

	Name	Requirement	Priority	Rationale	Author
1	Hints	The game shall display a clickable hint button	1	offer hints to the player if they are stuck	JK
1.1	Hints	The hit button shall reduce the timer when clicked	2	a penalty would be good to balance the use of hints	JK
1.2	Hints	time reduced -easy 1 minute - medium 2.5 minutes - hard 5 minutes	2	changeable depending on balancing needs	JK
1.3	Hints	the hint button shall give clues based on the active puzzle	1	hints need to be related to the current puzzle	JK
1.4	Hints	The user shall be able to view a short objective description for the active puzzle.	2	Keeps players oriented without spoiling the solution, reduces confusion and hint spam.	KP
1.5	Hints	The user shall be able to reveal a puzzle solution with a large time penalty when enabled by difficulty.	1	Prevents hard stalls while preserving challenge	KP
2	Inventory	The user shall have an inventory	1	to store items found during the game	JK
2.1	Inventory	The inventory will be limited to x spaces	2	to increase difficulty the users inventory space should be limited	JK
2.2	Inventory	spaces limited to 7 - easy 5 - med - 3 hard	2	to increase difficulty the users inventory space should be limited	JK
2.3	Inventory	The inventory shall allow drag and drop item rearrangement.	2	Provides better organization and user control.	RP
2.4	Inventory	The inventory shall allow discarding items.	2	Allows players to manage limited space more strategically.	RP
2.5	Inventory	Discarded items shall not be retrievable.	3	Adds permanence to player decisions and increases difficulty.	RP
3	Account	The user shall be able to make an account	1	Allows the user to have their own account	DD
3.1	Account	The user shall be able to save their high score to their account	1	This lets the user always have access to their high score	DD
3.2	Account	The user shall be able to create a username	1	This lets them pick their username	DD
3.3	Account	The user shall be able to create a password	1	This allows only the user to enter their account	DD
3.4	Account	The user shall be able to change their username if it is available.	2	Supports personalization and correction of typos while maintaining unique identifiers for saves, certificates, and leaderboards.	KP
3.5	Account	The user shall be able to play as a guest without creating an account.	1	Lowers friction for first-time players	KP
3.6	Account	The user shall be able to delete their account and associated data.	1	Gives control over locally stored data	KP
3.7	Account	The user shall not be able to create a duplicate account	1	Prevents username collisions and data corruption	KP
4	Difficulty	The user shall be allowed to choose from 3 difficulty levels: easy, medium, hard	1	allows the user to tailor their game based on their own skill level	JK
5	Timer	The game shall display a timer of x minutes at the game start	1	to show the player how much time is left for them to complete the puzzle	JK
5.1	Timer	the timer shall be 30 minutes - easy 25 minutes - med and 20 minutes - hard	2	variety to the games clock would add a layer of replayability and difficulty	JK
5.2	Timer	the timer shall trigger game over when it reaches 0	1	the game needs to end when the player runs out of time	JK
5.3	Timer	The timer shall be presented at all times after the game has started	1	allows the user to always know how much time they have left	DD
5.4	Timer	The timer shall flash red during the last 60 seconds.	1	Visually alerts the player that time is almost over.	RP
5.5	Timer	The timer shall play an audio alert when less than 30 seconds remain.	1	Provides an auditory cue for urgency.	RP

6	User's avatar	The user shall have an avatar	2	This allows the user to have something that represents their character (the avatar)	DD
6.1	User's avatar	The game shall offer five different avatar options	2	This gives the user more than one avatar to choose from	DD
6.2	User's avatar	The user shall choose one avatar after they hit play	2	This allows the user to choose their avatar before the game starts	DD
7	Audio	The system shall play audio when a puzzle is solved	2	This plays an audio cue to let the user know they have solved a puzzle	DD
8	Certificate	Upon completing the game, the system shall reward the user with a certificate	1	This gives something to the user that shows they have won the game	DD
8.1	Certificate	The certificate shall have the user's username	1	shows who the certificate belongs to	DD
8.2	Certificate	The certificate shall display the user's remaining time left at the time of completion	1	shows how much time left the user had before winning	DD
8.3	Certificate	The certificate shall display the difficulty the user completed the game on	1	shows the difficulty the user won on	DD
8.4	Certificate	The user shall be able to save their certificate to their account (requirement 3)	2	Allows the user to keep their certificate by saving it to their account	DD
