CS 407 Team 7

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

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

**Sprint 3 Planning Document**

GitHub repository: <https://github.com/kdroll/cs407>

Work Hours:

|  |  |
| --- | --- |
| **Developer** | **Number of Hours** |
| Ryan DeSalvio | 40 |
| Nicolas Bratton | 40 |
| Garrett Kizior | 40 |
| Keith Droll | 40 |

**Sprint Overview:**

This Sprint will involve us polishing, bug fixing, and adding any new content to create a fully-fledged and fun game for us to play. Most of our time will be spent polishing and bug fixing issues in our game and making sure everything is up to our standards.

The scrum master is Ryan DeSalvio. Our scrum schedule is a meeting every Monday and Thursday at 3:30pm.

Our risks and challenges for this sprint include making sure that the game is as bug free as possible. This means that we must try using our game in as many weird and unusual ways as possible. We might even have some play testers test the game for us and take in suggestions and write down bugs they encounter. Another challenge for us will be trying to balance polishing the old and implementing the new. There are still some new items that we must add for the new sprint and we must make sure that those items are implemented well and are as bug free as possible. Finally, we must make sure that the game is fun and playable. We risk spending all our time fixing things and maybe not realizing that we should add something to make the game more fun instead of airtight and polished.

User Story #1

As a developer, I would like to incorporate and upgrade system for the turrets

|  |  |  |  |
| --- | --- | --- | --- |
| # | Task Description | Estimate Time(hrs) | Owner |
| 1 | Make a UI that allows the player to know what they are upgrading their turret to and how much it will cost | 5 | Ryan Desalvio |
| 2 | Create different looks for turrets that are upgraded | 5 | Nicolas Bratton |
| 3 | Implement new abilities for machine gun turret | 7 | Keith Droll |
| 4 | Implement new abilities for rocket turret | 7 | Keith Droll |
| 5 | Implement new abilities for anti-air turret | 7 | Keith Droll |
| 6 | Implement new abilities for heath tower | 7 | Keith Droll |
| 7 | Implement new abilities for freeze tower | 7 | Keith Droll |

**Acceptance Criteria:** User is able to select a turret, open up a menu, spend their currency, and upgrade a turret so it may have a new ability.

User Story #2

As a developer, I would like the player to be able to purchase upgrades for their character

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| --- | --- | --- | --- |
| # | Task Description | Estimate Time(hrs) | Owner |
| 1 | Add UI to allow the user to select upgrades for their character that shows what the upgrade is and how much it will cost | 5 | Ryan Desalvio |
| 2 | Create new abilities for the player to purchase | 7 | Nicolas Bratton |
| 3 | When a new ability is purchased, that ability is applied to the player. | 2 | Nicolas Bratton |

**Acceptance Criteria:** User is able to open up a menu in game and select a set of upgrades to the player that will be applied if the user has enough currency

User Story #3

As a developer, I would like the player to be able to purchase upgrades for their guns

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| --- | --- | --- | --- |
| # | Task Description | Estimate Time(hrs) | Owner |
| 1 | Add UI to allow the user to open a menu that shows what upgrades are available for their gun and how much they will cost. | 5 | Ryan Desalvio |
| 2 | Create new upgrades for the different guns in the game | 4 | Nicolas Bratton |
| 3 | When a new upgrade is purchased, that ability is applied to the gun | 3 | Nicolas Bratton |

**Acceptance Criteria:** User is able to open up a menu in game and select a set of upgrades to the weapon the player is using that will be applied if the user has enough currency

User Story #4

As a developer, I would like to include a in-game store for the player to purchase weapons

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| --- | --- | --- | --- |
| # | Task Description | Estimate Time(hrs) | Owner |
| 1 | Make a UI that allows the player to know what guns are available for them to buy and how much each gun costs. | 5 | Ryan Desalvio |
| 2 | When a new gun is purchased, the old gun the player was using is swapped with the new gun and the new gun functions properly | 5 | Ryan Desalvio |

**Acceptance Criteria:** The user is able to open up a menu in game and select from a set of weapons, a new one to purchase and if that gun is purchased, the new gun replaces the current gun of the player.

User Story #5

As a user, I would like to play a polished and balanced game

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| --- | --- | --- | --- |
| # | Task Description | Estimate Time(hrs) | Owner |
| 1 | Ensure that no weapons are overpowered | 8 | Garrett Kizior |
| 2 | Ensure that the enemies do not spawn too fast and do not have too much health/speed/damage | 8 | Garrett Kizior |
| 3 | Ensure none of the turrets do too much/little damage/make the game too easy | 8 | Garrett Kizior |
| 4 | Ensure that none of the upgrades, turrets, or guns cost too much/little in the game | 8 | Garrett Kizior |
| 5 | Map is altered to feel more playable and is good looking | 5 | Keith Droll |

**Acceptance Criteria:** When the user plays the game, the game does not feel unfair and has a genuinely to fun to play.

User Story #6

As a user, I would like be able to view high scores.

|  |  |  |  |
| --- | --- | --- | --- |
| # | Task Description | Estimate Time(hrs) | Owner |
| 1 | Make a menu option in main menu that shows the high scores of the player | 2 | Nicolas Bratton |
| 2 | Create UI screen for high scores | 3 | Nicolas Bratton |
| 3 | The high scores of a player are stored persistently and can be viewed at any time even after closing and reopening the game | 5 | Nicolas Bratton |

**Acceptance Criteria:** User is able to go to the high scores section and see their previous high scores in the game.

User Story #7

As a user, I would like to be able to use a Xbox/PS4 controller to play the game.

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| --- | --- | --- | --- |
| # | Task Description | Estimate Time(hrs) | Owner |
| 1 | Implement support for Xbox controller | 2 | Nicolas Bratton |
| 2 | Implement support for PS4 controller | 2 | Nicolas Bratton |

**Acceptance Criteria:** User can choose whether they want to use an Xbox or PS4

User Story #8

As a developer, I would like to include an achievement system for the player

|  |  |  |  |
| --- | --- | --- | --- |
| # | Task Description | Estimate Time(hrs) | Owner |
| 1 | Make a main menu section for achievements | 2 | Nicolas Bratton |
| 2 | Create UI screen for achievements | 3 | Nicolas Bratton |
| 3 | Whenever the player earns an achievement, the player is alerted with a pop up on the screen | 3 | Nicolas Bratton |
| 4 | When an achievement is earned, the player is rewarded with a small amount of gold | 2 | Nicolas Bratton |

**Acceptance Criteria:** User is able to view and earn different achievements in game.

User Story #9

As a developer, I would like to add a new shooting enemy.

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| --- | --- | --- | --- |
| # | Task Description | Estimate Time(hrs) | Owner |
| 1 | The new enemy is complete with animations | 7 | Ryan Desalvio |
| 2 | The enemy is able to lock on to the player and shoot projectiles at him | 6 | Ryan Desalvio |
| 3 | The new enemy is able to shoot at base | 2 | Ryan Desalvio |
| 4 | Ensure the new enemy is added in the spawning system and is compatible to work in the mutation system | 8 | Garrett Kizior |

**Acceptance Criteria:** The user is able to shoot at and be killed by the new enemy and the new enemy presents new challenges to the player.

**Remaining Backlog**

N/A