User Requirement Changes

ID	Description	Priority
UR_ESCAPE	The player needs to be able to escape the maze within 5 minutes and fails otherwise.	Shall
UR_PAUSE	The player needs to be able to pause the game at any given time during play.	Shall
UR_EVENTS	The game shall include 1 positive, 1 negative and 1 hidden event for current iteration.	Shall
UR_ACCESSIBILITY	The game shall be accessible to as wide an audience as possible.	Shall
UR_VISIBILITY	The player should be able to view the whole map and its boundaries at all times (details of map contents may be hidden).	Shall
UR_EASE	Due to the mass market target audience, the game should be easy enough to win for new and average players alike.	Should
UR_SCORE	The player 'wins' the game by escaping the maze within the time and a score is given based on the time.	Should
UR_TONE	The game's tone should be family friendly with light humour without adult or overly violent themes.	Should
UR_HOW	The player should know how to play the game via some clear instructions/tutorial.	Should
UR_SAVE	(post project changeover) The user should be able to save their current progress in the maze.	May

Functional System Requirement Changes

ID	Description	User Reqs
FR_EVENTS	The game will detect and trigger events based on players interaction/collisions accordingly	UR_EVENTS
FR_MAP	The map will be a hardcoded 2D maze and visible at all times with clear boundaries.	UR_VISABILITY, UR_EASE
FR_MOVEMENT	The game shall allow the player avatar to navigate the map using standard directional keyboard inputs.	UR_ACCESSIBILITY, UR_EASE
FR_SCORE_CALC	The game should calculate a score based on the player's escape time, with a fail scenario should 5 minutes elapse before escape.	UR_SCORE
FR_RESET	The game shall reset/restart appropriately if the player either	UR_ESCAPE

	wins/fails/quits the game.	
FR_RESUME	The game shall resume seamlessly from pause with no background AI or physics persisting behind pause.	UR_PAUSE
FR_INVARIANTS	The game should always have a means to win (escape), the timer should always track player time, player avatar must always respond to player input.	UR_HOW, UR_ESCAPE, UR_SCORE
FR_TIMER	The game shall implement a timer to track the players play and escape time throughout the game.	UR_ESCAPE

Non-Functional System Requirement Changes

ID	Description	User Reqs	Fit Criteria
NFR_USABILITY	Game shall be simple and intuitive with limited instruction	UR_ACCESSIBILITY	90% of testers should be able to complete the maze based solely on the information provided in the manual/tutorial
NFR_RELIABILITY	The game shall remain stable during and after play	UR_ESCAPE	>= 90% of test runs (incl failure runs) should end without a crash or significant performance issues.
NFR_RESILIENCE	The game should handle invalid inputs or missing objects appropriately	UR_ACCESSIBILITY	Should a player try to interact with an area/object/npc without meeting the expected criteria (missing item, event not triggered yet etc) a suitable prompt should inform the player.
NFR_PERFORMANCE	The games performance shall run consistently smooth	UR_VISIBILITY	The framerates should run within acceptable range (30-60fps) on average hardware.
NFR_LEGAL	No assets or code can be implemented from illegal / copyrighted sources	UR_VISIBILITY, UR_TONE	100% of external assets and designs should be verified for fair legal use and cited appropriately.
NFR_UI	The map and user interface should be clear and accessible	UR_ACCESSIBILITY	The map and maze design should be clear and intuitive, with text prompts having >= 12pt fonts

				with bright and contrasting colours.
NFR_AESTHETIC	The game shall have a fantasy university theme with magical elements and assets with light humor and be family friendly	UR_TONE		The map, maze and NPC's shall all fit within the fantasy theme with magic effects, colour pallets, tiles and pixel art all cohesive to the theme.
NFR_INSTRUCTIONS	The player should know how to navigate the maze via input keys and how to win the game (escape).	UR_HOW, UR_ESCAPE		The game shall feature an instructions page within the menu (accessible from pause too) and/or feature an auto scripted instructional tutorial accessible in the same way.

Constraints

ID	Description	Fit Criteria
CR_ENGINE	The game must be built in a Java based engine for PC only. No support for other devices.	Runs successfully on windows/linuxPC hardware without additional dependencies using Java runtime.
CR_HARDCODED	The game's map and structures should be hard coded.	The game shall load the same map layout every run without procedural generation.
CR_ASSETS	The games assets shall be sourced from legally sound 3rd parties, AI generated or built from scratch.	3rd party assets used shall be documented, cited and verified for legal use.
CR_AI_LIMIT	No part of the game's programming can be constructed with the use of AI.	Git comment logs/google doc documented tasks detail proof of no AI use for programming of the game.
CR_TIMEFRAME	A finished, fully working first iteration of the game must be completed and tested by 12/1/2026	All core FR's implemented and tested by first assessment milestone: (10/11/2025).
CR_RESOLUTION	The game shall be a fixed screen resolution of 1920 x 1080	Full map visable and clear on a standard 1920 x 1080 resolution for 16:9 average monitor size.
CR_CHEAT	The player should only win the game according to the	The player should not be able to escape the maze or win by other

	rules/map limitations.	means such as manipulations or bugs. (e.g: clipping through walls, dupicating items illegally, manipulating events or AI).
CR_FORBIDDEN	The game shall make clear what the player can and cannot interact with.	The API should be accessible to developers only with no access available to the player. The player should not be able to pass through walls or into areas not intended for the player.
CR_RATING	Must be accessible to average player and be family friendly	The game difficulty should not be overly complex or competetive and not feature adult themes or violence.