9	Menu	The system shall have a menu	1	The menu allows the user to have access to various things like settings and the ability to exit the game	DD
9.1	Menu	The menu shall be opened by a button	1	Allows the user to access the menu	DD
9.2	Menu	The menu button shall be displayed at all times after the game has started	1	Allows the user to always have access to the menu button	DD
9.3	Menu	Opening the menu shall pause the timer (requirement 5)	3	Provides the user a way to pause the time if they are not actively playing the game	DD
9.4	Menu	Exiting the menu shall resume the timer (requirement 5)	1	Allows the timer to continue counting down upon leaving the menu	DD
9.5	Menu	The menu shall contain an exit button	1	The exit button provides a way for the user to leave the game	DD
9.6	Menu	The menu's exit button shall end the game when clicked	1	Allows the user to exit the game	DD
9.7	Menu	The menu's exit button shall take the user to the title screen when clicked (requirement 10)	1	Takes the user to the title screen	DD
9.8	Menu	The menu shall include a settings tab.	2	Ensures accessibility features are easy to enable or disable.	RP
9.9	Menu	The settings tab shall allow toggling accessibility features.	2	Lets players compare fairly within the same challenge level.	RP
10	Title Screen	The system shall have a title screen	1	The game has a screen where you can start a new game or make an account	DD
10.1	Title Screen	The title screen shall have a Login button	1	This allows the user to login to their account if they have one	DD
10.1	Title Screen	The login button shall take the user to the login screen (requirement 11)	1	This takes the user to the place where they put in their username and password for their account	DD
10.2	Title Screen	The title screen shall have a Create Account button	1	This button allows users to create an account	DD
10.3	Title Screen	The create account button shall take the user to the create account screen (requirement 12)	1	Takes the user to a screen where they can create their account	DD
10.4	Title Screen	The title screen shall display the name of the game	1	Tells the user the name of the game	DD
11	Login Screen	The system shall have a login screen	1	This screen allows the user to login to their account	DD

11.1	Login Screen	The login screen shall have a place for the user to enter their username	1	This allows the user to enter their username	DD
11.2	Login Screen	The login screen shall have a place for the user to enter their password	1	This allows the user to enter their password	DD
11.3	Login Screen	The system shall check the if entered credentials match with an existing account (requirement 3)	1	the system needs to be able to tell if the credentials are valid or not	DD
11.4	Login Screen	The login screen shall enter the user into their account if the credentials are correct (requirement 3)	1	This allows the user to enter their account	DD
11.5	Login Screen	The system shall display an error message if the credentials are incorrect	1	This tells the user they have entered in something wrong	DD
11.6	Login Screen	The error message shall state "Invalid credentials. Username and/password is incorrect	1	This tells the user they have entered in something wrong	DD
12	Multiplayer	The system shall incorporate Multitplayer	1	Allows the game to be played with more than one person	TK
12.1	Multiplayer	The system shall allow up to 2 players to join the same game session	1	Set to where up to 2 players can play under the same session	TK
12.2	Multiplayer	The system shall allow synchronization of puzzles for across both players	1	Both players progress at the same time	TK
13	Communication	The system shall include in-game communication tools for cooperative play	1	Players are able to communicate between eachother	TK
13.1	Communication	The system shall include a built-in team chat box	1	Allows players to communicate back and forth through a built in chat box	TK
13.2	Communication	The chat box shall support formatting such as bold, uppercase, & lowercase	2	Players are able to format text in order to provide emphasis	TK
13.3	Communication	The user shall have an option to note down any important information they need to	1	Provides an in-game memory aid for codes/clues	KP
13.4	Communication	The user shall have an option to view the notes at anytime	1	Ensures quick recall during multi-step puzzles and time pressure	KP
14	Leaderboard	The system shall track and display top preformances	1	The system provides means of seeing the top preformers in game	TK
14.1	Leaderboard	The leaderboard shall track and display the fastest completion times	1	The leaderboard will track the fastest completion times and display it	TK
14.2	Leaderboard	The leaderboard shall display usernames	1	The leaderboard shows player usernames	TK
14.3	Leaderboard	The leaderboard shall display difficulty	1	The leaderboard will display the level of difficulty of the puzzle completed	TK
14.4	Leaderboard	The leaderboard shall be able to filter by time	2	The leaderboard will allow players to filter by time such as week, month, or all-time	TK
