Project Name: T.O.W.E.R.S.

Project Owners: Ryan DeSalvio, Nicolas Bratton, Garrett Kizior, Keith Droll

Product Backlog

Problem Statement:

There is currently a high demand for fun and unique games in the entertainment industry. Our goal is to create a game that satisfies both of these demands by creating a FPS(First-Person Shooter)/tower defense hybrid. We believe this combination of genres will create unique experiences not currently seen in video games and allow us to put fun twists on the FPS and tower defense genres by implementing unique turrets with interesting abilities, upgrade trees for all user items, and fast paced FPS gameplay.

Background Information:

There are many games within the FPS and tower defense genres including popular franchises like Call of Duty, Battlefield, Bloons Tower Defense, and Plants vs. Zombies. These games all have been incredibly popular in the past decade and have put their own unique twists on their respective genres. We hope that by combining elements of these franchises will give our game a unique and fresh take in an otherwise saturated marketplace. For games like Plants vs. Zombies, we feel that the game is tactically fun but there is not enough hands on experience for the user when playing the actual game. To remedy this, we aim to divide our game into tactical and FPS sections where initially the player will make tactical decisions regarding where to place turrets on the map and then actually go into the map when the round begins in order to fight the enemy hands on. We hope this will create a fun system where the player makes tactical decisions and then is the direct beneficiary or victim of their own decisions. For games like Call of Duty, we feel there is very fun gameplay, but it can become mindless. T.O.W.E.R.S. fixes this by introducing tactical elements of turrets. Our turrets can be placed anywhere on the map providing tactical decisions for the player and each turret has its own unique abilities which can be upgraded individually, provide unique opportunities for the player to experiment, and provide varied gameplay with multiple avenues to success.

Requirements:

Functional:

- 1. As a user, I would like to start a new game
- 2. As a user, I would like to pick up dropped currency from destroyed enemies
- 3. As a user, I would like to buy turrets, and ammunition
- 4. As a user, I would like to know what my current health, current currency count, and round number is

- 5. As a user, I would like to choose upgrades for myself
- 6. As a user, I would like my character attributes to be shown in an easy to read menu
- 7. As a user, I would like to fight in either ranged and melee styles (If time allows for melee)
- 8. As a user, I would like to view an end-game statistics screen
- 9. As a user, I would like to pause the game
- 10. As a user, I would like to be able to place turrets from a top down perspective
- 11. As a user, I would like to be able to see turrets current ammunition
- 12. As a user, I would like to be able to see my base's health
- 13. As a user, I would like to be able to upgrade turrets
- 14. As a user, I would like to be able to view a well-designed upgrade tree for my player
- 15. As a developer, I would like to like to include animations for character/enemy movement
- 16. As a developer, I would like to like to include animations for character/enemy attack
- 17. As a developer, I would like to be able to store high scores
- 18. As a developer, I would like for enemies to spawn at an increasing rate as the rounds progress
- 19. As a developer, I would like the gameplay to be balanced and encourage player experimentation
- 20. As a developer, I would like to implement an achievement system (if time allows)
- 21. As a developer, I would like to incorporate a start menu that allows for starting games, and viewing high scores, etc.
- 22. As a developer, I would like to allow for cooperative play (if time allows)
- 23. As a developer, I would like for some enemies to follow the character blindly
- 24. As a developer, I would like for some enemies to shoot the character
- 25. As a developer, I would like to mutate the enemy's attributes (health, speed, strength) each round based on enemy performance
- 26. As a developer, I would like to allow the character to equip multiple weapons
- 27. As a developer, I would like to include a credit scene at the end of game (if time allows)
- 28. As a developer, I would like to include a store to purchase character skins, etc. with in-game tokens earned from completing each play through (if time allows)

Non-functional:

- 1. As a user, I would like to have fast response times with user input
- 2. We must be able to play this game on PC
- 3. The menus and interface needs to be simple, intuitive and responsive
- 4. We must have fast frame rates, and minimize computer resources
- 5. Art style must be attractive and simple

- 6. Game must include catchy and fitting soundtrack
- 7. Game must include sound effects for different events
- 8. Game is stored in an executable file this prevents people from viewing source code
- 9. As a developer, I would like the game to support multiple platforms (if time allows)
- 10. As a user, I would like to be able to use a controller or keyboard