CS 407 team 7

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

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

**Sprint 1 Planning Document**

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

Work Hours:

|  |  |
| --- | --- |
| **Developer** | **Number of Hours** |
| Ryan DeSalvio | 44 |
| Nicolas Bratton | 42 |
| Garrett Kizior | 42 |
| Keith Droll | 45 |

User Story #1

As a user, I would like to be able to place turrets from a top down perspective

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| --- | --- | --- | --- |
| # | Task Description | Estimate Time(hrs) | Owner |
| 1 | Player can switch from the first person perspective to a top down view of the map in between rounds | 3 | Garrett Kizior |
| 2 | Player can choose which item he wants to purchase from a list of items (given the player has enough currency) | 5 | Garrett Kizior |
| 3 | Selected item can be placed on the map with predefined restrictions such as turrets cannot be placed within 1 tile of each other | 7 | Garrett Kizior |

User Story #2

As a user, I would like to have multiple turrets with different abilities that can automatically shoot and target enemies

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| --- | --- | --- | --- |
| # | Task Description | Estimate Time(hrs) | Owner |
| 1 | Design multiple models for the turrets in the game | 8 | Keith Droll |
| 2 | Implement aiming logic for turrets so they may lock on to enemies | 10 | Keith Droll |
| 3 | Implement animations for turrets | 7 | Keith Droll |
| 4 | Implement ammunition for turrets | 2 | Keith Droll |

User Story #3

As a user, I would like to pick up dropped currency from destroyed enemies

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| # | Task Description | Estimate Time(hrs) | Owner |
| 1 | Implement currency dropping logic | 3 | Nick Bratton |
| 2 | Implement currency counter for player | 2 | Nick Bratton |

User Story #4

As a developer, I would like to like to include animations for character/enemy movement

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| # | Task Description | Estimate Time(hrs) | Owner |
| 1 | Find and implement multiple enemy models for the game | 9 | Ryan DeSalvio |
| 2 | Find and implement movement animations for the enemy models | 10 | Ryan DeSalvio |
| 3 | Find and implement character movement and reload animations | 10 | Ryan DeSalvio |

User Story #5

As a developer, I would like to allow the character to equip multiple weapons

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| # | Task Description | Estimate Time(hrs) | Owner |
| 1 | Find different weapon meshes that would be compatible with the game and theme | 5 | Garrett Kizior |
| 2 | Implement different shooting projectiles for each weapon | 4 | Ryan DeSalvio |
| 3 | Find and implement different animations for each weapon | 9 | Ryan DeSalvio |

User Story #6

As a developer, I would like for some enemies to follow the character blindly,

As a developer, I would like for some enemies to shoot the character

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| --- | --- | --- | --- |
| # | Task Description | Estimate Time(hrs) | Owner |
| 1 | Implement different AI logic for different characters | 5 | Nick Bratton |
| 2 | Implement shooting projectiles for enemy shooting characters | 2 | Ryan DeSalvio |
| 3 | Find and implement different animations for each enemy attack | 10 | Nick Bratton |

User Story #7

As a developer, I would like to mutate the enemy’s attributes (health, speed, strength) each round based on enemy performance

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| --- | --- | --- | --- |
| # | Task Description | Estimate Time(hrs) | Owner |
| 1 | Implement logic that can mutate enemies’ attributes on spawn | 8 | Garrett Kizior |
| 2 | Implement storage system that tracks enemy success rate over their lifespan and can be used to determine success of different types of enemies | 10 | Garrett Kizior |
| 3 | Implement visual cues for mutated enemies | 4 | Garrett Kizior |

User Story #8

As a developer, I would like for enemies to spawn at an increasing rate as the rounds progress

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| # | Task Description | Estimate Time(hrs) | Owner |
| 1 | Implement spawning logic for enemy characters that causes varied characters to spawn at an increasing difficulty | 10 | Nick Bratton |
| 2 | Disable enemy spawning during rounds and have a smooth transition between buying period and first-person period | 4 | Nick Bratton |

User Story #9

As a user, I would like to be able to play on a well-designed map that encourages experimentation and is visually appealing

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| # | Task Description | Estimate Time(hrs) | Owner |
| 1 | Design visually interesting map | 10 | Keith Droll |
| 2 | Design map that challenges player to experiment different strategies (Barriers, elevation differences, terrain differences) | 8 | Keith Droll |

User Story #10

As a user, I would like to be able to see my base’s health

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| --- | --- | --- | --- |
| # | Task Description | Estimate Time(hrs) | Owner |
| 1 | Find and implement center base model | 4 | Nick Bratton |
| 2 | Implement health bar for base which can be seen by player | 4 | Nick Bratton |