1)

Use case: Open Program
Primary actor: Player
Goal: Open the game program
Preconditions: Java Code compiled into an executable file
Trigger: Player clicks on executable file
Scenario:

1. Player: logs into computer
2. Player: finds game folder
3. Player: clicks on executable
4. Game: Launches game window

Exceptions: N/A
Priority: Essential
When available: Anytime
Frequency of use: Unlimited
Channel to actor: Mouse
Secondary actors: N/A
Channels to secondary actors: N/A
Open issues: N/A

2)

Use case: Start the Game
Primary actor: Player
Goal: Start from the main menu
Preconditions: Game program open
Trigger: Player clicks on start on main menu and selects difficulty
Scenario:

1. Player: Clicks on Start button
2. Player: Clicks on difficulty level
3. **start(), render()**: loads level, character, items, and entities
4. Game: Starts tic/timer

Exceptions: N/A
Priority: Essential
When available: On game menu
Frequency of use: Once on main menu
Channel to actor: Mouse or Keyboard
Secondary actors: N/A
Channels to secondary actors: N/A
Open issues: N/A

3)

Use case: Open Settings
Primary actor: Player
Goal: Game program open
Preconditions: On main menu
Trigger: Player clicks on setting button
Scenario:

1. Player: opens game
2. Player: clicks on settings button
3. **settings()**: displays settings

Exceptions: N/A
Priority: Essential
When available: On game menu
Frequency of use: as many times as player wants
Channel to actor: Mouse or Keyboard
Secondary actors: N/A
Channels to secondary actors: N/A
Open issues: N/A

4)

Use case: Quit Game
Primary actor: Player
Goal: Exit from game program
Preconditions: On main menu
Trigger: Player clicks on quit button
Scenario:

1. Player: opens game
2. Player: clicks on quit button
3. **exit():** displays "are you sure" image
4. Player: clicks on yes
5. **exit():** terminates game window and program

Exceptions: N/A
Priority: Essential
When available: On game menu
Frequency of use: once per game
Channel to actor: Mouse or Keyboard
Secondary actors: N/A
Channels to secondary actors: N/A
Open issues: N/A

5)

Use case: Main Character moves
Primary actor: Player
Goal: Open the game program
Preconditions: Game loaded
Trigger: Player pushes arrow keys
Scenario:

1. Player: starts the game
2. Player: pushes down on arrow key
3. Game: checks if player can move there
4. **onCollide()::** checks if collision is possible
5. Game: decides to move player

Exceptions: N/A
Priority: Essential
When available: Anytime on game level
Frequency of use: once per tic
Channel to actor: Keyboard
Secondary actors: N/A
Channels to secondary actors: N/A
Open issues: N/A

6)

Use case: Collect rewards (regular)
Primary actor: Player
Goal: collect a reward
Preconditions: Game level loaded and running
Trigger: Player moves into cell with reward
Scenario:

1. Player moves character into item
2. **onCollide():** checks if it is a reward
3. **destroy():** delete reward object
4. **getRewardsCollected():** increments reward counter
5. Game: moves character into cell

Exceptions: N/A
Priority: Essential
When available: Anytime
Frequency of use: Unlimited
Channel to actor: Keyboard
Secondary actors: N/A
Channels to secondary actors: N/A
Open issues: N/A

7)

Use case: Collect Punishments
Primary actor: Player
Goal: Open the game program
Preconditions: Game level already rendered and displayed
Trigger: Player clicks on executable file
Scenario:

1. Player: starts game
2. Player: moves character to punishment cell
3. **onCollide():**: checks if collision is true
4. **onCollide():**: checks if object is punishment
5. **getDamage():** changes player score
6. Game: moves character to cell

Exceptions: N/A
Priority: Essential
When available: Anytime
Frequency of use: Unlimited
Channel to actor: Mouse
Secondary actors: N/A
Channels to secondary actors: N/A
Open issues: N/A

8)

Use case: Lose Game
Primary actor: Player
Goal: Show lose screen after losing to much GPA points
Preconditions: Game level already rendered and displayed
Trigger: Player score drops to zero and clicks restart game button
Scenario:

1. Player: plays game
2. Player collects too many punishments
3. Game: Stop game tic
4. Game: Losing screen displayed

Exceptions: N/A
Priority: Essential
When available: After losing game
Frequency of use: once per game
Channel to actor: Mouse and keyboard
Secondary actors: N/A
Channels to secondary actors: N/A
Open issues: N/A

9)

Use case: Restart Game
Primary actor: Player
Goal: Restart level after losing to much GPA points
Preconditions: Lose screen is displayed
Trigger: Player score drops to zero and clicks restart game button
Scenario:
1. Player plays game
2. Player collects too many punishments
3. Game: Stop game tic
4. Game: Losing screen displayed
5. Player: clicks restart button
6. Game: restarts game level

Exceptions: N/A
Priority: Essential
When available: After losing game
Frequency of use: once per game
Channel to actor: Mouse and keyboard
Secondary actors: N/A
Channels to secondary actors: N/A
Open issues: N/A

10)

Use case: Win Screen
Primary actor: Player
Goal: Win the game
Preconditions: Player collected all required rewards
Trigger: Player goes to exam room or finish area
Scenario:
1. Player: All rewards collected
2. Player: moves character to finish area
3. Game: tic stops
4. Game: Win screen display is on

Exceptions: N/A
Priority: Essential
When available: when level is won
Frequency of use: Once per game
Channel to actor: Mouse and keyboard
Secondary actors: N/A
Channels to secondary actors: N/A
Open issues: N/A

11)

Use case: Customise character
Primary actor: Player
Goal: Customise character avatar
Preconditions: Game open and on main menu
Trigger: Player clicks on customise buttons and selects character art
Scenario:

1. Player: clicks on customise button
2. **customize()**: opens customise window
3. Player: chooses custom character
4. **customize()**:: changes character avatar to different one

Exceptions: N/A
Priority: Essential
When available: On Game main menu
Frequency of use: Unlimited
Channel to actor: Mouse
Secondary actors: N/A
Channels to secondary actors: N/A
Open issues: N/A