EE/CprE/SE 491 WEEKLY REPORT 8

Nov 1 - Nov 7

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 engine team continued to iterate on the existing classes and began to prototype and design the hyperbolic rendering portion of the engine. Additionally, discussions regarding the functions the engine needs to support were undergone, particularly in regards to where responsibilities of the engine end and the game development begin. The game design team continued working on prototypes and discussed what to move towards in the future in regards to storyboarding, version control (since Unity's version control is annoying), and the general story of the game.

- **Past week accomplishments**
  - Tasman: I didn't have too much time so I mostly researched how actions would be handled and discussed with the engine and design teams. I continued to look into proper action handling and using the JSON library to parse key binding files.
  - Josh: Integrated the Eigen library. Discussed with Tasman and Ben ideas about the action system. Talked with Ben about initial idea for non-euclidean rendering
  - Ben: Came up with an initial system for hyperbolic rendering.
  - Lincoln:Completed the main scene to show off the prototypes of the enemy, farmer, farming, and the light functions
  - Cory: Worked on fleshing out story ideas for game idea and storyboarding. Created a template map.
  - Zach: Finished inventory and item counts, started equipment
  - Spencer: Looked into version control further and met with the team to decide on which one to use. Storyboarded for the game and adjusted scope for end of the semester demo. Developed initial functionality for traps in Unity.

- **Pending issues**
  - Tasman: Need to figure out how to effectively test the programs
  - Josh: Creating shaders to convert points on a 2d texture to a non-Euclidean 2d texture
  - Ben: Hyperbolic rendering system only renders a Euclidean world in a hyperbolic view. This means that the world isn't truly hyperbolic.
  - Lincoln:Optimizing the enemies pathing algorithm for future use
  - Cory: NA
  - Zach: NA
  - Spencer: NA

- **Individual contributions:**

Name	Hours This Week	Total Cumulative Hours
Tasman	4	47
Josh	6	45
Ben	4	51

Lincoln	15	53
Cory	5	51
Zach	5.5	46.5
Spencer	8	54

- o **Plans for the upcoming week**
  - Tasman: Need to continue working on the Input Managers and figure out some effective ways to test my input handling.
  - Josh: Continue working with OpenGL and Eigen. Start working on the first non-Euclidean demonstration
  - Ben: Implement hyperbolic rendering demo
  - Lincoln: Work on storyboarding and then begin working on the final unity demo for this semester
  - Cory: Continue fleshing out the story and greeting story documents. Work on character design documents
  - Zach: Finish equipment and boosts, (keep figuring out UI).
  - Spencer: Finish trap functionality and start development on NPC characters in Unity.