[-NAME-] TG Brief

# Brief

The [-NAME-] Terrain Generator is a complex modular world generation system that can be used to generate complex terrain, endlessly and randomly. [-NAME-] TG will be completely customizable within the Unity editor. This allows for easier development of and interesting terrain possibilities. Through out this brief I will be using the acronym *TG* to refer to *Terrain Generator*.

# Goals

The [-NAME-] TG aims to provide a quick and easy tool for developers to create procedural worlds for their games. The tools provided in [-NAME-] TG should make world creation a two step process, allowing for quick implementation of other features. [-NAME-] TG should also allow for fine refinement of the terrain parameters to create many different types and styles of terrain.

# Third-Party Libraries

The [-NAME-] TG uses the Unity built-in libraries and the C# Random library. The Unity Math library and Unity Engine library are used to generate the noise and interface with the Unity editor. The C# Random library is used to generate random numbers within a range.

# Maths and Algorithms

I will be using the Perlin Noise function provided by Unity’s Mathf class. The

* Editor modifiable noise settings
* Editor modifiable noise curves