

Sprint 2 Planning Document

Keith Droll, Nicolas Bratton, Garrett Kizior, Ryan DeSalvio

Team 2 – Project Trials

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Sprint Overview

For Sprint 2 we will focus on more advanced systems, such as health, experience, character attributes as well as polishing existing systems like our random level generator, weapon functionality, and workable menus.

Scrum Master: Ryan DeSalvio

Meeting Schedule: Tuesdays, Thursday, and Saturday at 1:30pm

Risks/Challenges: A challenge we will face will be gaining familiarity with the software development package (Unity), because none of us have proficient skill with this tool, and those that do have a basic understanding will need to help those that have never used it before. This could use some of our time during the Sprint that could be used developing instead. Also familiarizing ourselves with git. We have had a lot of trouble with it and it will surely consume a considerable amount of our unrecorded man hours

Current Sprint Detail

User Story #1

As a user, I would like to pick up consumable items

#	Task Description	Estimated Time (hrs)	Owner
1	Design item models	8	Ryan
2	Make a consumable item class	3	Nick
3	Allow player to pick up item in game	5	Ryan
4	When item is picked up it should alter player characteristics/attributes	2	Garrett

Acceptance Criteria:

- Each in game item should have its own model image
- Given that there is an item in game, player should be able to pass over it to consume it
- Given that there is an item to pick up in game, when picked up the item should alter characteristics/attributes

User Story #2

As a developer, I would like to have an updated random level generator

#	Task Description	Estimated Time (hrs)	Owner
1	Generation should never make an empty space on the map unreachable	8	Garrett
2	Design more boundary models	8	Ryan
3	Generation shouldn't only place single block boundaries	10	Garrett
4	Generations should be playable	2	Garrett

Acceptance Criteria:

- Given that the random level generator is made correctly, an empty space should never be non-accessible by the player or enemy
- Given that a boundary is greater than one unit long a different model should be used for its image
- Given that the random level generator is made correctly walls should not generate too closely and levels should be playable

User Story #3

As a user, I would like to see information in game about my player and other enemies

#	Task Description	Estimated Time (hrs)	Owner
1	Create attacking system for player	6	Keith
2	Create attacking system for enemies	6	Keith
3	Display health for player on screen	2	Nick
4	Display experience for player on screen	3	Nick
5	Display elapsed level time and score on screen	3	Nick
6	Display how many enemies killed on screen	2	Nick

Acceptance Criteria:

- Given that the Player successfully attacks the enemy, the enemy should lose health.
- Given the Enemy successfully attacks the player, the player should lose health.
- The Player's health should be visible on-screen as part of the UI.
- The Player's experience should be visible on-screen as part of the UI.
- The time currently elapsed in the level and the Player's score should be visible on-screen as part of the UI.
- The number of enemies killed by the player should be visible on-screen as part of the UI.

User Story #4

As a user, I would like to see information in game menus

#	Task Description	Estimated Time (hrs)	Owner
1	Create viewable options menu path	6	Keith
2	Create viewable credits menu path	6	Keith
3	Create high scores menu path	6	Nick
4	Create working exit game menu path	3	Keith
5	When paused in game, show current character attributes and characteristics	10	Garrett
6	Create end-game statistics screen	3	Keith

Acceptance Criteria:

- Given that the User selects the options option in the menu, he/she should be able to see different configurable options to modify (and/or see control scheme).
- Given that the User selects the credits option in the menu, he/she should be able to see a list of the development team.
- Given that the pause and begin menu works, when the User selects 'Quit' or 'Exit Game', the game should exit gracefully.
- Given that the High Score functionality works, when the User dies/completes the game, they should see their high score compared with other's high scores achieved on the local machine.
- Given that the game keeps track of characteristics, when the User pauses the game, they should be able to see their current attributes and characteristics.

User Story #5

As a user, I would like to be able to spend my experience points

#	Task Description	Estimated Time (hrs)	Owner
1	Create a UI to spend experience points	10	Ryan
2	Experience points should be reduced and selected characteristics increased	4	Nick
3	Increased characteristics should change in game play and character attributes	8	Garrett

Acceptance Criteria:

- Given that experience points are tracked throughout the game, when the User reaches the end of a level, they should be able to spend their experience points through a graphical interface to modify their attributes.
- Given that the experience points UI works, when the User selects different options in the experience point menu, their experience points should decrease and their attributes increase respective to their choice.
- Given that the experience point menu works, when a choice is made, the characteristics of the Player should mirror this change (do more damage, move faster, etc).

