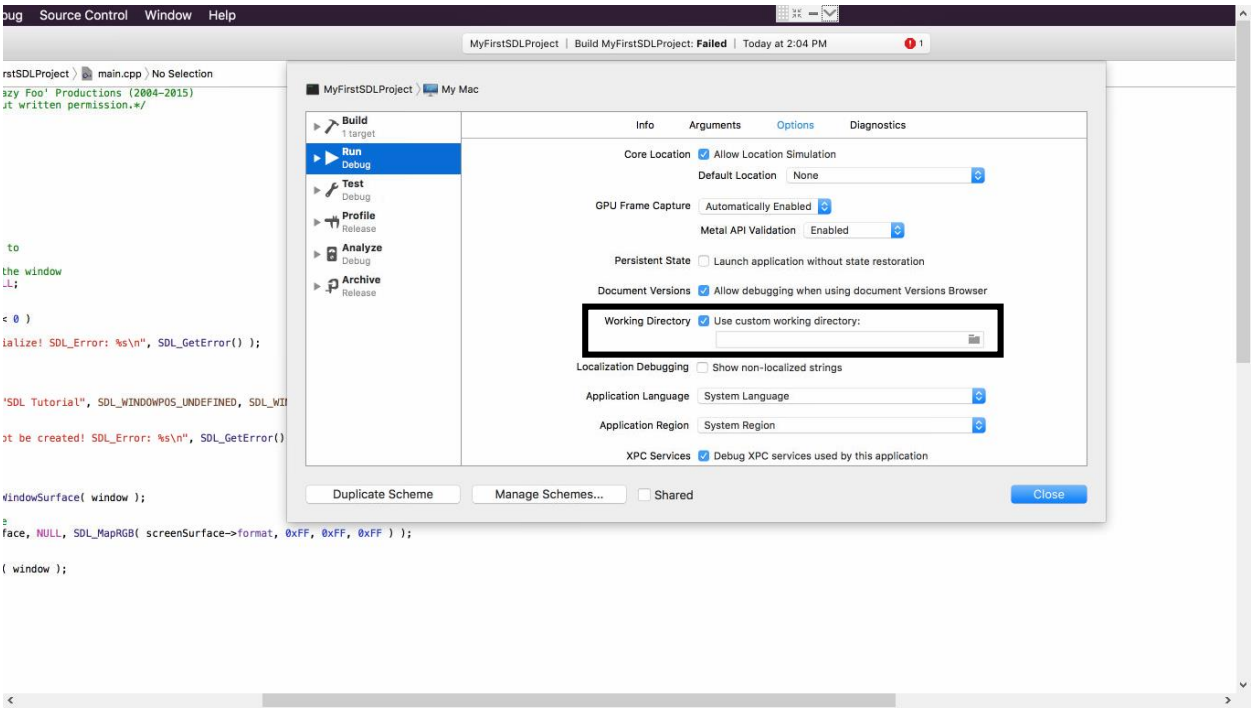
19. Code will build and run and will show a **white window** for 2 seconds and then the program will be terminated.



