Use Cases

Use-case: **Start the game**

Primary Actor: Player

Goal in context: To start up the game and have things loaded into view for player

Preconditions: Game must be fully configured and the board is generalized

Trigger: The player decides to play the game

Scenario:

1. Player presses a valid key to move
2. Timer starts
3. If the move is valid, the main character moves in the corresponding direction

Exceptions:

1. If the first move is not valid, the main character stays at the start point and the game (timer) does not start

Use-case: **Pick up reward**

Primary Actor: Player

Goal in context: Receive points depending on type of reward

Preconditions: The player is in the middle of the game

                 Rewards are dispositioned

Trigger: The player has walked onto the same cell the reward is occupying

Scenario:

1. Player walks onto the same cell the reward is occupying
2. Player earns the corresponding points
3. The score shown is adjusted
4. Reward is removed from the board

 Exceptions:

1. Reward is a bonus reward and it has disappeared; no points added
2. Player walks onto the same cell but reward is has already been collected and removed from board; no points added

Use-case: **Walk into trap**

Primary Actor: Player

Goal in context: Player loses 10 points

Preconditions: Player is in the middle of the game

                 Traps are dispositioned

Trigger: The player walks onto the same cell the trapping pit is occupying

Scenario:

1. Player walks into trapping pit
2. Player lose 10 points
3. The score shown is adjusted and points is non-negative

4. Trapping pit is removed

Exceptions:
1. Player walks onto the same cell but trap has been removed; no points lost
2. After the player walks into the trap, the points drop below zero; see use-case "**lose game by points.**"

Use-case: **Walk into moving enemy**
Primary Actor: Player
Goal in context: Player loses game by being caught by moving enemy
Preconditions: The enemy needs to be implemented and be a dynamic entity
                  The player is in the middle of the game
Trigger: Player has walked into a moving enemy
Scenario:
1. Player is moving around the map/board
2. Enemy has walked onto the same cell as the player or the player collides with moving enemy
3. Timer stop
4. The player loses the game and the end screen is displayed

Use-case: **Walk in game**
Primary Actor: Player
Goal in context: Move from current position
Preconditions: The game has started
                  Presses a valid key
Trigger: Player wants to move to another spot on the board
Scenario: When player press a valid key ,the main character move one cell in corresponding direction
Exceptions:
1. Player tries to walk into a wall – see use-case *"__walk into wall__"*
2. Player press an invalid key, the main character do not move

Use-case**: Walk into wall**
Primary actor: Player
Goal in context: Player attempts to walk into wall
Preconditions: Game is currently in session
                  Player is standing beside a wall
Trigger: Player decides they will try moving into a wall
Scenario:
1. Player presses button that would walk the character into wall

2. The main character doesn't move (moving enemy not affected)

Use-case: **Prematurely walk into endpoint**
Primary actor: Player
Goal in context: Forbidden player walk into endpoint before collect all regular rewards
Preconditions: Game is currently in session;
                 Not all the regular rewards have been collected
Trigger: Player decides they will try going to the end point
Scenario:
1. Player is currently in game
2. Player presses button that would walk the character onto endpoint tile
3. Character is blocked and does not have access to endpoint

Exception: player has collected all regular rewards and try to reach the endpoint – see use-case
"win game*"*

Use-case: **Win game**
Primary Actor: Player
Goal in context: win the game
Preconditions: Player collect all of the regular rewards
Trigger: Player walk into endpoint after collect all the regular rewards
Scenario:
1. Player collects all rewards
2. Points is non-negative
3. Player reaches the end point
4. Game end and end screen display

Exceptions:
1. Player tries to crossover to the endpoint without collecting all rewards – see use-case
*"**prematurely walk into endpoint***"*

Use-case: **lose game by points**
Primary Actor: Player
Goal in context: Lose the game by points drop below zero
Preconditions: Player is in the middle of a game
Trigger: Player moved to trap
Scenario:
1. Player collides with a trap
2. Player points drop below zero
3. Timer stop
4. Lost game and end scene shows up

Exceptions:
1. Play moved to trap but points does not drop below zero -- see use-case "w**alk into trap"**

Use-case: **Restart game**
Primary actor: Player
Goal in context: Restart the game without satisfy winning or losing requirements
Preconditions: Player is in the middle of a game
Trigger: Player wants to start a new game
Scenario:
1. Player clicks on restart button
2. Game board reloads
3. Timer set back to zero
4. Enemies and rewards are placed at randomized positions
Exception: If the player has not made an initial move, the game board will also be reloaded.

Use-case: **Quit game**
Primary Actor: Player
Goal in context: quit game without satisfy winning or losing requirements
Preconditions: Player is in the middle of a game
Win or lose condition has yet to be met
Trigger: Player wants to end this game immediately
Scenario:
1. Player clicks on quit button
2. Game returns to start screen
Exceptions: If the player has not made an initial move, the game board will also be reloaded.