Black box test plan

The reason we chose a black box test plan was because we wanted to make sure that all crucial aspects of our game was functioning as intended. The best way to confirming this being, a thorough test of each of the crucial game mechanics in the game that were required for the game to be considered in a playable state; or put more simply, a black box test of the game. After the following test was conducted it became clear that the game was in a functional state, everything was working as intended.

Test Cases

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| --- | --- | --- | --- |
| Case No. | Description | Inputs | Expected Outcome |
| 1. | Turn system that runs through all the units on the board in order | -Two units on the board  -Multiple units on the board  -Run the system for multiple turns | Units take turns properly and no unit is skipped |
| 2. | The ability to move friendly units around the board on their turn | -Friendly unit moved 1 or more tiles on their turn | That all units can be moved to accessible locations smoothly. |
| 3. | Pathfinding for AI units, they will move to advantageous positions | -Enemy unit can move by themselves on their turn | Enemy units are able to move around the board autonomously |
| 4. | The ability to order friendly units to attack enemy units | -Melee attack possible for melee units  -Ranged attack possible for ranged units | All units are able to successfully attack enemies |
| 5. | AI units are able to select and attack player units | - Singular AI unit attacking  - Multiple AI units attacking  - AI units able to select and attack over multiple turns | All AI units can select and attack a chosen target |
| 6. | Units are able to be killed when their life reaches 0 | -Friendly unit killed at 0 life  -AI unit killed at 0 life | All units are able to be killed at 0 life |
| 7. | UI updates correctly when actions are taken by the player and the AI | -Health bars update  -Combat log updates  -Selected Character updates | All UI elements correctly update |
| 8. | Level is able to be completed | - First level is able to be completed  - Second level is able to be completed | The levels can be completed, and transitioned between |
| 9. | Main menu system works | -Start game button functioning  -About us button functioning  -Exit button functioning | All elements of the main menu system working |
| 10. |  |  |  |

Test Results

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| Case No. | Results | % Achieved |
| 1. | The turn based system worked perfectly; all units had their turns in the correct order and were not skipped. | 100% |
| 2. | Friendly units were able to be successfully moved | 100% |
| 3. | Enemy units were able to make their way around the board, without clipping into other units. | 100% |
| 4. | Friendly units are able to attack enemy units in the fashion according to their type. | 100% |
| 5. | Enemy units were able to select and attack the selected target autonomously | 100% |
| 6. | Units successfully killed and removed from play when their life total reaches 0 | 100% |
| 7. | All UI elements correctly updated when necessary | 100% |
| 8. |  |  |
| 9. | All aspects of the main menu system performed the correct functionality when selected | 100% |
| 10. |  |  |