**A Solemn Evolution Initial Test Plan**

**Introduction**

The purpose of this test plan is to provide unit test for which metrics which can be met during the initial creation of the game to better refine the future chapters and final product. This test plan is from chapter 1 alone and only tests the game aspects of the program.

**References**

Proposal Document:

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| --- | --- | --- |
| Date | Task | Description |
| 1/8/2024 | Proposal | Full project proposal complete. |
| 1/8/2024 | Requirements Doc | Requirements document complete. |
| 1/21/2024 | Text Complete | Storyline/plot writing complete. |
| 2/4/2024 | Game Outline | Outline RNG functions, choices, compilation of choices, and interaction of the user and the game. |
| 2/4/2024 | Tutorial | Tutorial complete. |
| ~~2/18/2024~~ | ~~Games Functions~~ | ~~RNG functions and all game theory completed pending testing.~~ |
| 3/3/2024 | Game Flow | Game flow added. Player should be able to go through the main story and read the plot. |
| 3/17/2024 | Secondary Game Flow | Health, sanity, and choices are added. Choices are tracked to determine end case. |
| 3/17/2024 | Test Cases | Choice results and impacts and health and sanity are mapped for difficulty and possibility to ensure that players can complete the game. Health, sanity, and choice weight values are adjusted accordingly. |
| 3/17/2024 | Survey | Complete the survey and begin polling |
| 3/31/2024 | Aesthetics | Graphics and music complete. |
| 4/14/2024 | Testing | Complete game testing based on test cases. |
| 4/14/2024 | Polling | Polling complete, results compiled into readable format to present for defense. |
| 4/17/2024 | Senior Project Defense | Presentation complete for defense. |
| 4/17/2024 | Final Adjustments/Edits | Last minute adjustments and edits complete. |
| 4/17/2024 | Project Completion | Final project published to itch.io |

Game will not be completed during my final semester.

**Features to be Tested**

* Rate of player death on randomized playthrough.
* Rate of player insanity on randomized playthrough.
* Playability on windows.

**Features not to be Tested**

* The final choice ending will not be tested due to the game being incomplete.
* Proper game flow will not be tested due to the already understood need for code optimization.

**Approach**

* Testing will be completed by scripting 100 playthroughs and verifying the rate of death and insanity.
* Run the game from a clean windows install without issue.

**Item Pass/Fail Criteria**

* A 30% insanity rate and 20% death rate is successful.
  + Greater than +/- 10% deviation from the aforementioned rates of occurrence would be considered a fail.
* Playable from clean windows install is passing.
  + Unplayable from a clean windows install is considered failing.

**Suspension Criteria and Resumption Requirements**

* Code optimization is required to implement further chapters.
* Further choices should not be instantiated without an understanding of the rates of death and insanity occurrence.

**Test Deliverables**

* Test Plan
* Test Cases
* Test Scripts
* Test Reports

**Test Environment**

* Windows x64 with Mingw x64
* Using ChatGPT to help write the script and play the game to compile results.

**Approvals**

Adam Thiemann (Developer)

Professor O’Neil