User Story #6

As a user, I would like to hear sound effects for certain game events

#	Task Description	Estimated Time (hrs)	Owner
1	Sound Effect for player damage	4	Ryan
2	Sound Effect for enemy death	2	Nick
3	Sound Effect for enemy damage	3	Nick

Acceptance Criteria:

- Given that the sound is properly implemented, when the Player attacks an enemy, a distinct sound is played to demonstrate a successful hit.
- Given that the sound is properly implemented, when an Enemy attacks the Player, a distinct sound is played to demonstrate a successful hit.
- Given that the sound is properly implemented, when an enemy dies, a distinct sound is played to demonstrate their death.

User Story #7

As a user, I would like to be able to play a complete level

#	Task Description	Estimated Time (hrs)	Owner
1	Choose level difficulty	5	Garrett
2	I would like to choose a perk after each level	5	Ryan
3	I would like for enemies to spawn at an increasing rate as the level progresses	5	Garrett
4	Complete a soundtrack for level	10	Nick

Acceptance Criteria:

- Given that the level is made correctly I should be able to select a level difficulty and the enemies should either be harder to kill or the amount of enemies is increased
- Given that the level is made correctly and the level is over I should be able to select a perk for my player and it should alter player characteristics/attributes
- As the level is being played the rate at which enemies spawn should be increasing
- When the game is being played there should be a looping soundtrack

Backlog

Functional:

COMPLETE	As a user, I would like to start a new game
SPRINT2	As a user, I would like to pick up items
COMPLETE	As a user, I would like to pick up weapons
	As a user, I would like to be able to choose different dialogue options
SPRINT2	As a user, I would like to be able to view high scores
SPRINT2	As a user, I would like to know what my current health, experience bar, and level number is
SPRINT2	As a user, I would like to spend experience points on skills
SPRINT2	As a user, I would like to choose a perk after each level
COMPLETE	As a user, I would like to be able to use a controller or keyboard
SPRINT2	As a user, I would like my character attributes to be shown in a simple menu
SPRINT2	As a user, I would like to choose my difficulty level (if time allows)
COMPLETE	As a user, I would like to pause the game (if time allows)
	As a user, I would like to fight a final boss at the end of the game
	As a user, I would like to fight in either ranged and melee styles
SPRINT2	As a user, I would like to view an end-game statistics screen
COMPLETE	As a developer, I would like to like to include animations for character movement
COMPLETE	As a developer, I would like to like to include animations for character attack
SPRINT2	As a developer, I would like to be able to store high scores
SPRINT2	As a developer, I would like for enemies to spawn at an increasing rate as the level progresses
SPRINT2	As a developer, I would like to randomly generate levels, maps
	As a developer, I would like to make sure gameplay is balanced (enemy vs. player)
	As a developer, I would like each level to have a different setting
	As a developer, I would like the story to be entertaining yet unobtrusive to gameplay
	As a developer, I would like the story to be a choose-your-own-adventure style story
	As a developer, I would like the game to support multiple platforms (if time allows)
	As a developer, I would like to implement an achievement system (if time allows)
SPRINT2	As a developer, I would like to incorporate a start menu that allows for starting games, and viewing high scores, etc.
	As a developer, I would like to allow for cooperative play (if time allows)
COMPLETE	As a developer, I would like the game to run off an executable file
SPRINT2	As a developer, I would like to implement different terrain objects that affect the character
COMPLETE	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

SPRINT2	As a developer, I would like to have a health system for enemy (not all enemies have the same amount of health)
	As a developer, I would like to allow the character to equip armor as well as weapons (if time allows)
SPRINT2	As a developer, I would like to include a credit scene at the end of game (if time allows)
	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)
SPRINT2	As a developer, I would like to implement the Abstract Character Class structure
SPRINT2	As a developer, I would like to implement the Abstract Item Class structure
SPRINT2	As a developer, I would like to implement the Environment Class
	Non-functional:
COMPLETE	As a user, I would like to have fast response times with user input
COMPLETE	We must be able to play this game on PC
SPRINT2	The menus and interface needs to be simple, intuitive and responsive
COMPLETE	We must have fast frame rates, and minimize computer resources
	Art style must be attractive and simple
	Game must include catchy and fitting soundtrack
SPRINT2	Game must include sound effects for different events
COMPLETE	Game is stored in an executable file - this prevents people from viewing source code