

CS 2261 Homework 03:

Complex Mode 3 Game

Instructions

In this assignment, you will be making a more complex game in Mode 3. Some suggested games along the complexity level we expect are:

- Breakout, with at least 3 rows of 5 blocks (Easy)
- Tetris (Hard)
- Simple flash games (ex. <http://www.ferryhalim.com/orisinal/>)
- Simple Neopets games (<http://www.neopets.com/games/>)
- Old Atari games, like Asteroids (<http://www.freeasteroids.org>)

The design of this game must be more complex than just “falling boxes” or “collect the boxes” or “basic pong.” Push yourself creatively, and see what you can come up with! You are free to choose one of the examples above, but we encourage you to create your own original game (if you choose this option, please speak with a TA first so that we can ensure it is on the expected difficulty level). Your game must have the following:

- At least one struct
- At least one array
- Pooling
- An end (win/lose) state
 - It should be understood that you have reached an end to the game.
- At least **five** moving objects
- At least **three** buttons used for input
- Collision that matters
 - Something must happen whenever two different objects hit each other
- A readme.txt file
 - An instruction manual (of sorts) that tells a player how to play your game
- Only a *minimal* amount of flicker.

Your code must have the following:

- Multiple .c files (**more** than just main.c and myLib.c)
- At least **two** .h files
- Good organization (see tips below)
- Meaningful comments

Tips

- Start early. Never underestimate how long it takes to make a game.
- When splitting code between multiple files, put code that will be useful in multiple games in myLib.c, and code specific to this game in main.c or other files. Those other files should be specific to a concept (collision, etc.).
- Organize your code into functions specific to what that code does. Your main method should not be very long.
 - Having update() and draw() functions that you call in main() is helpful.
 - Make sure the order takes into account waiting for vblank at the correct times to minimize flicker.
- Build upon the myLib.c and myLib.h files from previous assignments.

Submission Instructions

Compress your entire project folder, including all source files, the Makefile, and everything produced during compilation (including the .gba file) into a single .zip file. Submit this .zip on Canvas. Name your submission HW03_FirstnameLastname, for example: "HW03_VrookLamar.zip".