

No.	Name	Requirement	Priority 1: Highest 3: Lowest	Rationale	Author
	Accessibility				
1	Sound Settings	The game shall allow users to change audio settings in two ways:	1	Audio settings provides accessibility and allows for more user customization.	Josue Fernandini
1.1	Music Settings	– Mute and adjust music volume	1	Users may get frustrated during certain levels and may feel distracted by gameplay music.	Josue Fernandini
1.2	SFX Settings	– Mute and adjust sound effects volume	1	Certain distinct sounds may affect users negatively. This adds to accessibility for users who are sensitive to certain sounds.	Josue Fernandini
1.3	Sound	The game shall have a button used for reading the story to the user.	1	Fullfill accessibility	Jada Young
1.4	Font Size	The game shall allow the user to change the font size.	1	Aids users who may have a visual impairment.	Josue Fernandini
1.41	Font Settings	The game shall have 4 different font sizes:	1	Having various levels of font size accomodates user preferences and various levels of impairments.	Josue Fernandini
1.42	Small Font	– Small (16px)	2	Covers for users who are more accustomed to smaller font size.	Josue Fernandini
1.43	Medium Font	– Medium (Base: 20px)	1	Having a baseline makes adjustments easier. Common font size for PC games are 18–20px.	Josue Fernandini
1.44	Large Font	– Large (24px)	1	Slight increase to improve the readability of the game's text.	Josue Fernandini
1.45	XL Font	– XL (28px)	1	40% increase (from baseline) that aids users with a high level of visual impairment.	Josue Fernandini
	Accounts				
2	Account Creation	The game shall allow users to create an account.	1	Allows for player progression and score to be saved.	Jordan Chavous
2.1	Username	The game shall allows users to create a username.	1	A username allows distinction between accounts.	Jordan Chavous
2.11	Password	The game shall allows users to create a password for their username.	1	An password is needed to make sure nobody can access your account and mess with your progress.	Jordan Chavous
2.12	Account restriction	The game shall only allow the user to access an account if they enter the correct username and password	1	Protects account access.	Austin Lantz
2.13	Password change	The game shall allow the user to change their password	1	Allows the user to reset password for security or in the event that they for get it.	Austin Lantz
2.2	Account Data	The game shall allows users to save data on the account.	1	There is no point in having an account if it doesn't save your progress.	Jordan Chavous
2.3	Login	The game shall allow users to login on several different days.	1	The data is saved on an account which should be accessible on any/or every day.	Jordan Chavous
2.4	Account Data	The game shall collect the users ability level.	1	Puzzles will be presented to the user based on their ability level.	Austin Lantz
2.41	Account Data	The game shall store the users ability level.	1	Ability levels need to be saved since puzzles are based upon them.	Jordan Chavous
	Audio				
3	Soundtrack	The game shall have a soundtrack.	2	Background music conveys mood and enhances user immersion, improving the overall gaming experience.	Josue Fernandini
3.01	Sounds	The game shall have sound effects.	2	Sound effects keep the user intrigued with the game.	Jordan Chavous
3.1	Main Theme	The game shall have a dedicated main theme for the title screen.	2	A main theme establishes the game's identity and sets the initial mood for the player.	Josue Fernandini
3.2	Level Music	Each level shall have distinct background music that loops infinitely.	2	Distinct level music provides variety, adds to the atmosphere, and can make a level more memorable.	Josue Fernandini
3.3	Sound Effects	The game shall play a distinct sound effect when:	3	Sound effects provide immediate feedback, confirming that an action has been taken or that the game state has changed.	Josue Fernandini
3.31	Sound Effects	– A new hint is unlocked	3	A sound effect for a new hint can convey the feeling like something has been unlocked.	Josue Fernandini
3.32	Sound Effects	– A puzzle is solved	3	A sound effect for solving a puzzle gives the user a feeling of achievement.	Josue Fernandini
3.32	Sound Effects	– A puzzle is failed	3	A failed sound effects notifies the user they messed up.	Jordan Chavous
3.4	Ending Theme	The game shall have dedicated music for beating the game.	2	A dedicated ending theme lets the user reflect on the game's experience. It also gives the user a feeling of achievement.	Josue Fernandini
	Character				
4	Character Creation	The game shall provide a character creation process.	2	Character customization provides a personal connection to the application.	Josue Fernandini
4.1	Character Creation	The user shall customize these attributes:	2	Customization options add to player expression, replayability, and uniqueness.	Josue Fernandini
4.11	Character Name	– A character name	2	Naming a character provides personalization, role-playing opportunities, and an identity.	Josue Fernandini
4.12	Character Avatar	– A character avatar	2	Custom avatars can add to the immersion of using the application and player expression.	Josue Fernandini
4.2	Inventory	The game shall provide the user with an inventory system.	3	An inventory system allows players to acquire, organize, and use items, to support level progression.	Josue Fernandini
