- 1. User Story: 01: Prevent Crashing
  - a. As a Player
  - b. I Want to play the game without it crashing mid-level
  - c. So that I can enjoy the game from start to finish
  - d. Priority: 1
  - e. Estimate: 5
- 2. User Story 02: Move Customization Menu
  - a. As a player
  - b. I Want to know how I can customize my player and be able to start the game afterwards
  - c. So that I can have a more enjoyable playing experience picking what I like
  - d. Priority: 2
  - e. Estimate: 2
- 3. User Story: 03: Add Coin Pickup
  - a. As a Player
  - b. I Want a way to earn points while evading enemies and moving around the screen
  - c. So that the game has a purpose and incentive to earn points
  - d. Priority: 3
  - e. Estimate: 2
- 4. User Story: 04: Illegible Help Popup
  - a. As a player
  - b. I want to be able to understand the game controls
  - c. So that I understand how to play
  - d. Priority: 4
  - e. Estimate 2
- 5. User Story: 05: Rewrite Help Popup
  - a. As a player
  - b. I want to be able to have a working help menu
  - c. So that I have an understanding what the game is about
  - d. Priority: 5
  - e. Estimate: 1
- 6. User Story: 06: Lagging
  - a. As a Player
  - b. I want to play without worrying about dying while my avatar lagged
  - c. So that I can enjoy the game
  - d. Priority: 6
  - e. Estimate: 2
- 7. User Story: 07: Add Better Music
  - a. As a player
  - b. I want to play the game listening to music that is more than one song
  - c. So that I can enjoy the game listening to a variety of my favorite songs without getting sick of one
  - d. Priority: 7
  - e. Estimate: 3
- 8. User Story: 08: Add Incremental Difficulty

- a. As a player I want the levels to start off easy and slowly get harder as I continue the game
- b. I want to be able to enjoy the game as I get to each boss level
- c. So that I can achieve every level with a fair difficulty
- d. Priority: 8
- e. Estimate: 8
- 9. User Story: 09: Change Game Aesthetic
  - a. As a Player
  - b. I want to see a theme that is consistent and matches
  - c. So that the game is easier to follow and more pleasing to the eye
  - d. Priority: 9e. Estimate: 5

## **TEST CASE INFORMATION**

Test Case ID	MCM_US02 ver1.0			
Owner of test	Shannon Luker			
Test name	Move Customization Menu			
Test objective	Verify that the customization m	enu is visible to the player and comes	up before	
	they start the game			
Step	Action	Expected Result	Pass/Fail	
1	Click on desired Wave Game method	Customization Menu is displayed	Fail	
2	Choose an Avatar to Play with	The Wave Game begins	Fail	
· · · · · · · · · · · · · · · · · · ·				
Test Result: Fail				
Customization Menu is next to other game methods and doesn't go straight into the game.				

Test Case ID	ABM_US06 ver1.0		
Owner of test	Shannon Luker		
Test name	Add Better Music		
Test objective	Add multiple songs to the game	so the player has a better overall user	experience
Step	Action	Expected Result	Pass/Fail
1	Start the game	New music is played in the	Fail
		background	
2	Click on desired Wave Game	Music changes to a different song	Fail
	method		
3	Choose an avatar	Music is still playing	Fail

4	Play the Wave Game	Music plays and changes with each	Fail		
		new level			
	Test Re	esult: Fail			
Music doesn't cha	Music doesn't change and game freezes				

Test Case ID	L_US06 ver1.0			
Owner of test	Gabby Licht	Gabby Licht		
Test name	Lagging	Lagging		
Test objective	Make sure the player is moving	fast enough and not lagging		
Step	Action	Expected Result	Pass/Fail	
1	Start the game	The game starts running	Pass	
2	Click on desired Wave Game method	The game mode selected runs	Pass	
3	Play the game for 10 minutes to see if lag is still noticeable	The player is no longer noticeably lagging	Fail	
Test Result: Fail				
The player is lag	, , , ,	game making it hard for the players to	enjoy the	

