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| --- | --- | --- | --- | --- | --- | --- |
| Background - testing game background items | | | | | | |
| Test | Test case | Method | Expected Results | Actual Results | Pass/Fail | Notes |
| s0 | background is visible | observe background | background should be visible | background is visible |  |  |
| s1 | Background is not static | observe background | background appears to be rotating | background rotates |  |  |
|
| s2 | Background rotates anti-clockwise | observe background | background direction appears to travel from the left side of the screen to the right | background travels from right to left |  |  |

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| Player - tests for player character | | | | | | |
| Test | Test case | Steps | Expected Results | Actual Results | Pass/Fail | Notes |
| p1 | Player visibility | observe | When game is launched, player should be continuously visible on screen | player icon is visible |  |  |
|
| p2 | Player spawn x position | observe player x position when spawned | when spawned, players x axis is at 0 | player spawns at x0 |  |  |
| p2 | Player spawn y position | observe player y position when spawned | when spawned, players y axis is at 0 | player spawns at y0 |  | consider increasing height |
| p4 | Player movement | test by pressing **SPACEBAR** key, observe JUMP\_AMOUNT | on button press, player y axis increases to appear jumping | on-press, player appears to jump |  |  |
| p5 | Player x axis static | observe | Players location on the x axis should remain static | player stays in the same x position during gameplay |  |  |
| p6 | Player gravity | observe | Player icon should be responsive to gravity | gravity is applied from game launch |  |  |
| p7 | Player gravity after movement | test by pressing **SPACEBAR** key, observe if player is falling | Gravity should remain affecting player after player has jumped | gravity is still applied |  |  |
| p8 | Player collision with asteroids | Allow player to collide with asteroid | player will die upon collision with asteroid | player dies upon collision |  |  |
| p9 | Player collision with sun object | allow player to collide with sun | Player will die upon collision with sun object | player dies upon collision |  |  |
| p12 | Player collision with floor | Allow player to collide with floor | player will die upon collision with floor | collision is not possible |  | adjust x positioning for player object |

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| Obstacles | | | | | | |
| Test | Test case | Method | Expected Results | Actual Results | Pass/Fail | Notes |
| 02 | asteroid visibility | observe in-game | asteroid are visible on screen | asteroid are visible after player presses play |  |  |
| o3 | asteroids have a minimum size set | observe scaleMin | minimum size should be of 0.25 | asteroids are not generated smaller than 0.25 |  |  |
| 08 | asteroids have a maximum size set | observe scaleMax | maximum size should be of 0,65 | asteroids are not generated larger than 0.65 |  |  |
| o4 | obstacle disappearance | observe | obstacles are destroyed once off screen | obstacles are destroyed once they disappear from off screen |  |  |
| o5 | asteroids collision with player | allow player character to collide with obstacle | player character should die upon collision | death is caused when player collides with asteroids |  |  |
| o6 | asteroid generation area | observe in-game | asteroids should only be generated within the players zone of play | asteroids are generated within the correct zones |  |  |
| o7 | asteroid distance from each other | observe in-game | asteroids are to leave adequate space between themselves and the player | Buffer zone is set so asteroids are to leave space between themselves. |  |  |
| 08 | Sun icon is not static | Observe | Sun icon should appear to be rotating | sun icon rotates |  |  |
| o9 | Sun Collision | Enable player to drop and collide with ground | Player should die upon collision with sun icon | player character dies when collided with sun |  |  |

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| Scoring | | | | | | |
| Test | Test case | Steps | Expected Results | Actual Results | Pass/Fail | Notes |
| sb1 | Score visibility | observe score system | player score is visible | player score is visible on screen |  |  |
|
| sb2 | Score tracking | attempt to obtain a score greater than 1 | a form of scoring system should be implemented | scoring increases by 1 after every second played |  |  |

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| Menu - tests for main menu | | | | | | |
| Test | Test case | Steps | Expected Results | Actual Results | Pass/Fail | Notes |
| m1 | Start button is visible | observe | Start button is visible on menu |  |  |  |
|
| m2 | Instructions button is visible | observe | Instructions button is visible on menu |  |  |  |
| m3 | Exit button is visible | observe | Exit button is visible on menu |  |  |  |
| m4 | Start button launches game | right click start button with mouse | Game screen is launched |  |  |  |
| m5 | Instructions page displayed | right click instruction button with mouse | Instructions page is displayed |  |  |  |
| m6 | instructions page exit button | observe | exit button on instructions page is visible |  |  |  |
| m7 | instructions page exit button | right click button with mouse | exit button redirects to main menu |  |  |  |
| m8 | Exit button on main menu | right click button with mouse | Game is terminated when button is clicked |  |  |  |
| m9 | Background image | observe | Background image is visible on instructions page |  |  |  |

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| Death screen menu | | | | | | |
| Test | Test case | Steps | Expected Results | Actual Results | Pass/Fail | Notes |
| d1 | Death screen is displayed when player dies | enable the player to die | Overlay screen appears when player dies |  |  |  |
| d2 | Death screen collapses when selection is made | right click any button on the death screen with mouse | Once a button is clicked, overlay screen should collapse |  |  |  |
| d3 | Replay button is visible | observe | replay button is visible on menu |  |  |  |
|
| d4 | main menu button is visible | observe | main menu button is visible on menu |  |  |  |
| d5 | Exit button is visible | observe | Exit button is visible on menu |  |  |  |
| d6 | Death screen main menu button | right-click button with mouse | on-click, Menu screen is loaded |  |  |  |
| d7 | Death screen replay button | right-click button with mouse | on-click, game is reset |  |  |  |
| d8 | Death screen exit button | right-click button with mouse | on-click, the game is closed. |  |  |  |

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| System | | | | | | |
| Test | Test case | Steps | Expected Results | Actual Results | Pass/Fail | Notes |
|  | Windows playability | load and run game on windows pc | game should run with no errors |  |  |  |
|  | Mac OS playability | load and run game on mac device | game should run with no errors |  |  |  |