Test Plan

Gesture Based UI Development

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Introduction

To carry out tests on my games design I have used multiple types of testing techniques. Each result from the tests will be recorded and features which need to be updated or amended will be changed before the games release.

The goal is to achieve a high level of testing which will exploit the game in any ways which it needs to be improved. By gathering any faults within the game, the sufficient changes can be made to its design before its submission date.

I intend to achieve these results by using the Black, Grey and White box testing techniques where I will be getting two participants, one with knowledge of Unity and C# and another participant with no knowledge whatsoever of the games development.

Objectives and Tasks

Objectives

The main objective is to ensure the games functionality at a high level so that there are no features which can be exploited. Any bugs that have been discovered will then be amended for the final release of the project.

Tasks

Below are the main forms of testing which we will be carrying out.

- Unit Testing
- Performance and Stress Testing

Features to be Tested

1. User Interfaces – Menu, Tutorial, Enemy Selection, Battle Sequence.
2. State Machine – Players turn, Enemy's turn, Win and Loss states.
3. Player Voice Commands.
4. Player Action options – Attacking, Healing and Fleeing.

Scope

The features that will be tested will be the User Interfaces within the game, the controls and general game objectives such as choosing an action and making sure that the games states are implemented correctly and running without errors.

Features such as the Main Menu, Tutorial Menu and Battle Scene are essential to test as this is how the Player will navigate around the game scenes and carry out the game's functionality.

Tactics

To carry out these tests on each feature I have got my two friends to take part, one of them is a Software Development student and the other has no knowledge of the coding of the game. This way we have multiple types of testing such as Black, Grey and White box.

Unit Testing

Participant: Thomas Kenny.

Thomas will be taking part in Unit Testing the Game, the features that he will be testing are all the Game UI components to ensure that they work correctly and are navigating the player to the correct scenes. Thomas will also be relaying any issues regarding the Grammar not being recognized on command.

Any of the UI features which have bugs or don't work as expected will be taken note of. Once all the Unit Testing is completed for the Games UI Components, Thomas will pass on his results to me so that I can improve on the features before release.

Performance and Stress Testing

Participant: Tom Hansbury

Tom is an outside tester who has no knowledge of the coding or development of the application. This way the test will be treated as a regular user playing the game and reporting back with any feedback or bugs that they find within the game. This method of testing is extremely useful as it gives critical feedback on the fluidity of the game.

Tom will be testing the playability of the game and test out features such as carrying out an action – Attack, Healing and Fleeing. Any bugs or exploits will be taken note of by Tom and they will be relayed back to me to be updated.

Test Environment

The testing environment will be using my PC. As the game is stored on my local PC, the two participants will have to test the game at different times.

Tools

- Unity Version 2019.4. 11f1
- A working Microphone.
- Visual Studio Code.

Schedule

Participant	Testing	Time
Thomas	Unit Testing	April 16th – 2:00pm
Tom	Stress and Performance Testing	April 17th – 2:00pm