

How to compile SDL_bgi programs with CodeBlocks

These instructions show how to compile an SDL_bgi program using CodeBlocks; we will use `fern.c`, provided in the `test/` directory.

Let's assume that CodeBlocks is installed in `C:\CodeBlocks`, and that the SDL2 development libraries for MinGW are installed in `C:\SDL2-2.0.16`. If you installed the software in different directories, change the following instructions accordingly.

The procedure was tested with CodeBlocks 20.02 and SDL2-devel-2.0.16-mingw.tar.gz.

Links:

<http://codeblocks.org/>

<https://libsdl.org/download-2.0.php>

Installing SDL_bgi

- copy `bin/CodeBlocks/SDL_bgi.dll` to
`C:\CodeBlocks\MinGW\bin`
- copy `SDL_bgi.h` to
`C:\SDL2-2.0.16\x86_64-w64-mingw32\include\SDL2`
- copy `graphics.h` to
`C:\SDL2-2.0.16\x86_64-w64-mingw32\include`

How to compile

- start CodeBlocks and click on **Create a new project**
- click on **SDL2 project**, then proceed
- in the wizard, provide a project name (`fern`), pick a folder to store the project, then click on **Next>**
- in the next window (SDL2 location), pick `C:\SDL2-2.0.16\x86_64-w64-mingw32`, then click on **Next>**
- in the next window, uncheck **Create "Debug" configuration**, check **Create "Release" configuration**, then click on **Finish**
- in the panel `Projects/Workspace/fern/Sources`, delete `main.cpp` (Remove file from project)
- in the panel `Projects/Workspace/fern`: right click, click on **Add files...**, pick `fern.c`, then click on **Ok**

- from the menu `Project/Build options...` select the `Search directories` tab, click on `Add`, pick the directory `C:\SDL2-2.0.16\x86_64-w64-mingw32\include`, then select `No` when asked to `Keep this as a relative path?`. Click on `Ok`
- from the menu `Project/Build options...` select the `Linker settings` tab, click on `Add`, pick the files `C:\CodeBlocks\MinGW\bin\SDL_bgi.dll` and `C:\SDL2-2.0.16\x86_64-w64-mingw32\bin\SDL2.dll`, then select `No` when asked to `Keep this as a relative path?`. Click on `Ok`
- from the menu `Build`, select `Build`. The executable `fern.exe` will be compiled.
- if you don't need to set environment variables, close the `Global variable editor` window
- run `fern.exe`.

Note 1: if you release your compiled program, you must also provide `SDL2.dll` and `SDL_bgi.dll` in the same directory.

Note 2: if your code uses functions provided by `stdio.h` (e.g. `printf()`, `scanf()`, etc.) you must also run a terminal. From the menu `"Project/Set program's arguments..."`, check the box `Run host in terminal`.