

Use Case: Starting a new game

Primary actor: player

Scenario:

1. The player starts the game.
2. The player selects the "Play Game" Button at the main menu.
3. The system initializes the first level.
4. The system displays the board, main character, and enemies.

Use Case: Moving the main character in a cardinal direction

Primary actor: player

Preconditions: The player must have started a game; the game must not be paused.

Scenario:

1. The player presses one of the 4 specific directional keyboard inputs to move.
2. The system ends the current game tick and checks the new position.
3. The system updates the main character's position if it is valid.
4. The system checks if the main character intersects with any objectives or enemies, then reacts accordingly.
5. The system performs enemy actions and updates the display for all board objects.

Exceptions:

1. New position is invalid.

Use Case: Shooting the main character's gun.

Primary actor: player

Preconditions: The player must have started a game; the game must not be paused.

Scenario:

1. The player presses one of the 4 specific keyboard inputs to shoot.
2. The system ends the current game tick and checks if the main character has enough ammunition to shoot.
3. The system updates the remaining ammunition if there is enough.
4. The system checks if the enemy is in range, updating its health if it is.
5. The system performs enemy actions and updates the display for all board objects.

Exceptions:

1. Main character does not have enough ammunition.

Use Case: Pausing the game

Primary actor: player

Preconditions: The player must have started a game; the game must not be paused.

Scenario:

1. The player presses the pause button on the keyboard.
2. The system pauses the current game tick and stops updating.
3. The system displays the pause screen.

Use Case: Resuming the paused game

Primary actor: player

Preconditions: The player must have started a game; the game must be paused.

Scenario:

1. The player presses the pause button on the keyboard.
2. The system resumes the current game tick and continues updating the game.
3. The system displays the level and its state from before being paused.