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| Project: | | Dreamscape | | | |
| Team No.: | | 5 | | | |
| Class: | | CSE 3310; Fall 2023 | | | |
| Module: | | Test Plan | | | |
| Deliverable: | | Test Plan Document | | | |
| **Version:** | | | **[1.0]** | **Date:** | **[11/16/2023]** |

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**Revision History**

| ***Version number*** | ***Date*** | ***Originator*** | ***Reason for change*** | ***High-level description of changes*** |
| --- | --- | --- | --- | --- |
| 1.0 | 11/16/2023 | 5 | Initial draft |  |
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# 1. Introduction and Plan of Approach

**Project Overview:**

Dreamscape is a primarily stealth, turn-based strategy game with horror undertones and elements. The game focuses on the player’s avatar, a treasure hunter, with the ability to jump and cross different fantastical and supernatural worlds each with a different theme. The player visits these worlds, and each world contains a set of levels. The levels are then traversed in a set order. Each level then contains a set number of different kinds of enemies and obstacles laid out in a grid tile map. The player then traverses the level by sneaking their way to obtain the level’s goal item of the level and then escaping from the level and enemies after obtaining the item. The player will then work through all the levels in each world and then after the final level the world is complete and then the player unlocks the following world. As the player works through the levels, they can gain unique items that help them get through the given levels. The end goal of the game is to work through each world’s levels and gain the final treasure of each world.

**Components Covered:**

1. Menus
2. Player
3. Levels
4. Environment
5. Player Movement System
6. Fighting System

**Assumptions and Anomalies:**

* We can assume that the game is being run on a valid android device
* Assume that all game art and visible UI is understandable and implemented
* Assume that underlying system operations that are needed to test these component cases are implemented correctly.
* As we continue to work on the game development, we can expect to find anomalies such as:

1. Introducing new components can introduce new bugs and complications between new and old components that could cause unseen and unexpected results in test outcomes.
2. As members begin to combine and consolidate the code into one project components may begin to clash and create errors or negative outcomes.

# 2. Test Cases: “Menus”

**Project Name:** Dreamscape

**Test Case Name:** Menus

**Test Case Id**: CSE3310/Fall 2023/Team5/Menus

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case No.** | **Test Case Description** | **Expected results** | **Outcome**  **Pass, Fail, Other (comments)** |
| TC1 | Tap on the app icon. | System should open and the main menu should be displayed. Ensure that the navigation is available for the player. |  |
| TC2 | When on main menu screen, tap start button | System should take user to the world select screen |  |
| TC3 | Swipe left or right on world menu icons | No navigation issues or getting stuck between menus.  Allows users to cycle between available worlds to play. |  |
| TC4 | During gameplay, locate and tap on the ‘pause’ button | Level should ‘pause’ or remain frozen while pause menu is opened |  |
| TC5 | Open the app and scroll through the different menus and submenus. | The performance of the menu and submenu should not have any issues, delays or freezes during transitions between menus. |  |

# 3. Test Cases: “Player”

**Project Name:** Dreamscape

**Test Case Name:** Player

**Test Case Id**: CSE3310/Fall2023/Team5/Player

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| --- | --- | --- | --- |
| **Test Case No.** | **Test Case Description** | **Expected results** | **Outcome**  **Pass, Fail, Other (comments)** |
| TC1 | Locate and select the ‘tool’ option. | Opens available tool list  System should allow the player to select up to three tool items the player can take into a level. |  |
| TC2 | Complete a level | When a level is complete, a tool item should be unlocked and allowed to be selected by the player to take into a new level |  |
| TC3 | Navigate to and press the ‘skills’ button from the world menu. | Upon entering skills menu:  Player should be able to see their skill points  Player should be able to see character skills  Player should be allowed to invest skill points into skills |  |
| TC4 | Observe the end-of-level results screen. | When a player completes a level their skill point amount should increase. |  |
| TC5 | Locate and select the player menu from the world menu screen | When a player invests a skill point into a chosen skill then it should update the player’s strength, stealth, or satchel attribute accurately. Check if it reflects the character's current abilities. |  |

