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Project Night Terror Test Plan & Execution

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1 Introduction

1.1 Purpose

The purpose of this document is to outline and summarize the testing processes used for Project Night Terror. As testing is thought of, implemented, and finished this document will be updated to reflect the tests and results gathered. The focus of the testing will be to ensure gameplay and functionality for different players works well, is desirable, usable, and playable. The testing will also help to fine tune variables involved with the player and Non-Playable Characters (NPCs).

It is important to note that there is a lot of minor and quick testing done during development as added functionally and minor changes are always tried before moving on. By doing this, I am able to detect and fix problems or bugs sooner. I am also able to fine-tune some variables better earlier on. Problems or bugs that are not resolved right away will often be left till later, but will be documented in GitHub under issues.

1.2 Things to Test

1.2.1 Gameplay

Gameplay includes player movement (such as jumping, running, etc.) and anything not listed below.

1.2.2 AI

Testing for AI is to test every NPC. This will involve testing that animations flow well; AI will respond and attack properly; the AI will roam properly and in bounds; and specific AI variables such as health, damage, and attack speed are working properly. The testing methods used to test the AI will include black/white box testing and also usability testing.

1.2.3 Items

Item testing includes the user's flashlight, rifle, pistol, knife, and cross. Breakdowns of each item are shown below. The purpose of testing items is to ensure that the game does not become too easy or hard with bad variable values; to ensure that animations and general look of items makes sense and looks good; and to ensure that the items follow good general usability ideas. This will be done with black/white box testing and also usability testing.

1.2.4 Collectables

Testing the collectables includes ensuring that their text displays properly, that audio files play properly, and that picking them up adds to the player's inventory properly. This will mostly be done with white box testing, but usability testing will also be covered with this.

1.2.5 Saving & Loading

Testing saving and loading is important so the user can save and leave the game; so the user can come back to the game and pick up where they left off; and to ensure

that the player's progress is saved while moving across levels. There are many different variables that need to be saved or loaded.

1.2.6 Levels

Level testing includes going from one level to the next, ensuring that there are little to no bugs in map design (such as clipping, level holes, lighting issues, etc.), and to ensure that level traversal by the player is smooth (for example, stairs should by moved across without getting stuck). This will be done usability testing and black box testing.

1.2.7 User Interfaces

User interfaces (UI) include the heads up display (HUD), the main menu, pause menus, item menus, and the sub menus within these. It is important to see if the interfaces are visually appealing, if the functionally works, and if usability is present.

2 Usability Testing

2.1 Purpose & Breakdown

The purpose of usability testing is to ensure that a range of users find the game usable, playable, and desirable. It is important that the user can learn the game easily and that the game is not hard due to controls, bad functionality, bugs, etc. Usability testing can help alleviate concerns or problems that may not arise during development and can create a better final product.

A usable game is one that the player can learn the controls without frustration and can easily understand them. A playable game is one that has few or no bugs, is not too difficult for the majority of players, and is enjoyable to play. Finally, a desirable game is one with nice user interfaces, good player interactions (such as shooting, reading text, using menus, etc.), and looks good overall.

Potential testers will be requested and any testers will be asked to fill out a consent form. Next, the tester will fill out a demographic questionnaire that will give insight into the tester's information, but more importantly their brief history with video games. The tester will then play different parts of the game and give feedback during the play if they wish. Once playing is finished, the tester will fill out a post-questionnaire about their experience and provide feedback based on their experience.

Consent forms and questionnaires will be added to the documentation and most likely added to the end of this document. The results will be added to sections below.

2.2 Demographics

It is important for Project Night Terror to be playable and appealing to a large demographic and the testing does not have any particular demographic to test for.

2.3 Testing Results
This will be filled in once usability testing is finished.

2.4 User Feedback
This will be filled in once usability testing is finished.

3 White Box Testing
3.1 Purpose & Breakdown
The purpose of white box testing where the tester knows about the code behind the tests is to fine tune the game, fix bugs and problems as soon as they arise, and to dive deeper into bugs or problems that are not a quick fix.

4 Automated Testing
4.1 Purpose & Breakdown
Automated testing could lower the time it would take to test certain functionality of the game. However, there currently is no plan for automated testing as there is nothing deemed beneficial to test automatically as almost all functionally and gameplay will be done by the user. It would be more beneficial to have myself or others see the testing first hand to give more insightful feedback. If automated testing is added, it will be added here.

5 Testing Results
5.1 Gameplay
5.2 AI
5.3 Items
5.4 Collectables
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