Testing and Results

Note: Due to the time constraints, the Deck 15 team was unable to learn how to use Unreal Engine's unit tests: Automation Testing. Instead, the team's time was spent on game play testing.

Test Plans:

Each member of the Deck 15 team, performed multiple playthroughs of the game. The team tried alternate routes and various ways to break the game or get it to perform in ways that were not originally intended. Friends and roommates of the Deck 15 team members were also asked to play through the game and give the results of their findings.

Level 1 Results:

Selected lights and actors all appear to turn on, off, and flicker at the right time and rate when triggered.

NoTeleportationTriggerBox seems to consistently be working and the player cannot teleport themselves inside the goal.

Goal and door light appear to consistently turn on when the ball is in the goal, turn off when the ball is not in the goal.

All trigger boxes appear to consistently work, they all appear to perform their specified action in accordance to their delay or time overlapped.

Ball appears to consistently emit sparks and crackle throughout this level.

Music appears to consistently play at the beginning and throughout the level.

All dialogue appears to consistently play when triggered.

Level 2 appears to consistently load when the player walks into the LevelLoadingTriggerbox.

Issues Found:

Dialogue gets cut short if another dialogue trigger box is overlapped. This is only really an issue during the beginning when the player is being told the mission and what controls to press as these can't be triggered again.

Level 2 Results:

Crackling sounds and sparks in electrical meshes appear to consistently work.

Wind trigger boxes appear to consistently work when turned on via the switch and triggered by the ball. Wind does not work when the switch is off and the ball is not overlapping the trigger box.

All dialogue appears to consistently play when triggered.

Door unlocking and lights appear to consistently work when the ball is in the goal. Lights appear to consistently turn off and the door locks when the ball is not in the goal.

Ball appears to consistently emit sparks and crackle throughout this level.

Music appears to consistently play at the beginning and throughout the level.

Level 3 appears to consistently load when the player walks into the LevelLoadingTriggerbox.

Issues Found:

Player has the ability to walk between the end of level doors and summon the ball. Making it appear as if they are going to leave the room with the ball. But the player still must summon it next level.

Level 3 Results:

The moving platform seems to consistently move back and forth.

Wind trigger boxes appear to consistently work when turned on via the switches and triggered by the ball. Does not work when switches are off and the ball is not overlapping the trigger box.

All dialogue in level appears to consistently play when triggered.

Goal and door light appear to consistently turn on when the ball is in the goal, turn off when the ball is not in the goal.

NoTeleportationTriggerbox appears to consistently work, the player cannot teleport inside the goal when the ball is in the goal.

Ball appears to consistently emit sparks and crackle throughout this level.

Music appears to consistently play at the beginning and throughout the level.

Elevator appears to consistently lift when triggered.

Door appears to consistently open when triggered by the switch.

Level 4 appears to consistently load when the player walks into the LevelLoadingTriggerbox.

Level 4 Results:

All dialogue in level appears to consistently play when triggered.

NoTeleportationTriggerboxes appear to consistently work and do not let the player teleport to the area that the trigger box covers.

Wind and gravity trigger boxes appear to consistently work when turned on via the switches and triggered by the ball. Do not work when switches are off and the ball is not overlapping the trigger box.

All moving platforms appear to consistently move back and forth.

Credits seem to consistently play at the end of the level.

Ball appears to consistently emit sparks and crackle throughout this level.

Music appears to consistently play at the beginning and throughout the level.

Main menu appears to consistently load when the ball is in the LevelLoadingTriggerbox and after the credits have finished playing.

Issues Found:

The player can teleport onto the last platform and bypass all other obstacles by doing the following: throw the ball in the air and teleport to it as the last platform is moving toward the goal. This allows the player to land on top of the last platform.

Dialogue can be cut short if another trigger box is overlapped, which is only an issue when Tera is giving instructions and the player may want to hear them again. The instruction dialogue cannot be triggered twice.

Overall Results:

Teleportation and summoning sound appear to consistently work.

Player movement, jumping, grabbing, throwing, all appear to be consistently working.

Pause menu appears to consistently display when the ESC key is pressed. Resume, Restart, Game Control, and Exit Game options all appear to consistently work.

All controls on the main menu appear to consistently work.

Issues Found:

It is possible to get stuck in other objects when teleporting. The player can use summoning/teleportation to get themselves out most of the time.

If close enough to a wall player can summon the ball and the ball will end up on the opposite side of the wall. The player can then teleport to the ball and get stuck or fall through space indefinitely.

When close enough to the door the player can summon the ball, and then teleport to the ball. Allowing the player to bypass all puzzles.

Player can teleport/summon the ball while the loading screen is playing. The player will not see this, but it can be heard.

Pause menu only pauses player activity, does not pause background activity or dialogue.