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Accent - Mid Project Report

Since this assignment was given we have made strides to complete various milestones that we set to complete. Overall Accent is a working game but still needs some improvements.

The core shooter engine still needs more work. Due to the complexity of the game, the ability to manually shoot will be removed from the player. Shooting will be handled instead by the player's rhythmic performance, determined by the rhythm engine. Special attacks will still have some degree of manual control, which will be controlled by mouse input, which will be implemented at the final stage of the game.

The core rhythm engine is slightly ahead of schedule. Tapped and held notes are both implemented and are (as far as we can tell) fully functional. As of right now, the rhythm engine is only interfaced to work with a keyboard setup. A primitive track definition file format has also been determined to allow easy switching between multiple tracks. The current behavior of the engine can be easily tweaked to achieve the final intended result.

The AI system will be impacted heavily by the incompleteness of the core engine. At worst, there may be no implementation of AI, but we plan to have some degree of (probably very dumb) AI at the very least.

Development of the graphics engine is progressing smoothly. Spritesheets are only stored in memory in one location, where renderable instances of the sprite are then generated from these spritesheet objects. The particle engine is functional, though not very robust at its current state. Particle emitters can be tweaked to achieve either thruster-like or "burst" effects, where the thruster-like effect is shown in-game by the rocket's thrusters. Other particle generation methods such as generation along a line and generation within a rectangle are very likely to be in the final version of the engine. Also, special particle modifiers called particle effectors are also planned for the final version for the engine, to allow for stronger control over how particles behave. An example of an effector would be one that simulates a black hole effect, that draws particles towards it, or a "wind" that pushes all particles uniformly in a single direction.

Sound Effects have yet to be implemented into the game, but it will be included in the final version of the game. In the final version of the game there should be sound effects for: Particle Emitters (Thrusters), Shooting, Feedback sounds on if the player succeeds or messes up the input for the rhythm, and background music for the game as well.