

Use Cases:

- Use Case: InteractSpecialTile

- **Primary Actor:** Player
- **Goal in Context:** To update the player's score when interacting with a tile.
- **Preconditions:** The special tile is unclaimed.
- **Trigger:** The player moves onto a special tile ((bonus) reward or punishment tile).
- **Scenario:**
 1. Player: observes game board
 2. Player: enters input (up, down, left, right)
 3. Player: ends up on special tile
 4. Player: observes resulting score from stepping on the special tile
- **Exceptions:**
 1. Player steps on "checkpoint" tile: score is increased by value of tile and number of checkpoints acquired is incremented by 1. If the number of tiles acquired is equal to required tiles, exit is opened up.
 2. Player steps on "punishment" tile: score is decreased by value of tile. If the score becomes negative, the player loses.
 3. Player steps on "bonus" tile: score is increased by value of tile.
- **Priority:** Essential
- **When available:** First increment
- **Frequency of use:** Many times per game session
- **Channel to actor:** Via game controls
- **Secondary actors:** Special tiles
- **Channels to secondary actors:** Game board
- **Open Issues:** n/a

- Use Case: InteractExit

- **Primary Actor:** Player
- **Goal in Context:** End the game when the player steps on the exit tile.
- **Preconditions:** Player has collected enough checkpoints to open the exit.
- **Trigger:** Player wants to escape the maze.
- **Scenario:**
 1. Player: observes game board
 2. Player: enters input (up, down, left, right)
 3. Player: moves onto open exit tile
 4. Player: observes screen displaying final results
- **Exceptions:**
 1. Exit is open: screen showing final game results appears.
 2. Exit is not open: player is not permitted to step onto the exit tile.

- **Priority:** Essential
- **When available:** First increment
- **Frequency of use:** Up to once per game session
- **Channel to actor:** Via game controls
- **Secondary actors:** Exit tile
- **Channels to secondary actors:** Game board
- **Open Issues:** n/a

- **Use Case: MoveCharacter**
 - **Primary Actor:** Player
 - **Goal in Context:** Determine resulting game behaviour when player tries to move.
 - **Preconditions:** Player has a physical interface (keyboard) connected.
 - **Trigger:** Player decides on a direction to move.
 - **Scenario:**
 1. Player: observes game board
 2. Player: enters input (up, down, left, right)
 3. Player: player attempts to move towards a direction
 4. Player: observes resulting character and enemy positions.
 - **Exceptions:**
 1. Player moves towards an unblocked direction: character moves onto tile in that direction. Enemies also move.
 2. Player moves towards a wall: character stays in the same position but enemies still move.
 3. Player enters invalid input: character stays in the same position but enemies still move.
 - **Priority:** Essential
 - **When available:** First increment
 - **Frequency of use:** Many times per game session
 - **Channel to actor:** Via game controls
 - **Secondary actors:** Tile, walls
 - **Channels to secondary actors:** Game board
 - **Open Issues:** n/a

- **Use Case: CollideWithEnemy**
 - **Primary Actor:** Player
 - **Goal in Context:** The player “loses” when colliding with an enemy.
 - **Preconditions:** Player enters input.
 - **Trigger:** Player wants to move.
 - **Scenario:**
 1. Player: observes game board

2. Player: enters input (up, down, left, right)
 3. Player: moves into enemy
 4. Player: observes resulting “lose” screen
- **Exceptions:**
 1. Player moves into enemy: instantly results in a loss
 2. Player enters input doesn’t move character: enemy may still move into the player resulting in a loss
 - **Priority:** Essential
 - **When available:** First increment
 - **Frequency of use:** Up to once per game session
 - **Channel to actor:** Via game controls
 - **Secondary actors:** Enemy
 - **Channels to secondary actors:** Game board
 - **Open Issues:** n/a
- **Use Case: RestartGame**
 - **Primary Actor:** Player
 - **Goal in Context:** The game is restarted and the player is given a fresh start.
 - **Preconditions:** Menu navigation is set up.
 - **Trigger:** Player decides to try again from the start.
 - **Scenario:**
 1. Player: selects “start game” from the main menu
 2. Player: begins playing game
 3. Player: presses “pause” keybind
 4. Player: selects “restart” option from pause menu
 5. Player: observes game board being reset
 6. Player: begins playing game again
 - **Exceptions:**
 - n/a
 - **Priority:** Non-essential
 - **When available:** 2nd-3rd increment
 - **Frequency of use:** Many times per game session
 - **Channel to actor:** Via pause menu
 - **Secondary actors:** n/a
 - **Channels to secondary actors:** n/a
 - **Open Issues:** n/a