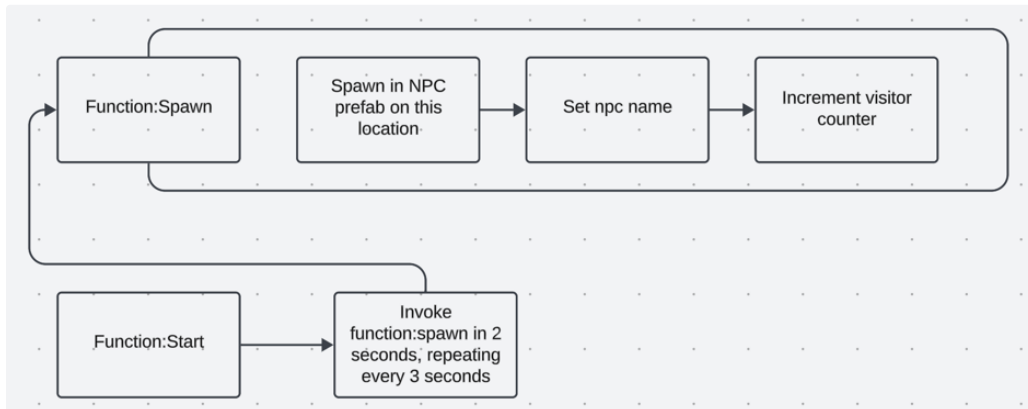


NPC Spawner feature

1st Iteration

simple npc spawn system:



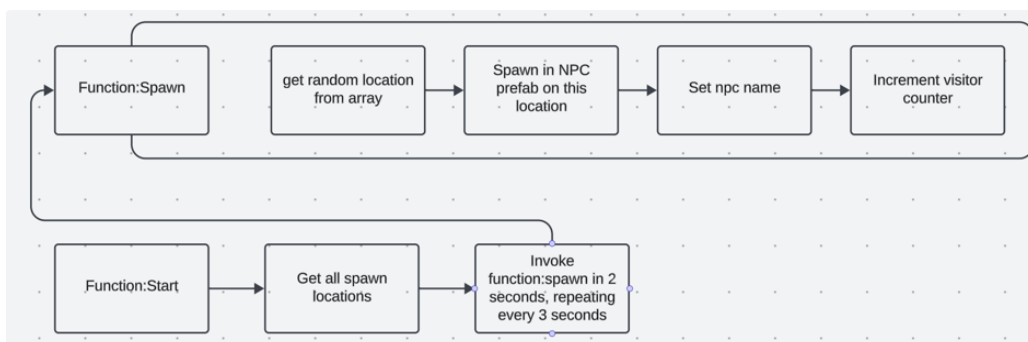
Invoke: sets function to be called in x seconds

