# Test Plan #[NUMBER HERE]

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| TESTING | DESCRIPTION | EXPECTED OUTCOME | ATUAL OUTCOME | SUCCESS?  (YES / NO / MAYBE) | EVIDENCE |
| 1.0 Jetpack UI – Fuel gauge. | The fuel gauge to display current fuel quantity. | The fuel gauge should decrease as the player flies with the jetpack.  The gauge should never go below 0 and above max fuel. |  |  |  |
| 1.1 Jetpack UI – Fuel gauge light. | The light below the fuel gauge that can flash. | The light should start to flash when the fuel amount left is 25% of the total amount of fuel. Otherwise, it should stay off. (bonus – have light speed up as there are less fuel left). |  |  |  |
| 1.2 Jetpack UI – Fuel gauge alarm sound. | The beeping sound for when the player uses the jetpack in the air and have low fuel. | Beeping should only player when the player is using the jetpack, and they have less than 25% fuel left.  (bonus – have beep sound speed up as there are less fuel left). |  |  |  |
| 2.0 Pause Menu – Pauses game. | Just pausing the game. | The game should freeze, and the player controls and physics should pause too. Nothing should be doing anything except the pause menu.  Pause menu should appear when escape is pressed. |  |  |  |
| 2.1 Pause Menu – Resuming and resume button. | Resuming the game after it is paused. | When the escape key is pressed / resume button is pressed. The game should unfreeze. |  |  |  |
| 2.2 Pause Menu – Main menu button. | Pressing the main menu button on the pause menu. | When the main menu button is pressed. The player should be taken back to the main menu. No artifacts of the game should be brought over. |  |  |  |
| 2.3 Pause Menu – Quit button. | Pressing the quit button on the pause menu. | When the quit button is pressed. The game should close. No crashing, applicating hanging or errors. Just close. |  |  |  |
| 3.0 Main Menu – Is there a main menu. | Checking the main menu. | The main menu should be loaded when the applicating is loaded.  The main menu should have no artifacts or visual errors. |  |  |  |
| 3.1 Main Menu – Start game button. | Pressing the start game button on the main menu. | This should get rid of the main menu and load the first level. |  |  |  |
| 3.2 Main Menu – Quit button. | Pressing the quit button on the main menu. | The game should close when the quit button is clicked. No crashes or errors. |  |  |  |
| 4.0 Basic Movement. | A and D (Left and Right) movement. | When the A or D key is held, the player should move Left or Right with the respected keys. Once the keys are no longer being pressed, they player should slowdown and stop. |  |  |  |
| 4.1 Jumping. | W for jumping. | When the player presses W while on the ground, they should get an instant velocity upwards, gravity should then reduce the velocity until the player starts to fall. |  |  |  |
| 5.0 Jet Pack Flight. | Flying with the jetpack. (W) | When in the air, and the W key has begun to be held, the jet pack should add a force upwards. A and D should move the player left and right.  Also, the jet pack must give an upwards force and counter gravity, it should not fail to lift the player. |  |  |  |
| 5.1 Jet Pack Activation. | The jet pack activation under specific circumstances. | The jet pack must be active only when the player is in the air for a short amount of time and require W to be pressed and held again to activate. |  |  |  |
| 5.2 Jet Pack and Ladders collision. | Jet pack behaviours with ladders. | While using the jetpack / in air and the player flies through a ladder, the player should go past.  When the player is on the ladder, they must not activate the jetpack unless they are on top of the ladder. (on top counts as off the ladder). |  |  |  |
| 6.0 Ladders Mounting. | How to use a ladder. (OSHA trained) | The player must only get on the ladder when at the bottom by pressing / holding W.  If the player is at the top of the ladder, then they must use S to enter the ladder.  The player must keep the current height while on the ladder.  If at top, the player will mount at the top of the ladder and be there. Same for bottom. |  |  |  |
| 6.1 Ladder Movement and Dismounting. | Moving on a ladder. | W must move the player upwards and S downwards.  A and D should dismount the player.  When the player reaches the top, they must get dismounted at the top. |  |  |  |
| 6.2 Top of Ladder. | What happens when the player is on top of a ladder. | The player should stop climbing and be standing on top of the ladder.  While on top of the ladder, the ladder should act like a solid object for the player to stand on until the use S to mount. |  |  |  |
| 7.0 Boomerang Throw. | Attacking with the boomerang. | The player character will throw an item in the direction they are moving or when still, where they are facing.  The player can only throw ONE boomerang at a time. |  |  |  |
| 7.1 Boomerang Return. | Boomerang returning to the player. | Once thrown, the boomerang must either reach the max range (based on original throw position) or a collider before returning.  When returning, if the boomerang gets stuck on an object, it must know and still return to the player.  Once returned to the player, the player will get the boomerang back. |  |  |  |
| 8.0 Moving Platforms Moving. | The platform moving between points. | The moving platform must move towards one of the points and change target once it reaches the point.  The moving platform should be omni-directional. |  |  |  |
| 8.1 Moving Platforms Moving Objects. | Moving objects with the moving platform. | When the player is on the moving platform. The player must move with the moving platform and not slide off.  Any physics objects also need to move with the moving platform. |  |  |  |
| 8.2 Collapsable Platforms. | How collapsible platforms should behave. | As soon as the player touches the collapsible platform, it should start to shake and then after a set time, fall through the map.  The platform must then return after a period has passed. It must appear and not move back up. |  |  |  |
| 9.0 Camera and Camera Movement. | How the camera transition to other sections of the level. | When the player reaches the edge of the screen, everything must freeze while the camera pauses, and the camera will quickly move in the direction the player was moving.  Once at the new position, everything they can be unfrozen.  The camera must move to get the level section in frame. |  |  |  |
| 10.0 UI screen scaling. | How UI elements get stretched and moved with different aspect ratios. | Jetpack fuel gauge must stay in the corners of the screen and no be distorted.  Main menu and pause menu buttons and UI layout must be maintained. |  |  |  |
| 11.0 Game Build (EXE) | Game build as an exe file. | Does the EXE work with all these features. |  |  |  |
| 11.1 Game Build (WebGL) | Game build as a WebGL file. | Does the WebGL work on itch.io. |  |  |  |
| 12.0 Fuel Canisters. | The collectable fuel canisters. | When a fuel canister is collected, the current fuel in the jet pack must go up by the amount on the fuel can.  The given fuel must never give fuel over the max amount. |  |  |  |
| 12.1 Fuel Canisters Collecting. | Player interacting with the fuel canister. | When the player touches the fuel canister, they must be given the fuel. |  |  |  |
| 13.0 Tutorial Level Works / Completable. | Is the level completable. | You can get from the start to the end of the tutorial level. |  |  |  |
| 13.1 Can complete the level. | Level complete trigger to load the main menu or win screen. | When the player reached the end of the level, they are taken to the main menu. |  |  |  |
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