Sprint 2 Planning Document

Team 1 - S2 Studios

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Sprint Overview

The purpose of this sprint is to continue building up on the game. This process involves the following: Adding a menu to set up each match by selecting different game modes such as free for all, team deathmatch, and king of the hill. Additional functionality will be added to character control, such as backstab attacking, dashing, and two new time distortions (freeze and speed up). Different visual indicators will also be added to notify player's current state like: low-on-health, picked-up-extension etc., so that players themselves/enemy can make different strategies based on the indicators. We're also testing everything.

It should also be noted that testing will be performed using live inputs and some scripted events, given this is a videogame.

Scrum Master

Mehran Einakchi

Scrum Meeting Schedule

We are going to have 2 meetings every week where we use to have lecture, each meeting is going to be about an hour long and 1 meeting on the weekend.

Risks/Challenges

This sprint, some overhead will be present when becoming familiar with the workflow due to other classes exams and project's progress in terms of testing in C#. Now that we've reached mid-development, bugs may begin to appear that affect other systems, making them harder to track down.

Current Sprint Details

User Story 1

As a User, I want a free for all game mode that pits players against each other, last player standing wins.

#	Task Description	Estimated Time	Owner
1.	Implement game controller, the logic of the game.	8 Hrs	Harrison
2.	Create a victory screen to show the users the winner of the match.	4 Hrs	Harrison
3.	Implement the transition from the end of the match to the menu.	3 Hrs	Harrison
4.	Test the logic of the game controller for free for all.	5 Hrs	Harrison

Acceptance Criteria:
- Given that the game mode for free for all is set up, when the users starts the game, then they will win the game if their player is the last one left.
- Given that the transition from the end of the match to the menu is implemented, when the match ends, then the user will be able to see a transition to the menu.
- Given that the victory screen is created, when a user wins the match, then they will visually see it on the screen (and can brag to their friends).

● Given that the tests are created, when a developer runs the tests, they will be able to verify that it the logic works correctly.

User Story 2

As a User, I want to have more intricacy to my attacks

#	Task Description	Estimated Time	Owner
1.	Player backstab mechanic. If behind a player's back do more damage to that player.	5 Hrs	Brian
2.	Player melee chain attacks. When the player presses the attack button in fast succession do different animations and change damage output.	7 Hrs	Harrison
3.	Allow player to dodge attacks both ranged and melee with a dash functionality.	7 Hrs	Han
4.	Create tests for the various attacking methods.	6 Hrs	Harrison

Acceptance Criteria:
● Given that there is a backstab mechanic, when the user plays, (then) the user should kill others faster with the correct positioning.
● Given that the combo melee attack is set up, when the players attack in quick succession, (then) the players should see new animations and do increased damage.
● Given that the player dodge ability is added in, when the players react within a time frame, (then) the players will prevent themselves from being damaged.
● Given that the tests are created, when the game is played, there will be a low probability of bugs appearing.

User Story 3

As a user, I want to see different kinds of power-ups.

#	Task Description	Estimated Time	Owner
1.	Implement power-up that changes distortion to speedup time.	4 Hrs	Brian
2.	Instantiate power-up that changes distortion to freeze time.	4 Hrs	Brian
3.	Implement power-up that changes distortion to slow down time.	4 Hrs	Brian
4.	Implement power-up stacking that allows multiple pickups of the same time distortion powerup to make it more powerful.	5 Hrs	Brian
5.	Create art for all new powerups.	5 Hrs	Brian
6.	Create tests for the new powerups.	5 Hrs	Brian

Acceptance Criteria:
- Given the powerup that changes distortion to speedup time is created, when the user picks up this powerup their current distortion ability will change to speedup time.
- Given the powerup that changes distortion to freeze time is created, when the user picks up this powerup their current distortion ability will change to freeze time.
- Given the powerup that changes distortion to slow time is created, when the user picks up this powerup their current distortion ability will change to slow time.

- Given the powerup stacking is implemented when the player picks up multiple powerups of the same distortion ability that ability will become more powerful
- Given the art for all the new powerups are implemented, the player will be able to discern between unique powerups.
- Given the tests for the new powerups are created, as game developers and as users we will be able to ensure that the powerups work and are secure.

User Story 4

As a player, I would like to know when I am about to die (via visual indicator).

#	Task Description	Estimated Time	Owner
1.	Create visual indicator for player prefab	5 Hrs	Han
2.	Modify visual indicator to change when health is low	5 Hrs	Han
3.	Create a visual animation to indicate player when they pick up a time-extension powerup(shining/flash).	6 Hrs	Han
4.	Testing player visual indicator	5 Hrs	Han

Acceptance Criteria:
- Given that visual indicator have been set up, when player is low on health, then the player's model becomes more transparent while the outline still visible.
- Given that visual animation to indicate player picking up a time-extension power up have been set up, when player picks up a power up for time-extension, then a significant indication will pop up to notify the player.
- Given that the testing have been passed, when player engaging in battle, then indicator should work fluently and accurately.

