Architecture & Design Document

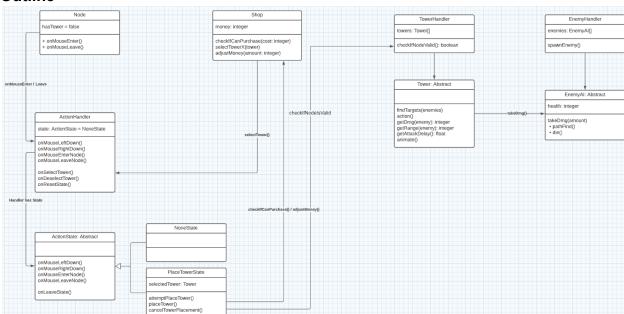
Product Purpose

The purpose of this project is to create a "tower defense" style game. The player can choose a map to play and start the game. During the game, the player can spend money to place towers to defend their main base. Enemies (controlled by AI) frequently spawn at the far edges of the map and they pathfind their way to attack the player's main base. Killing enemies rewards money, along with a passive money gain. Other features that we'd like to add include environment effects, tower upgrades, player abilities, and enemies attacking towers.

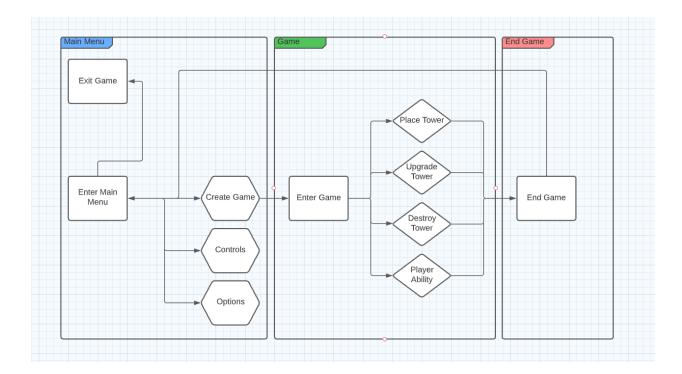
Document Purpose

This document outlines our project architecture and design and will be helpful to our team as we make our modifications later on. This will be referred back to and will be updated as the project continues.

Outline



Game Direction Outline



How?

The main program we are using to create this game is Unity. Unity provides the 3D environment and the component compatibility. Some other options we had were Unreal Engine, Godot, and Gamemaker, which were discarded for complexity, price, and style respectively. Unity requires C# which the team has been learning and using since we started. For modeling and animating, we are using Blender, which provides the ability to do so along with material designing and more control over appearance. We also could have used Maya or Zbrush but those were discarded because they didn't fit our needs and would have been like bringing the SWAT team to take the cat down from the roof, so to speak.