

Use Case: Knight's Movement

Primary Actor: Knight

Goal in Context: Maneuver the knight across the game board.

Preconditions:

- A valid cell must be available for the knight to move to.

Trigger: Inputting directional commands (e.g., W, A, S, D).

Scenario:

Pressing W moves the knight upwards.

Pressing A moves the knight to the left.

Pressing S moves the knight downwards.

Pressing D moves the knight to the right.

Exceptions:

- If any key other than W, A, S, or D is pressed.

Priority: High Priority

Frequency of Use: High

Use Case: Knight Encounters Enemy

Primary Actor: Knight

Goal in Context: Accidentally moving the knight onto the same cell occupied by an goblin.

Preconditions:

- An goblin must be present in a cell.
- The knight must not be in the same cell as an goblin.
- The game must not be over.

Trigger: The knight moves onto the same cell as an goblin

Scenario:

The knight moves to a cell containing an enemy knight.

The knight is defeated, resulting in the end of the game (0 health).

Exceptions:

- Invalid movement (refer to "Knight's Movement" use case).

Priority: High Priority

Frequency of Use: Medium

Use Case: Knight Encounters Barrier

Primary Actor: Knight

Goal in Context: Accidentally moving the knight into a cell obstructed by a barrier.

Preconditions:

- A cell with a barrier must be present.

Trigger: The knight moves onto the same cell as the barrier.

Scenario:

The knight attempts to move into a cell with a barrier from an adjacent cell.

The knight remains in the same position; no movement occurs.

Exceptions:

- Invalid movement (refer to "Knight's Movement" use case).

Priority: High Priority

Frequency of Use: Medium

Use Case: User Starts the Game through the Menu

Primary Actor: User

Goal in Context: Get user input to start the game.

Preconditions:

- User is presented with a main menu.

Trigger: User presses an appropriate button through the UI to start the game.

Scenario:

User's display is the main menu.

User enters input through the UI to start the game.

Exceptions:

User input is not valid.

User quits the game from the start menu.

Priority: Very High Priority

Frequency of Use: Medium

Use Case: User Pauses the Game

Primary Actor: User

Goal in Context: Get user input to pause the game.

Preconditions:

- User is given some UI to pause the game.

Trigger: User presses an appropriate button through the UI to pause the game.

Scenario:

User presses the pause button.
Game stays paused until resumed or quit.

Exceptions: None.

Priority: Low Priority

Frequency of Use: Low

Use Case: User Resumes the Game

Primary Actor: User

Goal in Context: Get user input to resume the game.

Preconditions:

- User is given some UI to resume the game.

Trigger: User presses an appropriate button through the UI to resume the game.

Scenario:

User presses the resume button.
The game is unpaused.

Exceptions: None.

Priority: Low Priority

Frequency of Use: Low

Use Case: User Quits the Game

Primary Actor: User

Goal in Context: User quits the game.

Preconditions:

- User is given some UI to quit the game.

Trigger: User presses an appropriate button through the UI to quit the game.

Scenario:

User presses the quit button.

The game stops, and the application is closed.

Exceptions: None.

Priority: Low Priority

Frequency of Use: Medium

Use Case: User Clears Level

Primary Actor: User

Goal in Context: User wins the game.

Preconditions:

- User is given some UI to win the game and exit.

Trigger: User presses the appropriate button to quit the game.

Scenario:

User presses the win button.

Game stops, application closes.

Exceptions: None.

Priority: Low Priority

Frequency of Use: Low