# 4. Test Cases: “Levels”

**Project Name:** Dreamscape

**Test Case Name:** Levels

**Test Case Id**: CSE3310/Fall2023/Team5/Levels

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| --- | --- | --- | --- |
| **Test Case No.** | **Test Case Description** | **Expected results** | **Outcome**  **Pass, Fail, Other (comments)** |
| TC1 | Enter a patrol enemy detection radius | The enemy should enter an alert state and chase the player |  |
| TC2 | Acquire the level’s special item | The level exit is unlocked and all enemies enter the alert mode |  |
| TC3 | Enter the level exit after acquiring the special item. | The level should be completed and a new tool should be unlocked |  |
| TC4 | Use a satchel item | The effect of the satchel item is activated |  |
| TC5 | Use all the available movement points and end turn | Each enemy on the map takes their turn to move/attack |  |
| TC6 | Die before reaching the exit | The player loses and the level restarts |  |
| TC7 | Pick up a satchel item | The item is added to the player’s satchel inventory |  |

# 5. Test Cases: “Environment”

**Project Name:** Dreamscape

**Test Case Name:**  Environment

**Test Case Id**: CSE3310/Fall 2023/Team5/Environment

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| --- | --- | --- | --- |
| **Test Case No.** | **Test Case Description** | **Expected results** | **Outcome**  **Pass, Fail, Other (comments)** |
| TC1 | Navigate to a door and interact with the door | Player should be presented with an option to open door upon interaction  If the locked door is locked, the player should have the corresponding key to open the door.  The door should open if the player has enough Movement Points or a given item, creating a new path. |  |
| TC2 | Locate and activate a switch. | The switch should trigger an environmental change or effect, such as lighting a fire, affecting players/enemies or opening a door. |  |
| TC3 | Find and end turn on a tile with fire effect. | The player should receive damage. |  |
| TC4 | Search and interact with a wet or water tile. | The player should receive a ‘wet’ or ‘slowed’ condition affecting player movement cost. |  |
| TC5 | Attempt to pass or move through walls or obstacles | The player should be unable to pass through but able to navigate around the obstacle. |  |
| TC6 | With no movement points left, attempt to interact with a close environmental interactable object | The interaction should not be possible if the player lacks sufficient Movement Points.  Player is notified they do not have sufficient movement points to interact with the object |  |
| TC7 | Use inventory items on hazardous objects. | The item from the inventory should appropriately mitigate or enhance interaction with the hazard object. |  |
| TC8 | Attempt to move with no movement points left | The player is notified that they do not have enough movement points to move. |  |

# 6. Test Cases: “Player Movement System”

**Project Name:** DreamScape

**Test Case Name:** Player-Movement-System

**Test Case Id**: CSE3310/Fall 2023/Team5/Player-Movement-System

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| **Test Case No.** | **Test Case Description** | **Expected results** | **Outcome**  **Pass, Fail, Other (comments)** |
| TC1 | Drag from player and make a path to desired location tile | The game should display the path and move the player along it when confirmed. |  |
| TC2 | Click player character and click desired tile location | The shortest viable path should be displayed and the player moved along it upon confirmation. |  |
| TC3 | Pinch and expand on screen | The grid should zoom in/out accordingly, giving a closer view or an overview of the level environment. |  |
| TC4 | Use a satchel Item from inventory. | The chosen item's effect is applied and its count is reduced or marked as consumed in the satchel inventory. |  |
| TC5 | Interact with an environment piece in a level | The interaction should trigger the specific in-game event or consequence associated with the piece. |  |
| TC6 | Drag movement through and around obstacles | The player should be able to move according to the grid's rules, avoiding obstacles and hazards. |  |
| TC7 | Swipe across the screen in level | The camera should pan smoothly, allowing the user to explore different areas of the grid without having to move. |  |

# 7. Test Cases: “Fighting System Requirements”

**Project Name:** Dreamscape

**Test Case Name:** Fighting System Requirements

**Test Case Id**: CSE3310/Fall 2023/Team #5/Fighting-System-Requirements

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| --- | --- | --- | --- |
| **Test Case No.** | **Test Case Description** | **Expected results** | **Outcome**  **Pass, Fail, Other (comments)** |
| TC1 | Select ‘attack’ button during fight scene | The player attacks an enemy. The enemy should lose health points. Health loss is calculated by the strength stat of the player |  |
| TC2 | Let enemy attack player | The player health points should decrease based on damage dealt by enemy attack |  |
| TC3 | Select the ‘run’ button during fight scene | Player is given the chance to escape the fight  The chance of escape should be calculated using the player’s stealth stat |  |
| TC4 | Select ‘item’ button and select valid item from inventory in fight scene | Player inventory should be correctly displayed with items that can be used in a fight sequence.  The player’s selected item should have its effect activated |  |
| TC5 | Let player health reach zero | Results in a player game over and level restarts |  |