**VR Escape Room Exploration Scenario**

**Group 24: Patricia Guera, Aakash Kotak, Dylan Ou, Krystian Stanuch**

The **VR Escape room** is a game that allows players to entertain themselves in their own homes by experiencing a unique type of virtual reality by allowing the users to solve different escape rooms. The second scenario describes how a player would start the game, what would the player first see when launching the program, and exploring the variety of options for escape rooms and puzzles that are pre-defined by the system.

**Scenario “Explore Rooms”**

Prior to starting the game, the player must connect a VR headset such as HTC Vive, to a machine that is compatible with it, like a computer. The player then selects the game on the computer, and will be displayed on the monitor and through the headset.

When the user first launches the program, the system displays an opening welcome screen with a button to change from the main menu to the level select menu and a button to quit the application. If the user presses the *Level Select* button, the system will display a menu that contains the available rooms. The user can then choose from a certain number of rooms based on their skillset. The player will use the controllers that come with the HTC Vive and select their room of choice. Each room varies by difficulty. The more challenging the room is, the longer the player has so that they can adequately solve the puzzle and escape. Each option will also display the difficulty and the time limit within the level select menu.

The user will select one of the rooms with the controller, and the game will display that certain room. Off in the top corner, the controls for the game will be displayed along with the story of that particular room and the objective. If the user needs help with controls, they will have the option of clicking the menu button the controller which will display *help* as one of the options, letting the user see more clearly the controls of the game and the objective.

The system will accept command inputs from the user, which may be: *pause, help, pick up, or move* in any case or case combination.

The *pause* command is registered by a specific button. Here, the user can find a *help* button and a *quit* button. Pressing the help button will switch to a screen that shows all of the controls. Pressing the quit button will prompt the user to make sure they want to quit the escape room with a yes or no button included. If the user is certain, they can press the yes button and return to the main menu. Otherwise, return to the game.

The *move* command is registered by the system by pointing to spots in the game world where the player is allowed to go to and pressing a specified button. The user will have to be looking in that specific direction with the VR headset and pointing at the correct spots for the system to allow the movement.

The *pick up* command will be registered with the grip button on the controller. This will allow the user to pick up items to analyze and determine if they are useful for solving the puzzle. They can also rotate the picked up object by rotating the controller.

Based on the user input, the game allows the user to explore the room and find clues to solve the puzzle. Each room has a different theme and therefore different types of clues and puzzles to look for and solve. Some of the themes for these escape rooms would be an underground bunker, a haunted mansion, or a family entertainment center similar to Chuck E. Cheese’s.

When the timer runs out, the system should no longer let the player move and display a message alerting the player that they have run out of time, and were unable to complete the room. If the player is able to open the door before time runs out, the system should stop the timer, open the door and transition into another scene. The new scene will alert the player that they have escaped the room in *x* amount of time, depending on how long they take. From there the user will be met with a new menu. The system will allow the player to either choose another room or exit. Exiting will just lead the user back to the main menu screen.

When the user chooses to exit the game before completion, then the user can choose the *exit* or *quit* option, and the program should print a final “conclusion” screen, and thank them for coming. The same will happen if the player selects *exit* from the menu that appears after completing a room.