Tower Domination

Group 09

Tech Feasibility Analysis

For this project, our group decided that we will be using the Unity Engine to develop our game. The 3 of us have some experience with Unity, using it for personal projects and in other classes. One of the bigger advantages of Unity is the library of resources we have access to, from all the extensive tutorials we can find online to the vast amount of models and assets we can get. One other engine we considered was Unreal Engine, but we decided against it since we all had previous experience with Unity and we thought since we're making a card game, many of Unreal's advantages over Unity would not be utilized.

Since we have 2 arts students, we're not planning on using too many 3rd party assets; the card art will come exclusively from our colleagues and the only other visual parts we will need are menus/interfaces.

In terms of the resources for actually developing the game's code, we have already found a good source of information, and we plan on using it as a baseline example for our game. For the different aspects that exist in the game regarding the cards (deck pile, discard pile, hand), Unity has both lists and queues that offer the possibility of creating easy shuffling, ordering or iterating functions. Also, another important aspect is the existence of inheritance classes, as it is crucial for the development of different types of cards and effects that will exist in the game (resource cards, spell cards, normal cards). Unity also provides a lot of tools to help develop the UI aspect of the game, something also extremely important for a card game.

We also researched about popular card games and their engine and found out that both Hearthstone and Magic: The Gathering Arena, two games that we referenced as competitors and inspirations, were also built on the Unity engine, giving us even more reasons to believe that Unity is the right choice to use.

Given all the aspects mentioned, we feel that Unity will meet our expectations and will make a lot of our work easier, which wouldn't happen if we had picked another engine instead.