

Final Project: SDL Game

OVERVIEW

The goal of this assignment is to produce a small, but complete, game using SDL and C++. The student is expected to implement a 2D environment for a player-controlled character to explore. The game should have a victory condition (escape the maze, defeat all the enemies, collect all the items, etc.) There should also be at least one interactive element that hinders the player and at least one interactive element that aids the player. Some sort of display of the player's state (i.e. a HUD) should be implemented (for example, displaying hearts for lives or showing the player's inventory on-screen.)

SUBMISSION

Students are expected to submit a functioning Visual Studio 2015 solution that builds a Win32 console application. The program must be written in C/C++. The student will archive their Visual Studio solution into a single zip file for submission. Files are to be submitted via Blackboard before the posted due date. Multiple submissions are allowed and the latest submission will be the one that is graded. Students will also submit a walkthrough of the game.

The project is expected to build as-is and provide the SDL libraries that it needs in order to run. The latest (as of the time of writing) Windows 32-bit releases of SDL2 and SDL2_TTF are attached to this assignment for your convenience.

GRADING

The teacher will evaluate the assignments by building the projects using the provided solutions. Once the program is built, the teacher will play the game using the submitted walkthrough. The teacher will then play the game again, this time attempting to crash / sequence-break the game. The grade for the assignment will be based on the ability of the submitted files to produce the expected output as well as the teacher's critique of the submitted code.

ATTACHED FILES

SDL2-2.0.5.zip - Windows 32-bit libraries and header file for SDL2

SDL2_ttf-2.0.14.zip - Windows 32-bit libraries and header file for SDL2_TTF, a library that adds support for True-type Fonts to SDL2

DungeonGameSample.zip - A compiled sample of the expected output for this assignment

DungeonGame_Barebones.zip - A project with some starter code for the final project