

SPACE WAR

TEST PLAN

Different components and their test plan are given below:

1. Testing the Home Screen

- Is the Game title displayed and visible to the user - |Expected – Yes | Result – Yes|
- Is the artwork displayed and visible - |Expected – Yes | Result – Yes|
- Are Start instructions clearly visible - |Expected – Yes | Result – Yes|
- Does clicking on the blue box start the game – |Expected – Yes | Result – Yes|
- Is Levels clearly visible - |Expected – Yes | Result – Yes|
- Does clicking on Levels show different levels of the game - |Expected – No | Result – No|
- Is the pause button visible? - |Expected – Yes | Result – Yes|
- Does clicking on pause button, pause the game? - |Expected – Yes | Result – Yes|
- Is the store button visible? - |Expected – Yes | Result – Yes|
- Does clicking on store button, open the space shop? - |Expected – Yes | Result – Yes|

2. Testing the Background/Foreground

- Does the background render and visible - |Expected – Yes | Result – Yes|
- Does the foreground render and visible - |Expected – Yes | Result – Yes |
- Does the foreground render on top of the background - |Expected – Yes | Result – Yes|
- Does the foreground have a gravity effect - |Expected – No | Result – No|
- Does the player fall when not in contact with the foreground? - |Expected – No | Result – No|
- Can the player collide with the foreground - |Expected – Yes | Result – Yes|
- Can the player collide with the background - |Expected – No | Result – No|

4. Testing the Player

- Is the player visible? - |Expected – Yes | Result – Yes |
- Does the player move forward when the upper arrow key is pressed? - |Expected – Yes | Result – Yes |
- Does the player move backwards when the lower arrow key is pressed? - |Expected – Yes | Result – Yes |
- Does the player move right when the right arrow key is pressed? - |Expected – Yes | Result – Yes |
- Does the player move left when the left arrow key is pressed? - |Expected – Yes | Result – Yes |
- Does the player collide with the foreground? - |Expected – Yes | Result – Yes |
- Does the player collide with the enemies? - |Expected – Yes | Result –

- Yes |
- Is the player able to collect all collectibles? - |Expected – Yes | Result – Yes |
 - Does the player fire bullet by pressing space bar key - |Expected – Yes | Result – Yes |
 - Are the bullets visible - |Expected – Yes | Result – Yes |
 - Does the bullets collide with the enemy ships - |Expected – Yes | Result – Yes |
 - Does the bullets collide with the enemy bullets - |Expected – Yes | Result – Yes |
 - Does the player life decrease by one for every hit by enemy ship or bullet? - |Expected – Yes | Result – Yes |
 - Does the player life increase by one for every spanner collected? - |Expected – Yes | Result – Yes |
 - Does the game end when the player life becomes 0 - |Expected – Yes | Result – Yes |
 - Does the player advances to next levels only after destroying a certain number of enemy ships? - |Expected – Yes | Result – Yes |
 - Does the player start the level from beginning - |Expected – Yes | Result – Yes |

5. Testing the enemies

- Are the enemies visible? - |Expected – Yes | Result – Yes |
- Do the enemies move forward? - |Expected – Yes | Result – Yes |
- Do the enemies increase as the level increases? - |Expected – Yes | Result – Yes |
- Do the enemy fire bullets (Valiant)? - |Expected – Yes | Result – Yes |
- Does the enemy bullet collide with the player ship? |Expected – Yes | Result – Yes |
- Does the enemy ship collide with the player ship? - |Expected – Yes | Result – Yes |
- Does the enemy ship die/disappear once hit by player bullet or player ship? - |Expected – Yes | Result – Yes |
- Does the enemy bullet disappear once hit by player bullet? - |Expected – Yes | Result – Yes |
- Do the enemies collide with the player? - |Expected – Yes | Result – Yes |
- Does the player lose one life for every hit by enemy ship or enemy bullet? - |Expected – Yes | Result – Yes |
- Does Missouri fire bullet in the player direction? - |Expected – Yes | Result – Yes |
- Does Subtle fire bullets in the player direction? - |Expected – Yes | Result – Yes |
- Does boss 1 die/disappear only after 10 hits from bullet? - |Expected – Yes | Result – Yes |
- Does boss 2 die/disappear only after 20 hits from bullet? - |Expected – Yes | Result – Yes |
- Does boss 3 die/disappear only after 30 hits from bullet? - |Expected – Yes | Result – Yes |
- Does boss 4 die/disappear only after 50 hits from bullet? - |Expected – Yes | Result – Yes |