4.3	Item Interaction	The user shall be able to interact with items (See Item requirement 6–6.22) in their inventory:	2	There's no reason to have items if the user can't interact with them.	Josue Fernandini
4.31	Item Use	– Use items	1	Using items enhances gameplay mechanics by allowing the user to increase their timer, or get a free hint.	Josue Fernandini

4.32	Sort	– Sort items alphabetically	A sorting feature allows the user to organize their inventory.	Josue Fernandini
4.4	Character update	The game shall let the user update their avatar	3 Users can update their avatar to reflect their style	Austin Lantz
4.41	Name update	The game shall let the user update their name	3 User can update the name according to their preference	Austin Lantz
Difficulties				
5.1	Options	The game shall allow the user to select the level of difficulty.	1 Users like to have control over how difficult their game is for a better experience.	Austin Lantz
5.11	Scale	The game shall have 3 levels of difficulty (Easy, Medium, and Hard).	1 In an escape room there are different levels usually depending on what room you pick determines the level of difficulty.	Jada Young
5.12	Default	The game's default difficulty shall be Medium.	2 Having a medium baseline for the difficulty allows the game to either: lighten up, ramp up in difficulty.	Josue Fernandini
5.2	Game Progression	The game shall progress through levels of difficulty as the user goes through the game.	1 The goal of the game is to help the user develop their problem solving skills	Austin Lantz
Game Progress				
6	Pausing progress	The game shall allow the user to pause gameplay during a session	1 Being able to pause gameplay so the user can take a break	Austin Lantz
6.1	Pausing a timer	The game shall stop the timer when the game is paused	1 Stopping the timer will not impact the users time to finish the level.	Austin Lantz
6.2	Save points	The game shall save the users progress when the user selects the save button	1 The user may need to take a break but may want to save	Austin Lantz
6.3	Save level	The game shall save the users level upon exit	1 When the user saves they can resume playing in the same place	Austin Lantz
Hints				
7	Hint System	The game's hint system shall be based upon:	2 Multiple variables are needed to determine what hints are given to the user.	Jordan Chavous
7.01	Level Difficulty	– The level of difficulty.	2 The harder the level the more hints you get and the easier levels should have less hints.	Jada Young
7.02	Hint Tracking System	The game shall log hint usage for each player session	2 Having the game keep track of how many hints they used will help them see how many hints they have left. From there, they can choose to use more or buy more if they have ran out.	Jada Young
7.1	Currency	The game shall have an in-game currency system to purchase hints.	3 In game currency can make the users experience easier.	Austin Lantz
7.2	Earnable Hints	The game shall allow the user to earn additional hints by progressing through challenges in the game.	3 Rewarding the player with hints after progressing further can make the game more enjoyable.	Austin Lantz
Items				
8	Interaction	The user shall be able to interact with items.	3 Having in-game items enhances gameplay mechanics.	Josue Fernandini
8.1	Item Types	The game shall provide the user with two item types:	3 Adding a variety of items gives the user more options in how to interact with the game.	Josue Fernandini
8.11	Timer Increase	– Timer Increaser	3 Having a way to add time gives the user more time to solve puzzles and may decrease difficulty frustrations.	Josue Fernandini
8.12	Free Hint	– Free Hint (See Hint Currency requirement 7.1)	3 Being able to unlock free hints adds to replayability as users may decide to save free hints for more difficult puzzles.	Josue Fernandini
8.2	Item Finding	The user shall be able to obtain items in two ways:	3 Obtaining items by exploration lets the user be more involved with the game environment.	Josue Fernandini
8.21	Event Items	– Gameplay Events	2 Receiving items tied to the user's actions and achievements increases replayability and provides an incentive to complete challenges.	Josue Fernandini
8.22	Pickup Items	– Pickup/Find	2 Allowing players to find items encourages exploration and level/environment engagement.	Josue Fernandini
Puzzles				
9	Puzzle System	The game shall have logical questions .	1 Certain users enjoy mental/logic challenges.	Jada Young
9.1	Progression	The game shall have a non-linear path.	1 Some users enjoy solving an escape room in no particular order and most of the time in an escape room there is no linear path.	Jada Young
9.2	Difficulty	The game shall present problems at the users appropriate ability level.	2 Users will be presented with puzzles that provide appropriate challenges based on their ability level. We want to make it fun but also challenging.	Austin Lantz
9.3	Puzzle Mechanics	The game shall present puzzles that require critical thinking.	2 Normally escape rooms require users to employ analytical skills.	Austin Lantz
9.31	Puzzle Mechanics	The game shall present puzzles that require creativity to solve.	2 Escape rooms typically require users to use creative thinking.	Austin Lantz
9.4	Theme	The game shall present puzzles that adhere to the themes for each level.	3 Escape rooms are all about the experience and the story so the problems should enhance the experience.	Austin Lantz