User Story 5

As a user, I want to be able to have multiple time distortion options.

#	Task Description	Estimated Time	Owner
1.	Create art and animations for the speed up time distortion.	4 Hrs	Michael
2.	Create art and animations for the freeze time distortion.	4 Hrs	Michael
3.	Implement freeze time prefab and class that freezes time around the calling player.	6 Hrs	Michael
4.	Implement speed up time prefab and class that affects only the calling player.	6 Hrs	Michael
5.	Create tests for both freeze and speed up time.	5 Hrs	Michael

Acceptance Criteria:
- Given the art and animations are completed, when the users press the time distortion button after collection the new powerup, then they will see a different time distortion effect.
- Given the freeze time distortion is implemented, when the user freezes time, then the user and everything within a radius of its player will stop moving until the user releases the button.
- Given the speed up time distortion is implemented, when the user speeds up time, then the user will move faster around the map.
- Given that the tests have been set up, when the developer runs the tests, the developer will then guarantee proper function.

User Story 6

As a player, I would like to have a game menu.

#	Task Description	Estimated Time	Owner
1.	Create art for game menu	5 Hrs	Mehran
2.	Implement functions to change different number of players	5 Hrs	Elijah
3.	Implement buttons to select between different maps	5 Hrs	Elijah
4.	Implement buttons to select between different game modes.	5 Hrs	Michael
5.	Implement advanced options for changing game mode values.	5 Hrs	Mehran
6.	Create tests to ensure proper menu flow.	5 Hrs	Han

Acceptance Criteria:
- Given the game menu art is created, when the user starts the game, then they are able to interact with a clean, beautiful menu.
- Given the functions to change number of players is implemented, when the user select different number of player, then the correct number of player should be spawned into the map.
- Given the map selection function is implemented, when the user change the map option, then the user's character will spawn into the correct map that they selected.
- Given the gamemode selection function is implemented, when the user change between different game mode, then the player is able to play in the game mode they selected.
- Given the advanced options function is implemented, when the player change different value of the game, then the player is able to play in the game value they entered.
- Given the testing is done, when the developer is using the game menu, then the game menu function should work properly and correctly generate

different game mode with different maps, number of players and game values.

User Story 7

As a user, I want a king of the hill game mode that requires players to got to specific points on the map to earn additional time.

#	Task Description	Estimated Time	Owner
1.	Implement game controller, the logic of the game.	8 Hrs	Mehran
2.	Create a victory screen to show the users the winner of the match.	4 Hrs	Mehran
3.	Implement the transition from the end of the match to the menu.	3 Hrs	Mehran
4.	Test the logic of the game controller for king of the hill.	5 Hrs	Mehran

Acceptance Criteria:
- Given that the game mode for king of the hill is finished, when the users begin the game, they will win if they gained the most time from the selected areas/hills on the map.
- Given that the transition from the end of the match to the menu is implemented, when the match ends, then the user will be able to see a transition to the menu.
- Given that the victory screen is created, when a user wins the match, then they will visually see it on the screen (and can brag to their friends).
- Given that the tests are created, when a developer runs the tests, they will be able to verify that it the logic works correctly.

User Story 8

As a user, I want a team deathmatch game mode that pits two teams against each other in a deathmatch to run the other team's cumulative time to zero.

#	Task Description	Estimated Time	Owner
1.	Implement game controller, the logic of the game.	8 Hrs	Elijah
2.	Create a victory screen to show the users the winner of the match.	4 Hrs	Elijah
3.	Implement the transition from the end of the match to the menu.	3 Hrs	Elijah
4.	Test the logic of the game controller for team deathmatch.	5 Hrs	Elijah

Acceptance Criteria:
- Given that the game mode for team death match is implemented, when the users play this game mode, they will only win if the entire enemy team is eliminated from the game.
- Given that the victory screen is created, when a user wins the match, then they will visually see it on the screen (and can brag to their friends).
- Given that the transition from the end of the match to the menu is implemented, when the match ends, then the user will be able to see a transition to the menu.
- Given that the tests are created, when a developer runs the tests, they will be able to verify that it the logic works correctly.

TIME TABLE WORKLOAD AND TOTAL (In Hours)

Harrison	Mehran	Brian	Han	Michael	Eli	TOTAL
33	30	32	33	30	30	188

Remaining Backlog

Functional Requirements

1. ~~As a player, I would like to chain melee attacks into a combo for more dynamic gameplay.~~
2. ~~As a player, I would like to have a ranged attack, that costs time to "throw."~~
3. ~~As a player, I would like to charge my attack to use the ranged throw, this would stop movement.~~
4. ~~As a player, I would like to be able to aim while charging the attack.~~
5. ~~As a player, I would like to have a backstab mechanic in which a player can inflict/take more time when meleeing another player from behind.~~
6. ~~As a player, I would like to be able to dash through attacks/arrow from ranged weapons.~~
7. ~~As a player, I would like to distort time in a radius around me to add a twist/challenge to those fighting me (costs extra time).~~
Powerups:
8. ~~As a player, I would like to pick up power-ups that allow me to further explore the idea of time, by permanently changing my time distortion mechanic.~~
9. ~~As a player, I would like the default time distortion to slow the time around me.~~
10. ~~As a player, I would like to have a power-up that changes my distortion to speedup time.~~
11. ~~As a player, I would like to have a power-up that changes my distortion to freeze time around me.~~
12. ~~As a player, I would like consecutive identical distortion power-up pickups to multiply the effect of the distortion.~~
13. ~~As a player, I would like a power-up that slows time.~~
14. As a player, I would like a powerup that changes my distortion to rewind time.