6. Testing the collectibles.

- Are the collectibles (spanners) visible? - |Expected – Yes | Result – Yes |
- Do the collectibles move forward? - |Expected – Yes | Result – Yes |
- Do the collectibles disappear once it's collected? - |Expected – Yes | Result – Yes |
- Do the Hud update once the spanner is collected? - |Expected – Yes | Result – Yes |
- Does every level show spanner? - |Expected – Yes | Result – Yes |
- Does collecting yellow gem increase space gold by 10? - |Expected – Yes | Result – Yes |
- Does collecting red gem increase space gold by 50? - |Expected – Yes | Result – Yes |
- Does collecting Bullet powerUp increase player bullet by
 - 1st = can fire 2 bullets at a time.
 - 2nd = can fire 3 bullets at a time.
 - 3rd = can fire 4 bullets.
 - 3rd = can fire 3 bullets and 2 rockets at a time if ship capability requirements are met.For 10 secs? |Expected – Yes | Result – Yes |
- Does buying Bullet powerUp increase player bullet by
 - 1st = can fire 2 bullets at a time.
 - 2nd = can fire 3 bullets at a time.
 - 3rd = can fire 4 bullets.
 - 3rd = can fire 3 bullets and 2 rockets at a time if ship capability requirements are met.Permanently? |Expected – Yes | Result – Yes |
- Does collecting Rate of Fire increase the speed of firing by 75 for 10 secs? - |Expected – Yes | Result – Yes |
- Does buying Rate of Fire increase the speed of firing by 75 for permanently? - |Expected – Yes | Result – Yes |
- Does collecting/buying Paralyze powerup, stop the enemy ship firing for 10 secs? - |Expected – Yes | Result – Yes |
- Does collecting/buying Shield powerup, protects the player from dying for 10secs? - |Expected – Yes | Result – Yes |

7. Testing the GUI/HUD

- Does the player move right when the right movement arrow key is pressed? - |Expected – Yes | Result – Yes |
- Does the player move left when the left movement arrow key is pressed? - |Expected – Yes | Result – Yes |
- Does the player move forward when the upper movement arrow key is pressed? - |Expected – Yes | Result – Yes |
- Does the player move backward when the lower movement arrow key is pressed? - |Expected – Yes | Result – Yes |
- Does the pause button on top right pause the game? - |Expected – Yes | Result – Yes |
- Does clicking on the resume text resume the game? - |Expected – Yes | Result – Yes |
- Does clicking on the sound icon on the top left of the screen mute the game audio - |Expected – Yes | Result – Yes |
- Does the HUD [Life] update when a spanner is collected? - |Expected – Yes | Result – Yes |
- Does the HUD update when the player collides with an enemy? - |Expected – Yes | Result – Yes |
- Does the HUD update the Score when player destroys enemy ship? - |Expected – Yes | Result – Yes |
- Does the HUD update the Level when a certain Score is achieved? - |Expected – Yes | Result – Yes |
- Is the store button visible? - |Expected – Yes | Result – Yes |
- Does clicking on store button, open the space shop? - |Expected – Yes | Result – Yes |
- Does HUD if any collectible/bought weapon is available? - |Expected – Yes | Result – Yes |

8. Testing the game audio

- Does the background audio for the game render and audible? - |Expected – Yes | Result – Yes |
- Does the audio for collecting collectibles in the game render and audible? - |Expected – Yes | Result – Yes |
- Does the audio for losing a life in the game render and audible? - |Expected – Yes | Result – Yes |
- Does the audio for firing bullets in the game render and audible? - |Expected – Yes | Result – Yes |
- Does muting the game audio by clicking on top left of screen mute all audio game? - |Expected – Yes | Result – Yes |
- Does the audio for destroying an enemy ship render and audible? - |Expected – Yes | Result – Yes |

9. Testing Level complete/fail screen

- Are the graphics visible and readable? - |Expected – Yes | Result – Yes |
- Does it show the correct number of levels completed? - |Expected – Yes | Result – Yes |
- Does it show the correct Score? - |Expected – Yes | Result – Yes |
- Does it show the correct highest score of that player - |Expected – Yes |

Result – Yes |

10. Testing the Space Shop

- Is the store button on top left of the screen clickable? - |Expected – Yes | Result – Yes |
- Does clicking on the store button on top left of the screen open the space shop? - |Expected – Yes | Result – Yes |
- Does the space shop graphic render and visible? - |Expected – Yes | Result – Yes |
- Does clicking on weapons, open respective options for buying? - |Expected – Yes | Result – Yes |
- Does the graphic for weapon option render and visible? - |Expected – Yes | Result – Yes |
- Does purchasing weapons from space shop update the game weapons - |Expected – Yes | Result – Yes |
- Does clicking on Ships, open respective options for buying? - |Expected – Yes | Result – Yes |
- Does the graphic for Ship option render and visible? - |Expected – Yes | Result – Yes |
- Does purchasing Ship from space shop update the game player Ship - |Expected – Yes | Result – Yes |
- Does clicking on PpowerUps, open respective options for buying? - |Expected – Yes | Result – Yes |
- Does the graphic for powerUps render and visible? - |Expected – Yes | Result – Yes |
- Does purchasing powerUps from space shop update the game powerUps - |Expected – Yes | Result – Yes |