Proposal Group Project

Required background knowledge

No extensive background knowledge should be required to understand the end-product of this project.

Core Project

The project will consist of a 2-player 2-dimensional tank game in which both players try shoot one another. Throughout the game multiple parameters such as accuracy, shots fired, rounds played, etc... will be registered.

Hypothesis

Do players increase in capability over time and if so, what are the clearest indications of this?

Members & respective background

Aaditya Manhass

Luke Romano – Previous experience with the Pygame library

Viktor Vermeire – Currently studying game development (mainly in C#/C++)

Breakdown

The delegation of tasks is likely to change depending on the speed with which specific tasks are completed.

1. Creation of in game assets
2. Programming of the physics involved (cannonball arc)
3. Creating the visual representation of the players, field and cannonshots
4. Creating an intuitive user interface
5. Collecting and storing the various parameters for assessing player skill.

Minimum viable Product

1. The players will be visible on screen on a flat level.
2. Each player will be able to set the parameters (arc & power) for their shot during their turn.
3. A player will be declared the victor upon hitting their opponent.
4. Both players will be able to register their names
5. After a round the players will be presented with the parameters that made up their performance
6. Means/medians using previous data will be provided for the various parameters.

Stretch goals

1. Graphs for the various parameters
2. More elaborate levels
3. The ability for players to have some limited movement options
4. Terrain can be influenced by the players