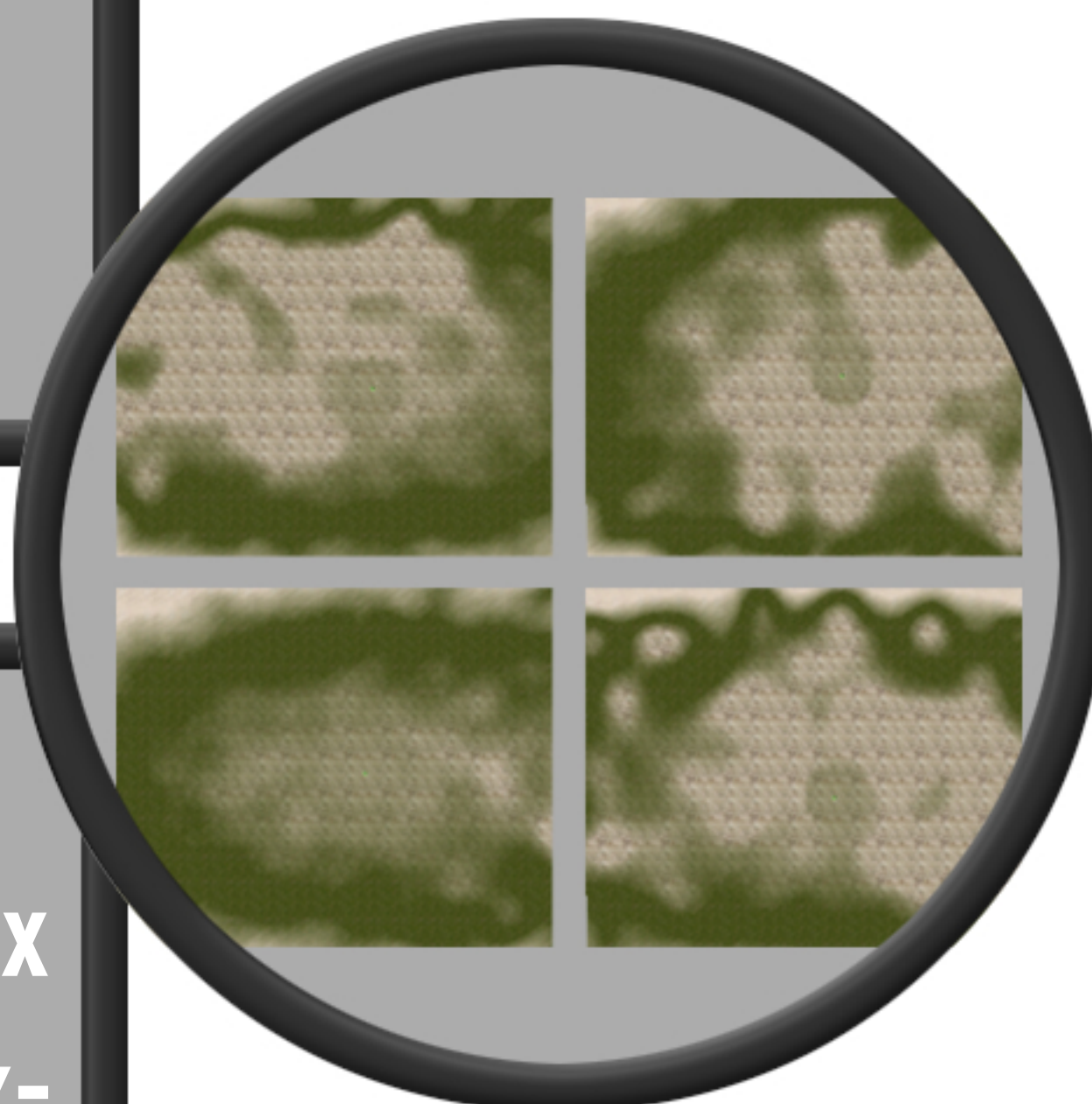


# The Last Kiwi

## Technical

### Map Generation

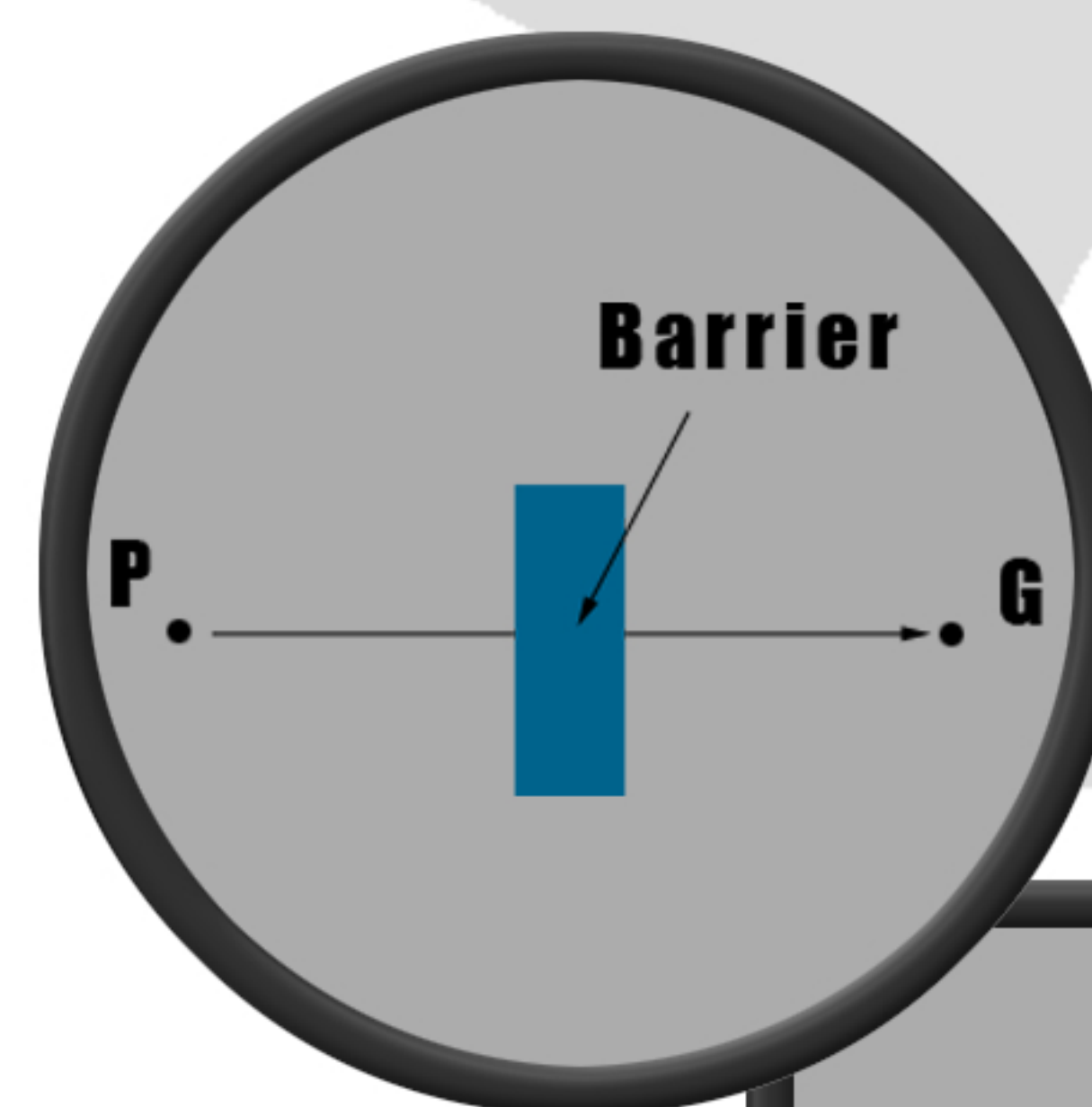
The map is a procedurally generated island suspended in space. This is done by using a perlin noise to create a height value for each x,z pair. A vertex shader is applied to vary the texture by height. The result is a completely random map for a different experience each game.



Four different map generations

### Terrain Shader

The terrain is shaded based on vertex altitude. The peaks of the hills are exposed rock and the majority of the map is grass that fades to sand at the edges.



Monster (P) approaching its goal (G) with a barrier in the way

### A.I. - Navigation

A navigation mesh is used to keep monsters from running up steep cliffs or into player placed objects. Depending on the state and monster type the monster will set a goal position and use the navigation mesh to determine its route to the goal.

