CS 2261 Milestone 02: First Playable

Instructions

For this Milestone, you will be implementing the key components that make the game what it is. I would highly recommend saving each Milestone separately so that you have something to revert to if there are strange problems occurring down the road. When you start on a new Milestone, you can just copy the folder and rename it to the current Milestone, then continue working. This milestone has two primary components:

Part 1

Implement the state machine that your game will use. You must have **at least** the following states with the following characteristics:

- Splash Screen (or Menu)
    - goes to Game and Instructions
- Instructions
    - goes back to Splash and/or Game
- Game (must be use Mode 0)
    - goes to Pause and Win/Lose
- Pause

    - goes to Game **and** Splash (to restart the game)
- Win/Lose (depending on what you proposed your game needs)
    - goes back to Splash

You may add more states or break these down into others as needed (ex. a cutscene between Splash and Game). States may be in any Mode, with the exception of Game, which **must be in Mode 0**. Your Milestone 2 submission must have all of these states appearing and able to be seen by traveling through the state machine (even if that is just button presses for now).

Part 2

Begin implementing the core gameplay that you proposed. You must use sprites to accomplish this. This does not have to be the final version of the gameplay components, as you will tweak and update it with each milestone until you are happy with the way that it works. The core functionality, however, must be completed.

For example, if your game were something like Super Mario Bros, you would need to have a player that can run around and jump on platforms. If your game were like Galaga, you would need to have a player that can move and shoot, and bullets that destroy enemies. Check your feedback for M01, and make sure you are implementing the things we recommend you have done by M02.

Do not get bogged down with art at this point. If you finish the other M02 requirements, go for it, but I would recommend making all the sprites just squares at this point. Your **state screens should be labeled in some way**, but the text tool in Usenti should do well enough for this Milestone. Again, if you finish all of the other M02 requirements, go for it, but your time will be better spent getting more of the core functionality implemented.

Project Final Requirements Reminder

As a reminder, the requirements for the final milestone of the final project are as follows:

- At least 2 animated sprites
    - "animated" means **three or more frames** of a looping animation
- Two or more simultaneous backgrounds
    - two backgrounds that move/scroll **independently** (hint: try parallax movement)
    - or one XL background (**greater** than 512 for width or height)
- The following states: Start, Instructions, Game, Pause

○ game state **must be implemented in mode 0**

○ you may use modes for other states (ask your TAs for tips if you're confused)

● A Win and/or Lose state as applicable

○ you must have at least one or the other

○ you must be able to restart the game from this end state without re-running your .gba file

● At least two sounds that can play simultaneously

○ one must be looping (*continued on the next page*)

● A cheat to make the game easier

○ not just skipping to the win state

● The ability to play the game correctly without having been told how to do so ahead of time

○ aided only be the in-game instructions and menus

● Bug-free gameplay

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 T-Square. Name your submission M02_FirstnameLastname, for example: "M02_BarryBirkman.zip".