

CS102**Spring 2021/22**

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Group**3F**

Criteria	TA/Grade r	Instructo r
Presentation		
Overall		

Till The Last Drop

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Requirements Report

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1. Introduction

Our game will be a tower defense strategy game with the aim to prevent enemies from damaging our central core. We will have multiple towers with different attacking features allowing users to protect the center from the enemies. Players will try to keep enemy characters out of their territory as much as possible.

2. Details

2.1 Features of The Game

2.1.1 Core Features

- There will be obstructions placed by player that can damage enemy NPCs before they destroy the base
- The player placed obstructions will be:
 - Repairable
 - Upgradeable
 - Destroyable
- Enemies will be capable of traversing multiple paths
- Each wave will have a certain amount and types of enemies
- Certain levels will have a boss at the end
- Some sort of shop and in-game currency with which player will be able to purchase upgrades and repairs for his obstructions
- These in-game currency can be earned through defeating enemies, and completing waves
- Powerups:
 - Ice rescue (Slow down time if situation gets out of hand!)
 - Health potion (Heal towers in a particular region)
 - Airstrike (Attack enemies in a particular region)
 - Booming economy (Get double the amount of currency as usual for some time)
 - Tower Upgrade (Increase the health and the power of a tower.)

2.1.2 Non-Core Features:

- Obstacles like walls or fences that will make npcs decide to destroy and pass through or circumvent around the obstacle.
- A speed up or down button that determines the pace of the game such as spawn time of npcs, speed of npcs and towers, gold income by second etc. It basically speeds up or down the time in the game.
- An android version of the game may be released.

2.2 Similar Softwares

There are various kinds of tower defense games in the market. Some software that are similar to ours are: Clash of Clans, Bloons TD franchise, Kingdom Rush and Revenge of the Titans.

Revenge of the Titans: A tower defense game with similar features. This game also has some power ups such as “bezerk”, which gives 10 seconds of super power to your turrets, and “freeze”, which freezes all enemies for 10 seconds [1].

Clash of Clans: *Clash of Clans* tasks players to build their own village using the resources gained from attacking other player's villages. To attack, players train different kinds of troops using resources. One of the aims of the game is to build and upgrade defenses and traps that protect the player's village from other players' attacks and to build and upgrade buildings. The logic of defending the base with the towers is similar to our game logic [2].

Bloons TD: Players attempt to prevent Bloons from reaching the end of a set course by placing towers or road items along it that can pop the bloons in a variety of ways. Tower, enemy and path use in the game is similar to the idea we thought in our game. [3].

2.2.1 Advantages of Our Game Over Similar Softwares

In addition to path following mechanics of Bloons TD, in our software, enemies can attack from different pathways that allow players to develop different strategies to defend the base instead of focusing on one fixed path.

One of the advantages of our game over Clash of Clans is the variety of powerups. Clash of Clans has a limited number of powerups which are only usable by the attacker. In our game, players will use the powerups to make it harder to reach the base and strengthen their defense.

Another advantage of our game over similar softwares' is the variety of defense towers. In most of the tower defense games' such as Revenge of the Titans, the player is restricted to a few types of defense towers. The player is offered a couple of them in our software.

2.3 Targeted Users

Our software is targeted for the general audience. It is a simple game suitable for all ages. It has a simple interface and gameplay. It will be easy for everyone to understand how the game works and how it is meant to be played. Furthermore, with the advantages our software has over similar programs such as enhanced steering behavior and various kinds of powerups and defense towers, it will be a more preferable choice for the audience. Especially for strategy game enthusiasts.

3. Summary & Conclusions

We are planning to create a basic tower defense game with various features like power ups, different levels and waves, armed towers to defend the base, basic AI NPCs, shop and purchasable items with in-game currency. It will provide strategic gameplay for video game enthusiasts.

4. References

- [1] Fandom, "Powerups | Revenge of the Titans Wiki," [Online]. Available: <https://rott.fandom.com/wiki/Powerups>. [Accessed 12 March 2022].
- [2] W. contributors, "Clash of Clans," [Online]. Available: https://en.wikipedia.org/wiki/Clash_of_Clans. [Accessed 12 March 2022].
- [3] W. contributors, "Bloons Tower Defense," [Online]. Available: https://en.wikipedia.org/wiki/Bloons_Tower_Defense. [Accessed 12 March 2022].