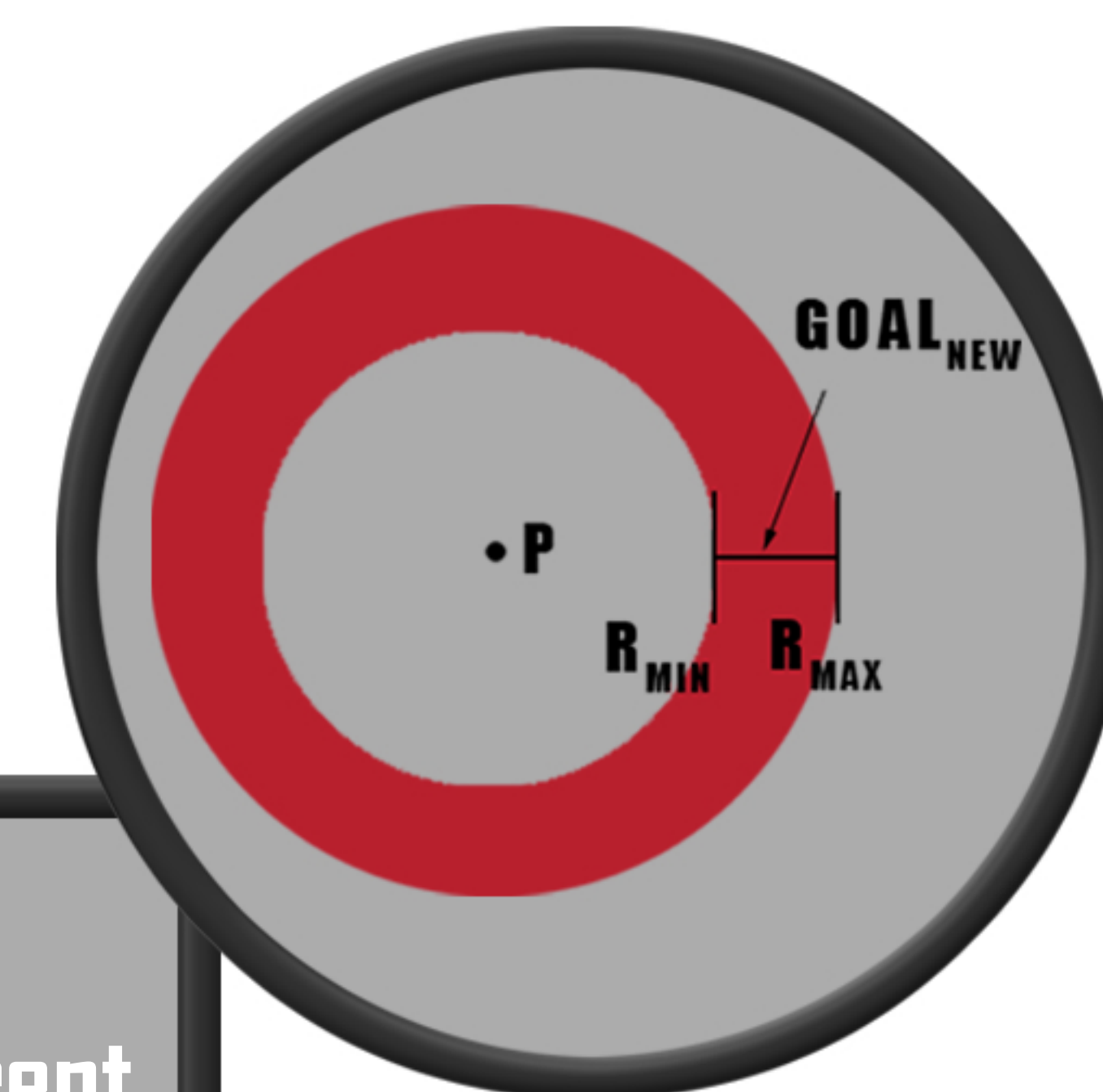
### Data Driven

Both monster stats and crafting recipes are data driven for ease of adding and editing. An XML file is used to store recipes and .Net System.Xml is used to parse the file into recipe objects.