14.5	Leaderboard	The leaderboard shall allow filtering by difficulty only.	2	Lets players compare fairly within the same challenge level.	RP
14.6	Leaderboard	The leaderboard shall allow exporting results as a screenshot.	3	Enables easy sharing of achievements outside the game.	RP
14.7	Leaderboard	The leaderboard shall highlight the player's own best score for comparison.	1	Encourages personal progress tracking.	RP
15	Story	The system shall present a narrative experience to the players	1	There will be a written background story to add context to the escape room	TK
15.1	Story	The game shall have an introductory background story explaining the context of the game	1	There will be given context relative to the setting and topic of the game	TK
15.2	Story	The system shall further the story through completion of puzzles	1	As players complete puzzles more detail will be added to the story	TK
15.3	Story	The system shall present a final lore piece to the player upon game completion	1	Once the player completes the game the story should also finish with a final piece of lore	TK

16	Achievements	The game shall award achievements for notable player actions	2	With certain player action there would be an achievement awarded to the player	TK
16.1	Achievements	The system should allow players to view achievements earned via player's account profile	2	If the player wanted to see the achievements earned they would navigate to their profile to see	TK
16.2	Achievements	The system shall associate each achievement with a rarity	3	Each achievement should have a rarity. For example common, rare, and ultra-rare.	TK
16.3	Achievements	The system shall display achievement notifications in real time.	2	Provides instant feedback and motivation.	RP
16.4	Achievements	The system shall allow achievements to remain hidden until unlocked.	3	Adds mystery and replayability.	RP
16.5	Achievements	The system shall allow font size adjustments for in-game text.	3	Promotes competition and community engagement.	RP
17	Progress	The system shall visually display the player's progress	2	The player will be able to see how close they are to completion of the overall game	TK
17.1	Progress	The system will have a progress bar to visually display progression percentage	2	Progression percentage will be displayed via progress bar	TK
17.2	Progress	The system shall update the progression in real-time upon puzzle completion	2	The progress of the player will be updated in real-time	TK
17.3	Progress	The system shall display per-room completion percentage	3	The game will also display the completion percentage of the current room	TK
18	Accessibility	The system shall allow font size adjustments for in-game text.	2	Improves readability for visually impaired players.	RP
19	Puzzle Variety	The system shall randomize puzzle order within a category.	2	Increases replayability and unpredictability.	RP
20	Cutscenes	The system shall allow players to skip cutscenes after first viewing.	3	Prevents frustration from repeated cutscene viewing.	RP
21	Tutorial	The tutorial shall explain basic movement and interaction controls.	1	Ensures new players can learn how to play effectively.	RP
21.1	Tutorial	The tutorial shall allow players to replay it at any time from the menu.	2	Provides ongoing learning support.	RP
22	Settings	The settings shall include a master volume control.	2	Allows players to adjust audio levels easily.	RP
22.1	Settings	The settings shall include customizable key bindings for movement.	1	Supports accessibility and personal preference.	RP
23	Puzzles	The game shall require x ammount of puzzles completed to win the game	1	After all puzzles have been solve the player will have both completed the story and won the game	JK
23.1	Puzzles	The game shall have 10 puzzles for easy 15 for medium and 20 for hard	2	Would allow for a mix of difficulty adding more puzzles	JK
24	Audio	The game shall contain auido cues to engage the player	1	To keep the user engaged and offer clarity of positive or negative results	JK
24.1	Audio	The game shall play a sound when the user interacts with a button	2	Important to let the user know that their input is being recorded	JK
24.2	Audio	The game shall sound a negative sfx when the user attempts to engage with a locked puzzle	2	Important to let the user know that their input is being denied because the puzzle is locked	JK
24.3	Audio	The game shall sound a negative sfx when the user attempts to engage with a completed puzzle	2	Important to let the user know that their input is being denied because the puzzle is already completed	JK
24.4	Audio	The game shall sound a positive sfx when the game is won	1	to add depth to the games playthrough	JK
24.5	Audio	The game shall sound a negative sfx when the game is lost	1	to add depth to the games playthrough	JK
24.6	Audio / Story	The story shall contain audio naritive elements	2	Make this an option to the user to reduce text clutter on screen	JK