15. ~~As a player, I would like a one-time pick-up that increases my remaining time.~~
16. ~~As a player, I would like a HUD text indicator to show my time remaining.~~
17. As a player, I would like a radial circle to indicate the time remaining.
18. ~~As a player, I would like to play with my friends.~~
19. ~~As a player, I would like to play with at least three friends.~~
20. As a player, I would like a sudden death implementation when there is a tie.
21. As a player, I would like the sudden death mode to have less time than standard as well as the removal of the time steal mechanic.
22. ~~As a player, I would like to play against my friends or strangers.~~
23. ~~As a player, I would need to steal "time" from other players, creating competition and survival instincts to occur between players.~~
24. ~~As a player, I would like to differentiate myself from the people I am facing visually using customization options or character options.~~
25. ~~As a player, I would like to know when I am about to die (via visual indicator).~~
26. ~~As a player, I would like to have a option menu for game mode values.~~
27. As a player, I would like to switch teams between players.
28. As a player, I would like to vote for the next game mode/map.
    Game modes:
29. ~~As a user, I would like a game mode that pits players together in a deathmatch free for all, last player standing wins.(FFA)~~
30. ~~As a user, I would like a game mode that pits two teams against each other in a deathmatch to run the other team's cumulative time out. (TDM)~~
31. ~~As a user, I would like a game mode in which players play to capture the most time from different points on the map in a king of the hill style game. (KOTH)~~
32. ~~As a user, I would like a game mode that causes stolen time to instead fill up a U.I. bar in the player's color. The player who contributed the most after the bar is filled wins, infinite respawns (after timeout). (FTB)~~
33. ~~As a player, I would like to be able to select game modes that has players capture flags to homebase. (CTF)~~
34. ~~As a user, I would like a vanilla gamemode FFA without any powerups.~~
35. As a user, I would like to own a large quantity of seconds to use as currency.
36. If time allows, I would like to play a adventure mode that has a story line.(Adv)

37. If time allows, I would like to have a lobby to organize online play.
38. If time allows, I would like to be able to integrate online and local play.
39. If time allows, I would like a reward for successive wins.
40. If time allows, I would like to play the game on different platform.
41. If time allows, I would like to play with/against with players from different platform.
42. If time allows, I would like the game be able to record my match history.
43. If time allows, I would like to save my single player game process.
44. If time allows, I would like to use time as a currency to buy rewards, such as randomized cosmetic items.
45. If time allows, I would like to pair against strangers online.
46. If time allows, I would like to pair with strangers online.
   Kits:
47. If time allows, I would like to choose between multiple characters with different "kits."
48. If time allows, I would like to have each character look aesthetically different.
49. If time allows, I would like to have a character that starts with more time, but moves a bit slower.
50. If time allows, I would like to have a character that moves faster, but steals less time from other players.
51. If time allows, I would like to have a character that steals more time from other players, but starts with less time.

(Non-Functionals are on the following page)

Non-Functional Requirements

1. ~~As a player, I would need to move consistently and one to one with my inputs with lowest input delay possible. (Response time)~~
2. ~~As a player, I would like the game's interface to be easy to pick up but difficult to master. (UI)~~
3. ~~As a player, I would like to have a melee attack that feels like an attack that has impact; action and reaction sort of animation or visual effects.~~
4. ~~As a player, I would like the game to be very responsive(low response time) because it's a real time video game.~~
5. If time allows, I would like the game to have a wide selection of maps.
6. If time allows, I would like the game to have a custom map creator.
7. If time allows, I would like the game to have an adventure co-op mode.
8. If time allows, I would like the game to have war fog or limitations on vision of the player.
9. If time allows, I would like the game to have a floodlight/blind mode of gameplay mixed with a split screen form of gameplay.
10. If time allows, I would like the game to have more than one game mode or custom lobby type.
11. If time allows, I would like the game to have a sparklight mode of gameplay where the player can only see around the character when the character performs an attack on a nearby object or player.
12. If time allows, I would like the game to look sleek and smooth in its animations and art style.
13. If time allows, I would like the music and sound effects to really immerse me in the game.
14. If time allows, I would like the game to have scalability of the UI for different platform. (Usability)
15. If time allows, I would like the game to have colorblind mode. (Accessibility)
16. If time allows, I would like the game sessions and player files to be safe and secure so that the game is not vulnerable to hacking. (Security)