Use case: start game **Primary actor:** player

Goal in context: to start a new round of the game

Preconditions: game must be opened, necessary peripherals must be connected

Trigger: player decides to start a game

Scenario: player opens application to be greeted by the start menu with "start", "leaderboard", "difficulty" options, player presses on the "start" option to start a round (with preset options), the game will spawn player in the enter cell and all entities

Exceptions: player clicks wrong option

Priority: essential, basic function, must be implemented

When available: first increment

Frequency of use: frequent, almost every time game is opened

Channel to actor: via start menu

Secondary actors: n/a

Channels to secondary actors: n/a

Open issues: Should there be a "continue game" function?

Would an internet connection be needed? (gameplay updates)

Perhaps a tutorial prompt for first time opening on a desktop

Use case: move character

Primary actor: player

Goal in context: move user-controlled character to an adjacent cell

Preconditions: a round must be currently in session Trigger: player decides to advance to a different cell

Scenario: The player utilises either the arrow keys or WASD to move the user-controlled

character accordingly

Exceptions: movement where path is blocked by barriers Priority: essential, basic function must be implemented

When available: first increment

Frequency of use: frequent, every time game is played

Channel to actor: via keyboard arrow keys

Secondary actors: n/a

Channels to secondary actors: n/a

Open issues: Should the player be able to customize the keys responsible for moving the user-controlled character?

Use case: pause/exit game

Primary actor: player

Goal in context: to stop the game at its current state or exit the application

Preconditions: game must be started (see use case - start game)

Trigger: player decides to pause the game or exit the application entirely

Scenario:

From anywhere the application is open, player can press the escape key A pop up window will appear. If the player was in the middle of a round, a menu with the following options will appear: resume, restart, return to the main menu and exit. If the player selects the exit option, they will be asked again if they are sure. If they select yes, the application will close. If they select no, they will be returned to the menu. If the player is not currently in the middle of a round, the player will be prompted with a window asking them if they are sure they would like to exit. If they select yes, the application will close. If they select no, the application will return to the original state before the player pressed the escape key.

The player can also exit the application from both the main menu as well as from the menu displayed after completion of a round.

Exceptions: n/a

Priority: moderate, game is functional without, can be implemented after basic functions

When available: second increment

Frequency of use: infrequent

Channel to actor: via UI Secondary actors: n/a

Channels to secondary actors: n/a

Open issues: n/a

Use case: end round **Primary actor:** player

Goal in context: End current game round session

Preconditions: game must be started (see use case - start game)

Trigger: The user-controlled character is caught by a moving enemy, user-controlled character reaches the exit cell after collecting all "regular" rewards, player score becomes negative, player quits the round via pause menu

Scenario: The player's round ends due to one of the following scenarios: the user-controlled character is caught by a moving enemy, user-controlled character reaches the exit cell after collecting all "regular" rewards, player score becomes negative or player quits the round via pause menu. Then, a menu with the following options appears: view leaderboard, play again, settings, return to the main menu and exit game.

If the player recorded a top-10 score, the player will be asked if they want to save their score to the leaderboard. If they select yes, they will be prompted to enter a name between 1-12 characters long and will be sent directly to the leaderboard menu. If the player selects no, the player will return to the main menu.

Exceptions: n/a

Priority: essential, basic function must be implemented

When available: first increment

Frequency of use: frequent, every time game is played

Channel to actor: via UI Secondary actors: n/a

Channels to secondary actors: n/a

Open issues: Should a "save" function be implemented so the player can continue playing

the game later?

Use case: restart game
Primary actor: player

Goal in context: to start a new round of the game during gameplay

Preconditions: game must be in progress **Trigger:** player decides to restart round

Scenario: player pauses game by pressing the escape key and then selects the restart game

option. Another round with the same settings for difficulty and map size commences.

Exceptions: Player cannot restart a game unless currently in one

Priority: low-moderate, not essential, can be implemented after basic functions

When available: second increment

Frequency of use: infrequent

Channel to actor: via pause menu

Secondary actors: n/a

Channels to secondary actors: n/a

Open issues: n/a

Use case: View leaderboard

Primary actor: player

Goal in context: to view top ten all time scores

Preconditions: player must not have a round currently in session

Trigger: player decides to view leaderboards

Scenario: From either the main menu, or the menu displayed upon completion of a round, the player can select the view leaderboard option. At the bottom of the leaderboard will be a return to main menu option.

Exceptions: The player cannot view the leaderboard while they are currently playing a round.

Priority: low, can be implemented after basic functions

When available: third increment Frequency of use: occasional

Channel to actor: via main menu or menu displayed upon completion of a round

Secondary actors: If the leaderboard ends up being global, other players will see the leaderboard scores of others. Their scores may be potentially knocked off the leaderboard or may contribute to it.

Channels to secondary actors: n/a

Open issues: Is the leaderboard going to be local to the computer global?

Use case: Toggle settings

Primary actor: player

Goal in context: toggle/view current settings

Preconditions: player must not have a round currently in session

Trigger: player decides to toggle/view settings

Scenario: From either the main menu, or the menu displayed upon completion of a round, the player can select the settings option. The settings menu will allow the player to change a variety of settings, including but not limited to difficulty, map size and character control method.

Exceptions: The player cannot toggle/view settings while they are currently playing a round.

Priority: moderate, can be implemented after other basic functionality

When available: second increment

Frequency of use: occasional

Channel to actor: via main menu or menu displayed upon completion of a round

Secondary actors: Since setting changes are to be saved locally, over people using the same

application may need to change to their preferred settings upon opening the application

Channels to secondary actors: n/a

Open issues: Perhaps an option to control game volume as well? At this stage, music has not been discussed so this remains an open issue.