**Use Case Document**

**The Time-Twisted Escape Rooms**

**Team Bombay**

**CMSC 447 – Software Engineering**

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**Sprint 1**

# Explanation of Use Case Contents

This Use case document has been developed for Team Bombay’s Sprint 1 for direction towards the game and functionality. Any user will be able to login to our game with no pre-requirements necessary to begin playing. Upon login, the user will be prompted whether if they had played the game before by asking for a registered username. If username is not recognized by the database, it will be made for them. Otherwise, the player class would pull information from the database to figure individual player statistics.

From the login page, the user will land on the main me.nu. Here they will be given four main options. Leaderboard option will present the current leaderboard of the game full of the fastest times of players who completed each level. Credits option will present a scrolling list of names and the tasks that each member has worked on towards the creation of the game. Key-binds option will allow the user to change the button layout for the game tied to their account. The final option ‘Play’ will present tall the unlocked levels that the player has access to.

From here they have the option to play the opening cutscene or selecting an available level. At which point, if a level is chosen, the user character is spawned into the level area. From here they can move in the cardinal directions, interact with objects, and equip items from the inventory. These character actions would be controlled by the user keyboard inputs. They also access to a menu which gives two options to the user. These would be the hint and quit game options. Prompting hint would provide a user a hint with the current problem, however it would take some time away from their total score. The quit option would send the user back to the main menu.

During this game loop, should the user interact with an interactable object, a close of the object sprites would appear on screen. This would give user access to point and clicking to interact with specific parts of the object. If a valid option was selected, the object would prompt the game to make an appropriate significant change. The user can exit this close of the object by hitting the interact button again.

The game loop has two conditions for the level to end. First being that the user has successfully acquired the items necessary to leave the current level. Should this condition be met, the screen would fade to white and present the user with his score based of the time remaining in the level. They would then be prompted either to return to menu or go to the next level. The second exit condition for the game is that the user had ran out of time in the current level. Should they run out of time, an explosion effect would play engulfing the screen and gives a level failed screen. They will then be prompted to either restart the level or return to menu.

Each level would have a different layout and theme for the player to explore and solve. With 3 levels total and a given 15 minutes time to escape each one. Each level would play a cutscene upon beginning and end tied to the story. These would be skippable by any keyboard input.