### Artificial Intelligence

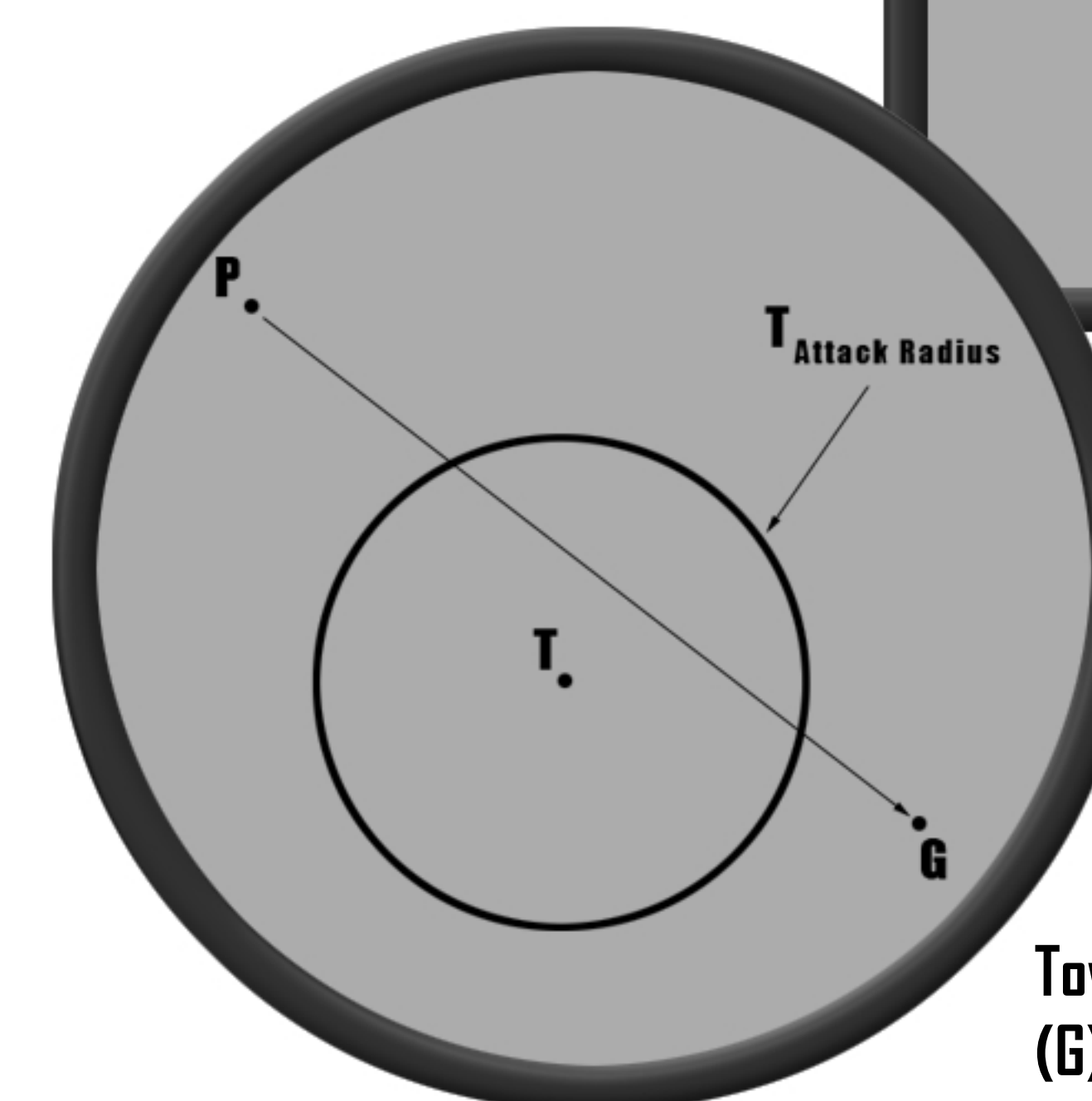
The Last Kiwi features many different monsters designed to swarm and overwhelm the player. The monster's behavior is determined by a state system, navigation mesh, and flocking.



Player position (P) and a new goal set within min-max radius.

### A.I. - State Selection

Each monster has several unique states that it can be in at any given time. These states involve moving, attacking the player, attacking a structure, or attacking a generator. Monsters will attack the generator by default unless a player or defense tower is near. When attacking a player they will set their position goal within a certain min-max radius away from the player. If an impassible structure is in the way of the monster they will switch target to the structure.



Tower (T) with a monster (P) approaching its goal (G) within tower attack radius.

### Contacts

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