Trash Dash (desktop deployment) Gameplay Logic Test Plan

Test Case #	Scope	Test Case	Pre-condition	Test Steps	Expected Result	Actual Result	Pass/Fail
1	Controls	Player controls are functional	1. Start a gameplay session	1. Press "UP"	Player character should jump and play jump SFX		
				2. Press "Down"	Player character should slide and play slide SFX		
				3. Press "Left"	Player character should move left one lane		
				4. Press "Right"	Player character should move right one lane		
2	Player Statistics	Player can gain score by surviving	1. Start a gameplay session	1. Avoid obstacles	Player's distance HUD element should increment by value of 1. Player's score HUD element should also increase whenever the distance HUD element increments.		
				2. Continue until a player speed increase is observed	Score multiplier HUD element should increase as the player's speed increases. Player score HUD element should gain score by multiplying any distance gained by the current score multiplier.		
3	Player Statistics	Player can collect "Fishbones"	1. Start a gameplay session	1. Collide with "Fishbones"	Player should pick up "Fishbone" and SFX should play. "Fishbone" HUD element should increment by 1 for every "Fishbone" picked up		
4	Player Statistics	Player can collect "Sardines"	1. Start a gameplay session	1. Collide with "Sardines"	Player should pick up "Sardines" and SFX should play. "Sardines" HUD element should increment by 1 for every "Sardines" picked up		
5	Obstacles	Player takes damage by colliding with obstacles	1. Start a gameplay session	1. Collide with "Wheely Bin"	Player character takes damage, Health HUD element updates to grey out 1 heart. Damage SFX, VFX, and animations are played.		
				2. Collide with "Bin"	Player character takes damage, Health HUD element updates to grey out 1 heart. Damage SFX, VFX, and animations are played.		
				3. Collide with "Rat"	Player character takes damage, Health HUD element updates to grey out 1 heart. Damage SFX, VFX, and animations are played.		
				4. Collide with "Highbarrier"	Player character takes damage, Health HUD element updates to grey out 1 heart. Damage SFX, VFX, and animations are played.		
				5. Collide with "LowBarrier" (Can optionally complete test case 6 at this point)	Player character takes damage, Health HUD element updates to grey out 1 heart. Damage SFX, VFX, and animations are played.		
				6. Reset game			
				7. Collide with "RoadworksCone"	Player character takes damage, Health HUD element updates to grey out 1 heart. Damage SFX, VFX, and animations are played.		
				8. Collide with "RoadworksBarrier"	Player character takes damage, Health HUD element updates to grey out 1 heart. Damage SFX, VFX, and animations are played.		
6	Game State	Game logic when running out of hearts functions as intended	1. Start a gameplay session	1. Take damage until no hearts remain	Death animation and particles should play, "Continue?" screen should display		
			2. Have at least 3 "Sardines"	2. Click the green "Continue" button	"Sardine" count should be reduced by given value, Player should revive with 1 heart remaining		
				3. Take Damage	Death animation and particles should play, "Game Over" screen should display		
				4. Reset			
				5. Take damage until no hearts remain	Death animation and particles should play, "Continue?" screen should display		
				6. Click "Game Over" button	"Game Over" screen should display		
7	Power-ups	"Coin Magnet" power-up functions as intended	1. Start a gameplay session	1. Pick up the "Coin Magnet" by running over it	Player should pick up the "Coin Magnet", Buff is displayed on bottom left of HUD, "Fishbones" will be attract to the player regardless of location, SFX and Partides should play		
			2. Play until a "Coin Magnet" spawns	2. Continue running until "Coin Magnet" buff displayed on bottom left HUD expires	Particles should subside, "Fishbones" should no longer be attracted to the player, "Coin Magnet" buff icon should be cleared from the HUD		
8	Power-ups	"Extra Life" power-up functions as intended	1. Start a gameplay session	1. Pick up the "Extra Life" by running over it	Player should pick up the "Extra Life", health HUD element should recolor 1 heart, SFX and particle effect should play		
			2. Take Two Damage				
			3. Play until an "Extra Life" spawns				
9	Power-ups	"Score Multiplier" power-up functions as intended	1. Start a gameplay session	1. Pick up the "Score Multiplier" by running over it	Player should pick up the "Score Multiplier", Buff should be displayed on bottom left of screen, score HUD element should update score multiplier, SFX and particle effect should play		
			2. Play until a "Score Multiplier" spawns	2. Continue running until "Coin Magnet" buff displayed on bottom left HUD expires	Particles and VFX should subside, score HUD element should update score multiplier, "Score Multiplier" buff should be cleared from the screen		
10	Power-ups	"Invincibility" power-up functions as intended	1. Start a gameplay session	1. Pick up the "Invincibility" power-up by running over it	Player should pick up the "Invincibility" power-up. "Invincibility" buff should be displayed in the bottom left of the screen, SFX, VFX, and particle effect should play		
			2. Play until an "Invincibility" power-up spawns	2. Collide with an obstacle	Player should not take damage		
				3. Continue running until "Invincibility" buff displayed on bottom left HUD expires	Particles and VFX should subside, "Invincibility" buff icon should be cleared from the screen		
				4. Collide with an obstacle	Player should take damage		