9.5	Difficulty	The game shall present puzzles that can be reasonably solved within the specified time limit.	1 Want to challenge users but not make it impossible for them to succeed.	Austin Lantz
Story				
10	Introduction	The game shall have a story line before the player starts the game.	1 Having a storyline before the player starts will help them understand the theme of the escape room and why they need to escape.	Jada Young
10.1	Variety	The game shall allow the character to choose which path they want to take after a task.	3 Allowing players to choose what path they want to take will help them feel like they are progressing through the game to escape.	Jada Young
10.2	Story Development	The game's introduction story line shall be built upon each puzzle completion.	2 The building of the story is essential to the enjoyment of the user. There shouldn't be an intro story line and no other stories that go along with it.	Jordan Chavous

	Timer			
11	Timer System	The game shall have a time limit of 30 minutes.	A limit to complete the game adds to the games suspense and difficulty. 1	Josue Fernandini
11.1	Time Penalty	The game's timer shall decrease on every puzzled failed based upon difficulty.	Time pentalization is needed in order for there to be multiple difficulties. 1	Jordan Chavous
11.2	Easy Mode Penalty	The game's timer shall decrease by 15 seconds per puzzle failed on the Easy difficulty.	A pentalization for the easy difficulty is needed to add a little suspense, but not overwhelm the user. 1	Jordan Chavous
11.3	Medium Mode Penalty	The game's timer shall decrease by 30 seconds per puzzle failed on the Medium difficulty.	A pentalization for the medium difficulty is needed to add a good mix, inbetween hard and easy difficulties, of suspense and anxiety. 1	Jordan Chavous
11.4	Hard Mode Penalty	The game's timer shall decrease by 1 minute per puzzle failed on the Hard difficulty.	A pentalization for the hard difficulty is needed to add a lot of suspense and make the user more anxious. 1	Jordan Chavous
	User Interface			
12	Display	The game shall provide a user interface (UI) that displays essential game information.	Presenting relevant information to a user is a requirement of every game as it keeps players informed about the state of their character and environment. 1	Josue Fernandini
12.1	Timer	The game shall display a timer of 30 minutes on game start.	A timer is needed to add sense of danger. 1	Jordan Chavous
12.11	Timer	The games's timer shall indicate time left in the game.	Indication of time left in the game allows the user to be aware of how fast they must play in order to complete the game. 1	Jordan Chavous
12.2	Hints	The user shall have a way to toggle through available hints.	A carousel -type mechanic allows players to cycle through hints without cluttering the screen. 2	Josue Fernandini
12.3	Inventory	The user shall have a button to open their inventory. (See Inventory requirements 4.2 - 4.32).	A quick way to access a menu is necessary especially since players are on a timer. 3	Josue Fernandini
12.31	Inventory	The game shall have a distinct inventory interface that is layered above the current level's interface.	Z-indexing the inventory UI higher is a common technique found in games. It will be similar to a modal found in web applications. 1	Josue Fernandini
12.32	Close Inventory	The game shall have a button to close the inventory.	If a modal-type component is being used to display information then there has to be a way to close it. 1	Josue Fernandini
12.33	Sort	The game shall have a button to sort the inventory alphabetically.	The user must be provided with a way to organize their inventory. 2	Josue Fernandini
12.4	Item Layout	The game shall show an item's (See Item requirement 8 - 8.22) 3 unique properties:	Item information must be shown to allow users to interact with them. 2	Josue Fernandini
12.41	Item Name	- Item Name	Player's have to know the name of which item they are interacting with. 1	Josue Fernandini
12.42	Item Avatar	- Item Avatar	A unique icon or image helps player's quickly recognize an item in their inventory instead of completely relying on text. 3	Josue Fernandini
12.43	Item Quantity	- Item Quantity	Showing item quantity informs players of available resources and supports decision-making during gameplay. 1	Josue Fernandini
12.5	Navigation	The game shall allow the player to use navigation buttons to move around the room.	Some users find it easier to navigate through an online escape room by using navigation buttons(for example, google maps) 2	Jada Young
12.6	Save Button	The game shall have a save button.	Allows the user to save their progress. 1	Jordan Chavous
12.7	Leaderboard	The game shall show a leaderboard that contains:	A leaderboard shows the user game their completion attempts. 3	Jordan Chavous
12.71	Leaderboard Times	- Different game completion times from the user	Allows the user to see all of their attempts and which ones are the best or worst. 3	Jordan Chavous
12.8	Ending Screen	On game completion the game shall show a "The End" screen that contains:	An ending screen gives the user satisfaction that they beat the game. 2	Jordan Chavous
12.81	Ending Time	- Time it took the user to complete the game	Allows the user to see how well they did 2	Jordan Chavous
12.9	Pause button	The game shall have a pause button	Allows the user to pause gameplay 1	Austin Lantz