Invoke repeating: does the same but repeats every x seconds

script tied to a game object so spawns all on that location - subject to change

2nd iteration

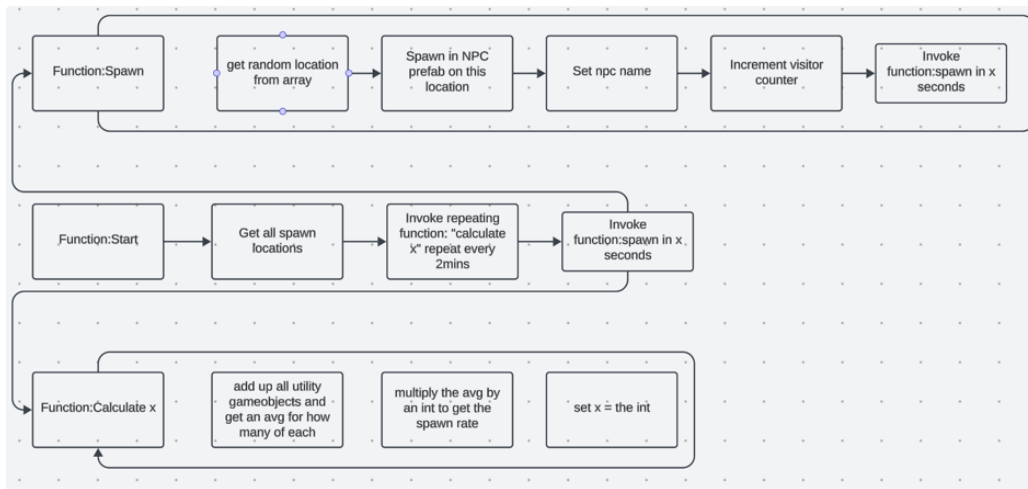
added multi-location spawning



3rd iteration

added variable spawn rates

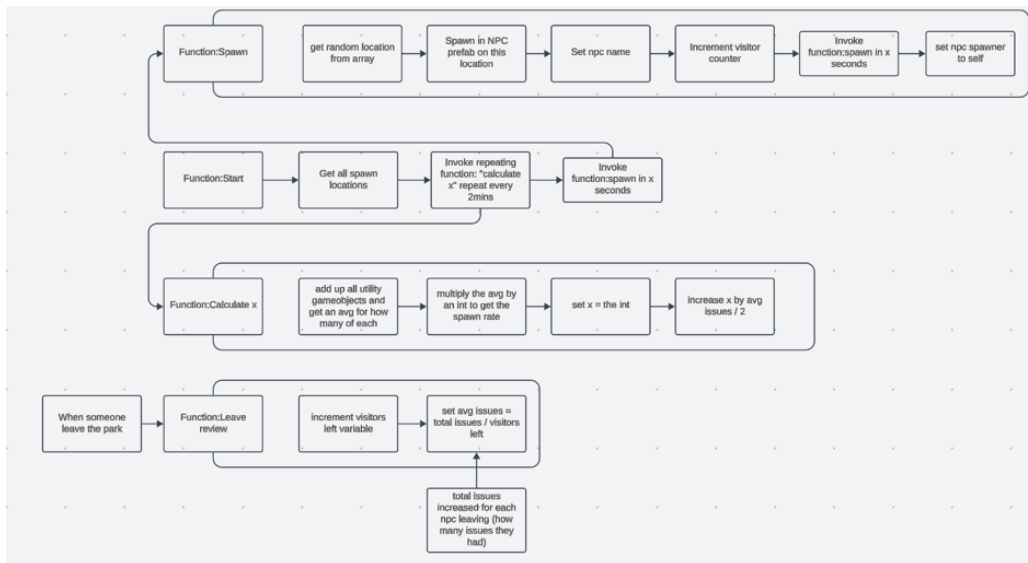
calculates spawn rate periodically



4th iteration

added visitor satisfaction

changes based on the avg issues each npc has



Spawn system overhaul:

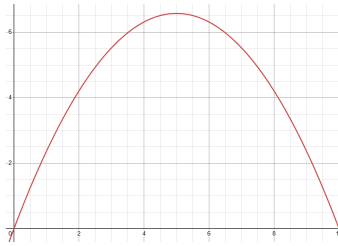
quadratic function represents the spawner:

The spawner now uses a quadratic function to control the number of visitors that spawn each spawn routine. At time of writing the function is:



Preview unavailable

With a representative graph:



The x axis refers to the day/night cycle, where the day spans across the graph within the bounds of positive y, The Y axis is represents the number of visitors that will spawn on a given cycle.

The “a” value changes the peak of the curve, directly changing the overall number of visitors that will spawn in a day, this value is calculated by a number of different factors and will continue to be updated to account for new features that are intended to affect the spawn.

Factors that affect the spawning (as of this iteration):

- Number of vendors/services
 - Takes the average number of vendors and services in the scene, the more of these there are, the more people can spawn.
- Visitor satisfaction
 - There is an overall satisfaction value in the spawner script, this gets adjusted by the individual satisfaction of each visitor when they exit the park, as of current iteration, the spawner starts off with a satisfaction value of 1, and multiplies the spawn value by itself, the visitor satisfactions are multiplied with the overall satisfaction to adjust it when they leave, if the visitors satisfactions are on average below 1, the overall satisfaction will begin to drop below as well.