

EE/CprE/SE 491 WEEKLY REPORT 1

9/10 - 9/17

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

Josh Deaton Rendering Engine Lead

Ben Johnson Rendering Engine Engineer

Cory Roth Rendering Engine Engineer

Lincoln Kness Game Design Lead

Zach Rapoza Game Design Engineer

Spencer Thiele Game Design Engineer

- **Weekly Summary:** This week, we were primarily concerned with distributing roles and responsibilities, clarifying design points, and performing initial research and experimentation.

- **Past week accomplishments**
 - Tasman:
 - Began researching Non-Euclidean mathematical models
 - Set up an environment for github repo for experimenting.
 - Began to look into OpenGL for testing.
 - Josh:
 - Set up OpenGL and CMake repository for team
 - Created instructions for building and using the repository
 - Went through hello_triangle on OpenGL
 - Ben:
 - Set up basic OpenGL rendering of textured triangles
 - Research into game engine design (Entity Component System)
 - Lincoln: Researching Non-Euclidean Game Design
 - Cory: Researching OpenGL and Getting used to software we will be using
 - Zach: Look into the game development process and basics of game design
 - Spencer:
 - Researched different existing non-euclidean games
 - Developed multiple brief designs for game concepts

- **Pending issues**
 - Tasman:
 - Currently need to learn more about OpenGL and experiment with rendering triangles.
 - Josh:
 - Getting the repository set up for building had some unexpected issues
 - New learning about shaders
 - Ben:N/A
 - Lincoln:N/A
 - Cory: OpenGL takes time to understand and had other responsibilities so did not get enough time as I would like
 - Zach: N/A
 - Spencer:
 - Difficulty determining what game mechanics will translate well to non-euclidean spaces

- **Individual contributions:**

<u>Name</u>	<u>Hours This Week</u>	<u>Total Cumulative Hours</u>
Tasman	7	7

Josh	10	10
Ben	8	8
Lincoln	8	8
Cory	6	6
Zach	5	5
Spencer	5	5

- **Plans for the upcoming week** *(Please describe duties for the upcoming week for each member. What is(are) the task(s)?, Who will contribute to it? Be as concise as possible.)*
 - Tasman:
 - Josh:
 - Continue working with the best way to add shaders
 - Learn about how to use the different kind of shaders
 - Start researching different NE models
 - Ben: Continue to work rendering of textured triangles
 - Lincoln: Brainstorm Ideas and communicate with the other members of Game Design to reach a base idea.
 - Cory: Go through tutorials on OpenGL, start goal of rendering a person. Begin researching math on non-euclidean spaces
 - Zach: look into and explore unity (for mock up), and determine the general theme/structure of the game.
 - Spencer:
 - Brainstorm more game ideas for the meeting
 - Meet with other game design members and discuss all ideas and decide on a few primary ideas to present to the rest of the team
 - Refine and expand on the primary game ideas
 - Refamiliarize with Unity and find learning resources for other members