

Use cases

Use case: Changing position of the Main Character.

Primary Actor: Main Character.

Goal in context: To move the Main Character on the map, considering objectives and restrictions.

Preconditions: Map has been rendered.

Trigger: Player decides to change position of the Main Character on the map.

Scenario:

1. Player presses W, A, S, D keys.
2. If key W is pressed, Main Character moves to the grid located on top of one currently occupied.
3. If key A is pressed, Main Character moves to the grid located to the left of one currently occupied.
4. If key S is pressed, Main Character moves to the grid located to the bottom of one currently occupied.
5. If key D is pressed, Main Character moves to the grid located to the right of one currently occupied.

Exceptions:

1. Main Character moves into a grid containing Punishment - see use-case "Main Character encounters Punishment".
 2. Main Character moves into a grid near another grid containing Moving Enemy - see use-case "Main Character encounters Moving Enemy".
 3. Main Character moves into a grid containing Regular Reward - see use-case "Main Character collects Regular Reward".
 4. Main Character moves into a grid containing Special Reward - see use-case "Main character collects Special Reward".
 5. If target grid is a type of barrier, it can not be occupied by the Main Character, and they will not move.
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Use case: Main Character encounters Moving Enemy.

Primary Actor: Main Character.

Goal in context: To see what happens when Moving Enemy is encountered.

Trigger: Main Character makes a move.

Scenario:

1. Main Character moves around a map, and Moving Enemies are getting closer to Main Character's location.
 2. Main Character steps into a grid right beside a grid containing Moving Enemy.
 3. Game is over and the ending scene appears.
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Use case: Main Character encounters Punishment.

Primary Actor: Main Character.

Goal in context: To experience how encountering Punishment affects gameplay.

Scenario:

1. Main Character moves around a map.
 2. Main Character steps into a grid containing Punishment.
 3. Score is lowered by some number of points.
 4. Encountered Punishment disappears.
 5. If points < 0 , the game is over and the ending scene appears.
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Use case: Main Character collects Regular Reward.

Primary Actor: Main Character.

Goal in context: To collect rewards required to progress.

Trigger: Main Character moves into the cell containing Regular Reward.

Scenario:

1. Main character moves into a grid containing Regular Reward.
2. Reward is collected, and disappears.
3. Score is adjusted with regular points.
4. If all Regular Rewards are collected, door will appear to exit the current level.

Exceptions:

1. Main Character moves into a grid with Regular Reward that also contains Moving Enemy - score is lowered by some number of points and Moving Enemy disappears. Then, reward is collected by adjusting score and removing that reward from the map. If the score becomes below 0, the game will end and reward is not collected.
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Use case: Main Character collects Special Reward.

Primary Actor: Main Character.

Goal in context: To acquire Special Reward until it disappears.

Trigger: Bonus Reward appears randomly on the map.

Scenario:

1. Special Reward appears for a few ticks on the random available walking grid.
2. Main Character moves into the grid containing a Special Reward.
3. Score is adjusted with appropriate special points.
4. Special Reward disappears.

Exceptions:

1. Special Reward may disappear before the Main Character is able to move into the containing grid.
 2. Main Character moves into a grid with Special Reward that also contains Moving Enemy - score is lowered by some number of points and Moving Enemy disappears. If the score is below 0, game would be over. Otherwise, reward is collected by adjusting the score and removing that reward from the map.
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Use case: Player starts a new game.

Primary Actor: Player.

Goal in context: To begin playing the game.

Scenario:

1. Player executes game application.
 2. Title screen with options appears.
 3. Player clicks 'Begin a new game' bar.
 4. First level renders with character in starting position.
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Use case: Player views scoreboard.

Primary Actor: Player

Goal in context: To view some past scores attained

Preconditions: Game has been played at least once.

Scenario:

1. Player opens main menu.
 2. Player clicks 'Scoreboard' bar.
 3. 10 top scores are shown.
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Use case: player ends games

Primary Actor: Player

Goal: To end the game once person is finished playing

Scenario:

1. Player opens the menu
2. Player selects end game option
3. Game closes