

# ■ Step-by-Step: Setup SDL2 with MinGW & VS Code

## ### Download SDL2

- Go to the official SDL2 website and download the SDL2 MinGW development package (ZIP file).
- (Or use your provided drive link, but official is always safer.)

## ### Download Extra Libraries (Optional)

- If you have additional libraries (like SDL\_image, SDL\_mixer, SDL\_ttf, etc.), download them too.
- (Again, you can use your drive link or official sources.)

## ### Unzip the Files

- Extract the SDL2 ZIP file to a safe location, for example:  
C:\Users\USER\Documents\SDL2-devel-2.28.5-mingw\
- Do the same for any extra libraries.

## ### Copy the SDL2 Runtime File

- Inside the extracted SDL2 folder, look for SDL2.dll (it's inside lib or bin depending on the package).
- Copy this file into your MinGW/bin folder, e.g.: C:\MinGW\bin\
- (This step ensures your compiled game can find SDL2 when you run it.)

## ### Add Extra Libraries

- For each extra library (e.g., SDL\_image, SDL\_mixer):
- → Copy their include folder contents → into your SDL2 include folder.
- → Copy their lib folder contents → into your SDL2 lib folder.
- So everything ends up organized under SDL2's include and lib.
- ■■ SDL2.dll file must be in mingw/bin/ folder compiler.

## ### Update VS Code Settings

- Open .vscode/c\_cpp\_properties.json.
- Add your SDL2 include path. Example:
- "includePath": [ "\${workspaceFolder}/\*\*", "C:/Users/USER/Documents/SDL2-devel-2.28.5-mingw/SDL2-2.28.5/i686-w64-mingw32/include/SDL2" ]
- ■■ Reminder: On Windows, always use double backslashes (\\) or forward slashes (/) in paths.

## ### Install VS Code Makefile Tools

- In VS Code, go to Extensions and install: Makefile Tools (ms-vscode.makefile-tools).

### ### Configure Makefile Tools

- In your project, create a Makefile.
- Set up build rules with your MinGW compiler and SDL2 libs.
- Example build command (inside Makefile):
- mygame.exe: main.cpp
- g++ main.cpp -IC:/path/to/SDL2/include -LC:/path/to/SDL2/lib -lmingw32 -lSDL2main -lSDL2 -o mygame.exe

### ### Build the Project

- Open a terminal in your project folder.
- Run: mingw32-make

### ### Run the Game

- After building, run your game with: ./mygame.exe