Test Case ID	CGA_US09 ver1.0			
Owner of test	Gabby Licht			
Test name	Change Game Aesthetic	Change Game Aesthetic		
Test objective	Make overall theme match the p	player's choice of character		
Step	Action	Expected Result	Pass/Fail	
1	Start the game	The game starts running	Pass	
2	Click on desired Wave Game	The customization screen should	Fail	
	method	come up		
3	Choose desired character from	The overall theme (background,	Fail	
	customization screen	enemies, etc.) change to match the		
		selected character		
4	Play the Wave Game	Theme is visible for all levels and	Fail	
		enemies while playing		
Test Result: Fail				
The aesthetic of the game doesn't match, and the customization menu hasn't been moved yet for the				
player to go directly into it to choose the character/theme of the game.				

Test Case ID	DC USO1 yor1 0			
	PC_US01 ver1.0			
Owner of test	Robert Martinez			
Test name	Prevent game from crashing			
Test objective	Play the game without crashing mid gameplay without game over or losing all			
	health			
Step	Action	Expected Result	Pass/Fail	
1	Choose Waves mode	Game starts and user can begin	Pass	
		playing		
2	Purposely collide with enemies	Health should decrease and allow	Fail	
	with enough health to survive	user to keep playing		
	impact			
3	Purposely collide with enemies	Health should reach 0 and game	Fail	
	when health is low and next	over menu should display with		
	impact would end the game	input box for leaderboard		
4	Choose Survival Mode	Game starts and user can begin	Pass	
		playing		
5	Purposely collide with enemies	Health should decrease and allow	Fail	
	with enough health to survive	user to keep playing		
	impact			
6	Purposely collide with enemies	Health should reach 0 and game	Fail	
	when health is low and next	over menu should display with		
	impact would end the game	input box for leaderboard		
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## Test Result: Fail

The results are inconsistent as to when the crashing occurs. Because the crashing always occurs when colliding with enemies, we focused on this for the tests. The results show that at different points with each time starting the game, the game will crash before reaching the game over menu.

Test Case ID	ACP_US03 ver1.0			
Owner of test	Robert Martinez			
Test name	Add Coin Pickup			
Test objective	Add coins for user to collect and	l earn points while evading enemies		
Step	Action	Expected Result	Pass/Fail	
1	Player collides with coin sprite	Point value increases by specified	Fail	
		amount		
2	Player evades enemies	Point value only increases by	Fail	
	without colliding with coins	specified amount for surviving time		
		period		
Test Result: Fail				
No coins have been added				

Test Case ID	IHP_US04 ver1.0			
Owner of test	Ashley Mills			
Test name	Illegible Help Popup			
Test objective	Adjusting Help menu to make the controls understandable to better the user experience			
Step	Action	Expected Result	Pass/Fail	
1	Help menu Opens	Able to read text	Fail	
Test Result: Fail  When opening up the Help Popup Menu it is not legible to the players on what controls can be used in game.				

Test Case ID	AID_US08 ver1.0		_	
Owner of	Ashley Mills			
test				
Test name	Add Incremental Difficulty			
Test	Creating the difficulty to where it	slowly progresses into getting harder.		
objective				
	•			
Step	Action	Expected Result	Pass/Fail	
1	Player plays the first levels	Difficulty is easy with minimal	Fail	
		enemies on screen		
2	Player progress to Boss Level	Difficulty is more advanced than	Fail	
		the levels prior		
	•		•	
Test Result: Fail				
The level of d	ifficulty is randomized and there is	no specific order on what difficulty will	be placed for	

Test Case ID	RHP_US05 ver1.0		
Owner of test	Ashley Mills		
Test name	Rewrite Popup Menu		
Test objective	Creating the help menu to pop u	ip right when the game starts with	n legible controls
Step	Action	Expected Result	Pass/Fail
Step 1	Action Start the game	Expected Result Legible help menu popup	Pass/Fail Fail

3	Able to exit out of help menu	Working exit button	Fail	
	and play the game			
Test Result: Fail				
The help pop up option located in the Main men that is unable to read and understand.				