

Final Programming Project
CpSc 4160/6160: Data-Driven 2D Game Development
Computer Science Department
Clemson University
A Playable Game
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Due Date:

To receive credit for this assignment your solution must be a compressed directory submitted, using `handin`, by 8 AM on Wednesday, May 1st, 2019.

Project Specifications:

Your final project must meet the following requirements:

1. Your game must reach a conclusion, which will be different for each of you because your games are different, but there must be some indication that the game (or first level) is over and the player has achieved success or failure. Also, you must provide some direction about how the player can reach a successful or failed conclusion; what do I do to win or lose (most likely in your HUD with F1).
2. Include music and sound effects: (example at `sdl/sound`)
3. A *restart* option after the conclusion (successful or otherwise) (example at `sdl/restart`)
4. Inclusion of a “god” mode option where the player doesn’t die (so I can test your game’s conclusion).
5. A video highlighting the best features of your game. The file name for your video must have your userid as the prefix. For example, `malloy.mp4`, `ghsprin.mp4`, `daander.mp4`, or `bradlen.mp4`
6. Your game must be robust (crash rarely) and be relatively free of memory leaks.

In addition to the above requirements, your game will be evaluated for its inclusion of pizzazz, which is difficult to define but is obvious when it’s there. Some possibilities, for which code samples have been provided in your repo, include: (1) lights: `sdl/lights`, (2) painter’s algorithm, (3) a menu: `sdl/menu`, (4) flocking, (5) Perlin Noise (procedural?) (6) your choice. Document your pizzazz in README so we can identify it.

Your assignment will be tested on a Linux platform using gcc or clang, but your project **must** uncompress, compile, and run, on the department linux systems.

(Some possible Key assignments: F1 \Rightarrow help, F4 \Rightarrow frames, `g` \Rightarrow “god” mode, and `r` \Rightarrow restart)

Project Presentation: Our final project presentation will be Wednesday, May 1 at 3 PM. I will bring refreshments, and a video of all of your games. In addition, I will have downloaded, uncompressed, and compiled your games on my laptop. After the video presentation, I will invite you to present your game to the class and invite your class members to play your game.