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 7 PM on Wednesday, December 12^{th}, 2018.

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 illustrating the best features of your game. This video must be submitted by due date and show some progress from your previous project. I would recommend that you use either the frames generator or *simplescreenrecorder* to make your video. But in either case, the file name for your movie must have your userid as the prefix. For example, `malloy.mp4`, `owithyc.mp4`, `jbjerke.mp4`, `nhagen.mp4`, or `nluce.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) use lights: sdl/lights, (2) use painter's algorithm: sdl/painters, (3) include a menu: sdl/menu, (4) flocking, (5) use Perlin Noise (procedural?)

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 ⇒ help, F4 ⇒ frames, g ⇒ "god" mode, and r ⇒ restart)

Project Presentation: Our final project presentation will be Thursday, Dec 13 at 8 AM. I will bring refreshments. I will have made a video of all of your games. In addition, I will have downloaded, uncompressed, and compiled your games on my laptop. During our final presentation, I will invite you to present your game to the class and invite one of your class members to play your game.