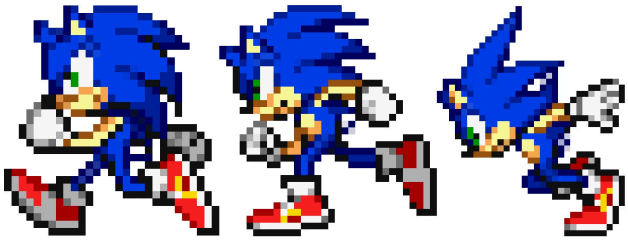
MILESTONE 01

First Playable



Purpose: To build the first playable version of your project leveraging Mode 0, good code architecture, and other concepts learned over the course of the semester.

Instructions:

For this milestone, you will be implementing the **key components** that make your game what it is. We 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 (or MENU, or START)
  - ◆ From here, the player can go to GAME and INSTRUCTIONS
- ➔ INSTRUCTIONS
  - ◆ From here, the player can go to SPLASH and/or GAME
- ➔ GAME (***must be in a tiled mode***, such as Mode 0)
  - ◆ From here, the player can go to PAUSE and WIN/LOSE
- ➔ PAUSE

- From here, the player can go to GAME and SPLASH (restarting the game)

➔ WIN and/or LOSE (depending on what you proposed your game needs)

- From here, the player can go back to SPLASH

You may add more states or break these down into others as needed (e.g. a cut-scene between SPLASH and GAME, or multiple levels represented as GAME1, GAME2, etc.). States may be in any mode, with the exception of **GAME**, which ***must be in a tiled mode***. Your Milestone 1 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). Each state should be visually discernible, even if that means something simple like changing the color of the entire screen or using Usenti text.

Part 2:

Begin implementing the **core gameplay** that you proposed. *You must use sprites to accomplish this*. Your implementation for M01 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 The Legend of Zelda, you would have to have a character that can run around and perform some kind of attack. If your game were like Space Invaders, you would need to have a player that can move and shoot, and bullets that destroy enemies. ***Check your feedback for M00, and make sure you are implementing the things we recommend you have done by M01.*** Your submission will be graded according to the feedback given for your specific game.

Code / Files

Your *code* must have the following:

- Good organization.
- Meaningful comments
  - Since each final project is unique and complex, comments are very helpful for not just the TAs, but also for yourself! Final project code can quickly get messy.
- A README.md file with explanations of the following:
  - What is finished about the game so far
  - What still needs to be added
  - Any bugs you have found
  - For our sake, how to play/navigate the game in its current state (and see anything you want us to see).

Do **not** focus on art at this point. If you finish the other M01 requirements and suggestions, go for it, but we recommend making all sprites just squares/simple art at this point. Your state screens should be labeled in some way (visually different), but the *text tool in Usenti* should do well enough for this Milestone. Your time will be better spent **getting more of the core functionality implemented.**

If you have questions about what core gameplay components you must implement for this milestone, reach out to your grading TA and we will happily give you guidance! Your grading TA is the person who graded your homeworks and M0 (lab graders change).

Submission Instructions:

Ensure that **cleaning** and building/running your project still gives the expected results. **Please reference previous assignments for instructions on how to perform a "clean" command if you need clarification.**

Compress your entire project folder, including all source files, the Makefile, and everything produced during compilation **(including the .gba file)**. Submit this zip on Canvas. Name your submission **M01_LastnameFirstname**, for example:

> “M01_RoseMatthew.zip”