EE/CprE/SE 491 WEEKLY REPORT 6

10/18 - 10/24

Group number: Team #37 - sdmay25-37

Project title: Non-Euclidean Game

Client: Josh Deaton
Advisor: Dr. Joseph Zambreno

Team Members/Role:

Tasman Grinnell	*Project Manager/Rendering Engine Engineer*
Josh Deaton	*Rendering Engine Lead*
Ben Johnson	*Rendering Engine Engineer*
Cory Roth	*Rendering Engine & Game Design Engineer*
Spencer Thiele	*Game Design Lead*
Zach Rapoza	*Game Design Engineer*
Lincoln Kness	*Game Design Engineer*

- **Weekly Summary:** The rendering engine team was primarily involved in preparing for beginning the implementation of the rendering/game engine which will be discussed in this week's rendering engine meeting. The Game Design team continued prototyping mock-ups in Unity, with Unity's version control beginning to be set up and managed. Details for the prototypes are being initially created, involving NPCs and general world interaction.

- **Past week accomplishments**
  - Tasman: Since I was running low on time this week, I spent time looking at some reference games that we've looked at previously in our discussions of other Non-Euclidean games (HyperRogue and Hyperbolica). I watched some of the dev logs that are up on their site to learn more about the project and game development through their examples.
  - Josh: Continued researching projection types. Sketching out system diagrams. Preparing for a meeting Friday. Looking at Ben's ECS.
  - Ben: Created the implementation for fetching component archetypes. More design of "system" objects.
  - Lincoln: Finishing brainstorming on the list of NPCs and worked on debugging the unity prototypes
  - Cory: Finished prototype of lights. Got coded reworked to be written in the proper formatting way.
  - Zach: Got collisions working, started touching on getting items interaction
  - Spencer: Added implementation for farmer interaction when planting and harvesting. Brainstormed NPC ideas and locked in on initial concepts.

- **Pending issues**
  - Tasman: Still have some of the issues from last week since I haven't worked on any technical stuff this week.
  - Josh: How we are going to organize our engine?
  - Ben: ECS implementation is mentally draining. Probably going to switch gears to something easier.
  - Lincoln: Updating the enemy behavior to detect lights rather than using an array of all the lights.
  - Cory: Implementation sprite in unity
  - Zach: implement sprite switching
  - Spencer: Unity Version Control may require funding.

- **Individual contributions:**

Name	*Hours This Week*	*Total Cumulative Hours*
Tasman	4	36
Josh	4	34

Ben	6	39
Lincoln	6	38
Cory	6	40
Zach	6	33
Spencer	6	40

- **Plans for the upcoming week**
  - Tasman: Continue watching the dev logs and work on the issues that I was having last week. Continue researching implementations of the shaders for the Non-Euclidean conversions.
  - Josh: Meet with the engine team and discuss our direction moving forward. This direction will dictate my plans for the upcoming week.
  - Ben: Make a super simple engine implementation to start dividing work from.
  - Lincoln: Start piecing together the unity assets to make the early main farm scene.
  - Cory: Work on writing out the first 10 minutes of the game, continue render development
  - Zach: Finish sprite switching, implement accessories, and implement inventory
  - Spencer: Actually getting Unity Version Control working. Combining current prototypes into one scene for testing.