Document Name: Falling Up Test Plan

Version: 1.1

Created: 02/09/2017

VERSION HISTORY

Version #	Implemented By	Revision Date	Reason
1.0	Katie Kristiansen	02/09/2017	Test Plan initial draft.
1.1	Christian Hughes	02/17/2017	Added additional test cases.
1.2	Christian Hughes	04/04/2017	Added further test cases.
1.3	Christian Hughes	04/11/2017	Added filenames for 4.5.1 - 4.5.15.

1. INTRODUCTION

1.1. Purpose of the Test Plan Document The Test Plan document documents and tracks the necessary information required to effectively define the approach to be used in the testing of the project's product

2. COMPATIBILITY TESTING

2.1. Ensure that game can runs on Android, Mac, and Windows (includes VR platforms). Ensure that the game can be progressed through on all targeted platforms (levels load as intended, etc.).

3. CONFORMANCE TESTING

- 3.1. Ensure that game logic progresses as intended by the original development team. Game must be "beatable".
- 3.2. Ensure that audio and video assets are presented as intended by the original development team. Audio and video must play simultaneously, and should not be cut off without user input.
- 3.3. Ensure that the player can progress through the game using a VR headset without experiencing motion sickness. Some degree of motion sickness is inevitable, but it can be largely alleviated through certain control/gameplay tricks.

4. FUNCTIONAL TESTING

- 4.1. Test for proper collision detection on all interactable objects and doors. It should not be possible for the player to leave the indoor Meadowlark Hills area.
- 4.2. Test that doors open, close, and display proper animations.
 - 4.2.1. The elevator doors must open when the palyer is near, and the player must be transported to another level upon entering the elevator.
 - 4.2.2. All doors with clear windows should open after the action button is pressed. Pressing the action button near an open door should close it. Doors without clear windows should not open.
 - 4.2.3. The door to the apartment bedroom (level 2) should not open until the pills in the apartment bathroom are consumed.
- 4.3. Ensure that scripting logic drives the player to progress in the intended order.
- 4.4. Ensure that textures are baked on the correct meshes, and that none are missing. Missing textures usually manifest themselves as dark grey meshes.
- 4.5. Ensure that all interactable objects provide interaction prompts as intended.
 - 4.5.1. (level 1) The puzzle should play video and audio (TreePuzzle -- TreePuzzle).
 - 4.5.2. (level 1) The Accounts Payable Sign should play audio (Key_Forgot_To_Pay_Wav)..
 - 4.5.3. (level 1) The Deck of Card should play video (Cards).
 - 4.5.4. (level 1) The Book should play video (Library).
 - 4.5.5. (level 1) The Horse Painting should play video and audio (Horsepainting -- HorsePainting).
 - 4.5.6. (level 1) The Pool Table should play video (Cueball).

- 4.5.7. (level 2) The Carousel should play video and audio (Carousel -- Loren_She_Loved_Those_Wav).
- 4.5.8. (level 2) The helmet should play audio (Loren_Truth_2500).
- 4.5.9. (level 2) The Tractor Photo should play audio and video (TractorPhoto).
- 4.5.10. (level 2) The Golden Gate Bridge picture should play audio (Bill_Golden_Gate_Wav).
- 4.5.11. (level 2) The Shower should play audio (Loren_Sink_1000).
- 4.5.12. (level 2) The Pill Bottle should play audio (Kay I m Sorry Wave).
- 4.5.13. (level 2) The Coffee Table Hat should play audio (Loren_Della_s_Cancer_Wav).
- 4.5.14. (level 2) The Cardboard Box should play audio (Kay_Time_To_Move_Wav).
- 4.5.15. (level 2) The stereo should play audio and video upon insertion of the CD -- this is the final memory (FinalAudio -- FinalVideo).

5. PERFORMANCE TESTING

5.1. Given current graphical flourishes, we're targeting 60FPS on all platforms. Framerate should not dip below 30 on non-VR systems, and should not dip below 60 on VR systems.

6. REGRESSION TESTING

6.1. Ensure that each new build of "Falling Up" undergoes the same testing plan -- no existing features should be broken when releasing a new build.

7. STRESS TESTING

- 7.1. Run game for a long period of time (30-60 minutes) to check for performance degradation (potentially due memory leaks).
- 7.2. Interact with many objects in quick succession. Ensure that transitions between interactions are seamless. Memories from different objects should not overlap their video or audio.
- 7.3. Check for performance consistency when rapidly switching between game states (pausing and unpausing, toggling the inventory list, etc.

8. SYSTEM TESTING

- 8.1. Ensure that all keyboard and mouse input (desktop)/gyroscope and touch screen input (mobile) works properly for the target system.
- 8.2. Ensure that game can transition from windowed to full-screen mode (desktop).