

Use Case 1: Winning the level

Primary Actor: Main player

Goal: Collect all required rewards and reach the exit

Preconditions: The game is in action and has a working board.

Trigger: Player reaches the exit cell with enough points.

Scenario:

- Player navigates the game boards via moving
- Player avoids the moving enemy
- Player collects all regular rewards
- Player has accumulated enough points to exit the Game.
- Player reaches exit cell
- Game ends, time and score is displayed

Exceptions:

- Player not presented with winning screen
- Rewards or punishments are not displayed

Priority: Essential, must be implemented

When available: When the Player completes the level.

Frequency of use: Everytime the user completes a level

Use Case 2: Collect reward

Primary Actor: Main player

Goal: Collect all required rewards or bonus rewards to increase score

Preconditions:

- The game has a working board and the player can move around the board
- There are regular and bonus rewards available for collection on the board

Trigger: Player collects bonus or regular reward

Scenario:

- Player navigates the game boards via moving
- Player collects reward by moving into the same cell as the reward
- Reward disappears off the board
- Score increases by 50 points for regular rewards and 100 points for bonus rewards

Exceptions:

- Rewards are not displayed on the screen
- Collecting rewards does not change score
- Rewards do not remove from the board when collected

Priority: Essential, must be implemented

When available: First increment

Frequency of use: Up to 5 reward collections per play session

Use Case 3: Receive Punishment

Primary Actor: Main player

Goal: Decrease player score

Preconditions:

- The game has a working board and the player can move around the board
- Punishments will generate on the board

Trigger: Player lands on cell with punishment

Scenario:

- Player navigates the game boards via moving
- Player receives punishment by landing on a cell with a punishment
- Punishment disappears from the board
- Score decreases by 50 points

Exceptions:

- No punishments generate on the board
- Punishment does not disappear after being collected

Priority: Mandatory, must be implemented

When available: Game start

Frequency of use: Multiple times for each map

Use Case 4: Moving

Primary Actor: Main player

Goal: Change position of main character on the board

Preconditions: Game has a working board and The game was initiated.

Trigger: Pressing arrow keys

Scenario:

- Player wants to move to a specific position
- Players captures rewards/punishment
- Enemies move to catch the player
- Player exits the game via moving to the exit

Exceptions:

- Cannot move across walls

Priority: Essential, must be implemented

When available: When the Player is in the Play State

Frequency of use: almost at all times while in the play state

Channel to actor: via game screen

Use Case 5: Lose the game

Primary Actor: Main player

Goal: Be presented with the exit screen options menu

Preconditions:

- The game is in progress
- Enemies and punishments are on the board

Trigger: Enemy reaches same cell as player or player's score falls below zero

Scenario:

- Player navigates the board
- Player captures punishments
- Enemy captures the player
- Player score goes below 0
- Game goes into game over state

Exceptions:

- The exit screen does not appear
- Player doesn't die when encountered by the enemy
- Game isn't over even though the score goes below 0.

Priority: Mandatory, must be implemented

Use Case 6: Enemy engages player

Primary Actor: Main player

Goal: End the level

Preconditions:

- The game has a working board and the player can move around the board
- There are moving enemies on the board

Trigger: Move character into the same cell as moving enemy

Scenario:

- Player navigates the game boards via moving
- Player engages a moving enemy
- Moving enemy disappears from board
- Game over state begins

Exceptions:

- Moving into a moving enemy does not end the game
- Moving enemy is stationary
- Moving enemy does not follow the main character

Priority: Essential, must be implemented

When available: upon initial launch of the game

Frequency of use: Can engage one of 3 moving enemies on the game board