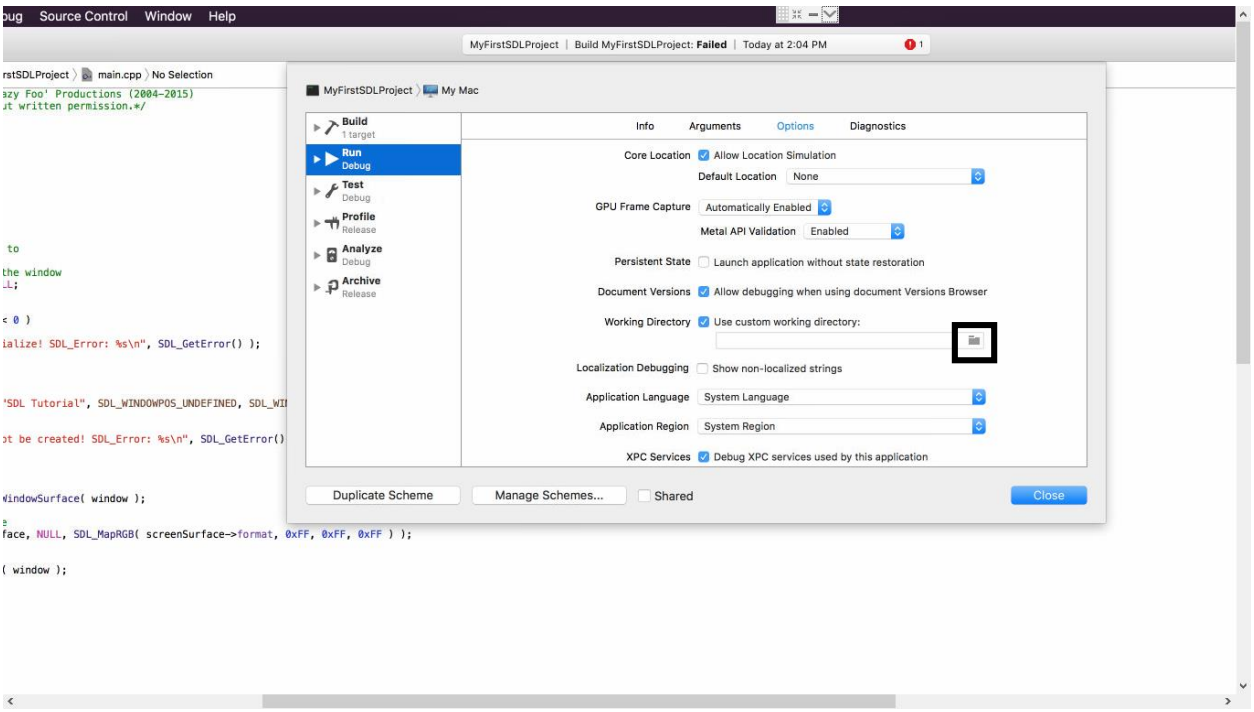
20. In order for your application to be able to find the files you use for the application (for example images, fonts, or sound etc.), you need to set the working directory.
Go to **Product -> Scheme -> Edit Scheme**:

