Use case: Starting A Level **Primary Actor**: Player

Goal in context: To start playing the game

Preconditions: The player has executed the game program and is at the main menu

Trigger: The player wants to play the game and executes the game program

Scenario:

- 1. Player can select "Select Level" from the game menu using the keyboard or mouse
- 2. Player can select any unlocked level and level will load
- 3. On a new game only the first level will be available

Exceptions:

- 1. Player selects a locked level and nothing happens
- 2. Player can also access the level select screen from the in-game pause menu

Priority: Essential

When Available: First iteration

Frequency of Use: At least once a game session

Channel to actor: Keyboard or mouse

Secondary Actors: N/A

Channels to Secondary Actors: N/A

Open Issues:

Use case: In-Game Pause Menu

Primary Actor: Player

Goal in context: Player wants to pause the game to do something else

Preconditions:

Trigger:

1. Player either wants to pause the game to do something else or access one of the options in the pause menu

Scenario:

- 1. The Player clicks the pause button in the level screen or uses a keyboard shortcut to pause the game and open the pause menu
- 2. The Player can resume the game by closing the pause menu
- 3. The Player can restart the level, choose a new level, or return to the main menu
- 4. The Player can access the help screen
- 5. The Player can guit the game from the in-game pause menu

Exceptions:

1. The main menu also has a button to guit the game.

Priority: High

When Available: First Iteration Frequency of Use: Infrequent Channel to actor: Pause menu

Secondary Actors: N/A

Channels to Secondary Actors: N/A

Use case: Rebinding keys **Primary Actor**: Player

Goal in context: Player wants to establish different inputs for game actions

Preconditions: Keystrokes are interpreted independently from loaded game level

Trigger: Player is dissatisfied with control layout and wants to change it to better suit their

needs

Scenario:

1. Player can see an action name and its associated input signal in an adjacent field

2. Player can change the associated input signal by clicking on the input signal field and pressing their chosen input

Exceptions:

1. Input key is already associated with an action, an error message is displayed

Priority: Low

When Available: Second iteration or later

Frequency of Use: Infrequent

Channel to actor: Main menu screen or pause menu options

Secondary Actors: N/A

Channels to Secondary Actors: N/A

Open Issues:

Use case: Help menu **Primary Actor**: Player

Goal in context: Player has forgotten things about the game and wants to read about it

Preconditions: Documentation about game entities exist

Trigger: Player doesn't remember details about an entity or mechanic

Scenario:

- 1. Player can open the help menu from the main menu or the in-game pause menu and learn about the different entities in the game
- 2. A separate window appears containing infographics on the game entities

Exceptions: Priority: Low

When Available: Second iteration or later

Frequency of Use: Infrequent

Channel to actor: Main menu or Pause menu

Secondary Actors: N/A

Channels to Secondary Actors: N/A

Open Issues:

1. Conciseness vs. available space

Use case: View Credits **Primary Actor**: Player

Goal in context: Player would like to learn more about the creators of the game

Preconditions: Player is at the main menu

Trigger: Whimsical curiosity

Scenario:

1. Player can click the About button to read information about the game and its creators.

Exceptions:

Priority: Very Low

When Available: Second iteration or later

Frequency of Use: Almost never **Channel to actor**: Main menu

Secondary Actors: N/A

Channels to Secondary Actors: N/A

Open Issues:

Use case: View Scores **Primary Actor**: Player

Goal in context: Player would like to view their previous game scores

Preconditions: Player has played at least one game **Trigger**: Player is curious about their previous scores

Scenario:

1. Player is viewing the game menu

2. Player selects the "Scores" button

3. A window appears containing the player's previous scores

4. Player selects "back" or escape to get back to the game menu

Exceptions:

1. Player has not played a game: A message is displayed "No scores"

Priority: Very Low

When Available: Second iteration or later

Frequency of Use: Infrequent Channel to actor: Main menu

Secondary Actors: N/A

Channels to Secondary Actors: N/A

Use case: Main Game Loop **Primary Actor**: Player

Goal in context: To finish the level by obtaining all regular objectives and achieve as much

score as possible

Preconditions: Game level is successfully loaded

Trigger: Player enters the level by starting the game or completing the previous level

Scenario:

- 1. Player wants to obtain all the regular objectives in the level
- 2. Player wants to obtain as many bonus objectives in the level as possible
- 3. Player uses arrow keys to move the player character and collects objectives by moving the player character over them

Exceptions:

- 1. Player loses score by contacting an enemy with the player character
- 2. Player loses the game by losing all their current score
- 3. Bonus objectives disappear due to time or other challenge conditions
- 4. Player attempting to move into a cell containing a wall or other moving enemy is blocked from moving into the cell

Priority: Essential, must be completed **When Available**: First Increment

Frequency of Use: Main purpose of game, once every game **Channel to actor**: Gameplay interface using keyboard and mouse

Secondary Actors: N/A

Channels to Secondary Actors: N/A

Use case: Improved Game Loop

Primary Actor: Player

Goal in context: To finish the level by obtaining all regular objectives and achieve as much

score as possible balancing bomb use and time bonus **Preconditions**: Game level is successfully loaded

Trigger: Player enters the level by starting the game or completing the previous level **Scenario**:

- 1. Player wants to collect as many regular objectives and bonus objectives as possible
- 2. Player has bombs to use which remove enemies in a radius around the player character but also removes one bonus objective from the level
- 3. Bonus score will also be awarded based on fast completion of the level
- 4. Player can choose to not use a bomb to obtain a bonus objective and risk punishment by enemy contact, or use the bomb to prevent time loss from manuvering around enemies but lose the bonus objective

Exceptions:

1. Player doesn't want to feel punished for not playing at the highest level (not using bombs and collecting as fast as possible)

Priority: Low

When Available: Second iteration or later

Frequency of Use: Every level, or specific levels

Channel to actor: Gameplay interface using keyboard and mouse

Secondary Actors: N/A

Channels to Secondary Actors: N/A

- 1. Should a bomb remove a random bonus objective or a set sequence of bonus objectives?
- 2. Should bombs reduce player score when there are no more bonus objectives to remove?
- 3. Should this be a core part of the game or a mechanism for specific levels?
- 4. How can completion without bonus be incentivized so the player doesn't feel punished for not challenging themselves? A unique reward for basic completion? Unique sprite accessories for different levels of final score?