**Group 6 Members**

1. Lukas Villalpando
2. Paul Schulte
3. Milan Mihailovic
4. Kevin Meehan

**Code Style**

1. Our group will be following the Google C++ Style Guide.
2. Our group’s code will be contained within the namespace: group6

**What is your high-level goal for this module?**

We would like to develop a 2-D grid that utilizes multiple algorithms in order to create a robust and interactive procedural world generation module capable of creating complex and dynamic environments.

**What key features will you make available to other modules?**

* A 2-D Grid with procedural world generation.
* Objects & agents within the world.
* Agent interaction with the world.
* API that is compatible with other modules.
* Real-time data for analysis.

**What features will you need other modules to provide?**

* Graphical interface.
* Data analysis.
* Agent behavior.
* Player input.

**Why is this project challenging?**

* Different algorithm(s) must be decided upon that will interact with each other.
* Collaboration and communication with other groups to ensure modules can correctly interact with one another.
* Optimization to ensure actions & updates are as quick as possible .
* High-level work in C++ to develop efficient world generation.

**World Module Functionalities:**

* Define agent locations/spawn-points.
* Handle collisions.
* Movement & locations of agent(s).
* Definition of areas/biomes.
* World information.
* Handling agent interactions with objects and other agents.

**Communication:**

We will communicate over discord with other groups in order to ensure module compatibility.