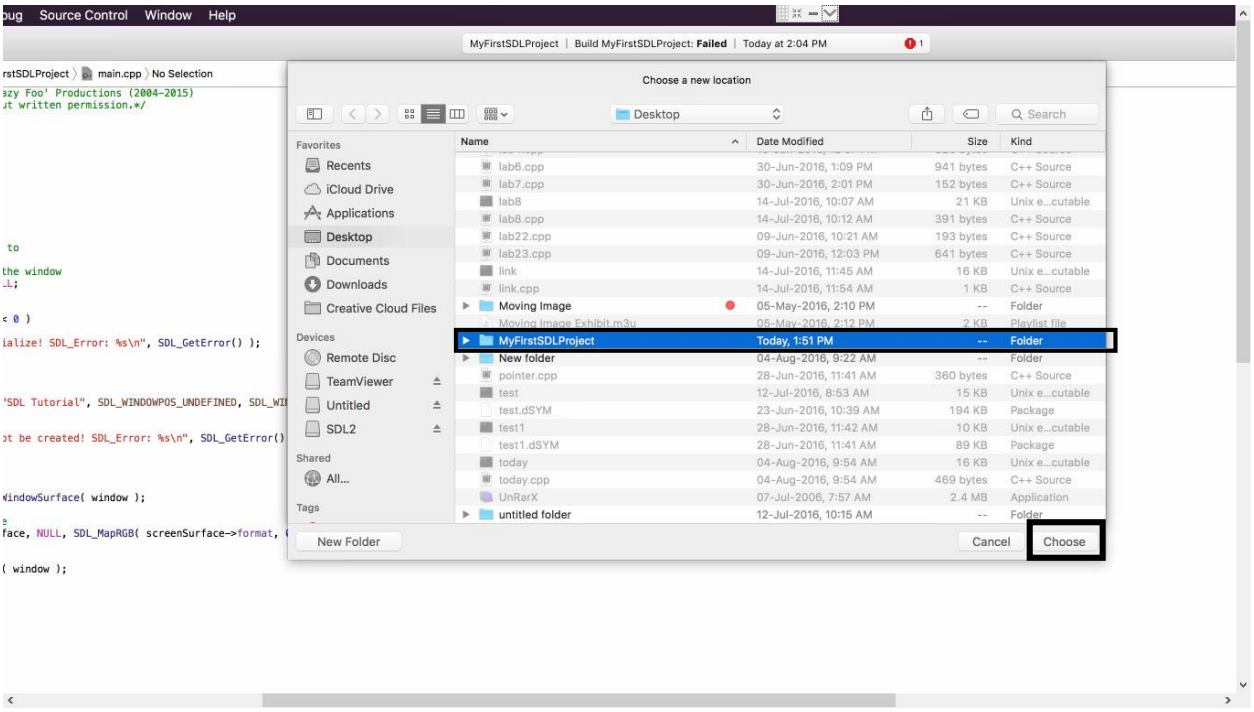


21. Under the Run Section, Check **Use Custom Working Directory**.

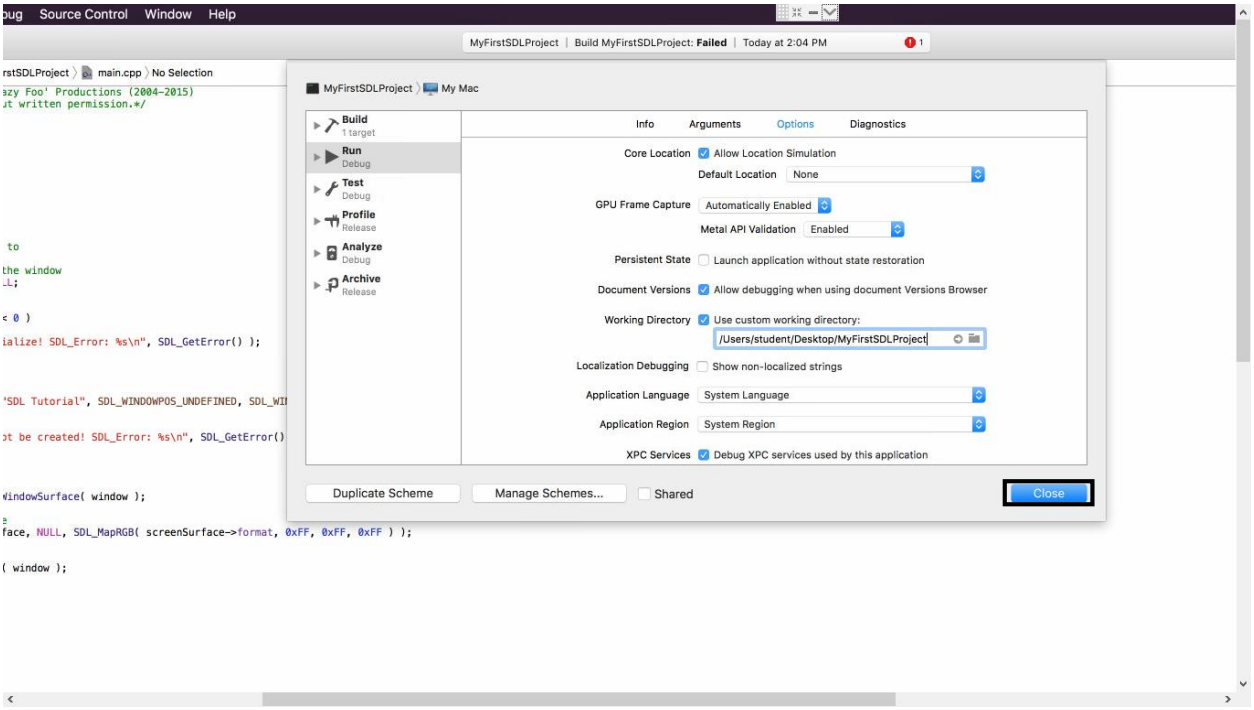


22. Set the working directory by clicking on the folder symbol. The working directory is where the application will think it is operating in. Set it as your Project Directory.
Click on **Choose**.





23. Working Directory has been configured successfully.
Click on **Close**.



If your project can't load files for images, fonts, or sound it's because you did not set up your working directory properly.

Congratulations! You have successfully setup SDL2 on XCode!