Use case: Play Cheese Run Game on Desktop application

Iteration: 1, last modification: Feb 17

Primary actor: Players

Goal in context: To have players access a playable Cheese Run game in which the players can control the Mouse character and either win by collecting all the required Cheeses for scores and exit the maze, or lose the game by having a negative total score or having the Mouse character touched by the moving enemies.

Preconditions: Game must be downloaded and installed successfully

Trigger: A player decides to play the game.

Scenario (Player collects all Cheeses and wins the game):

1. The player opens the application.
2. The system displays the home screen with a Play button.
3. The player clicks the Play button.
4. The system displays the maze completed with the main character (Mouse), barriers, moving enemies (Cats), punishments (Mousetraps), and rewards (Cheese and Organic Cheese as bonus).
5. The player presses one of the arrow keys to move the Mouse to an available square.
6. The system moves the Cats toward the Mouse using an available square, while simultaneously starting the timer.
7. The player continues to control the Mouse toward Cheese (and Organic Cheese) to collect them, while avoiding Cats.
8. The system continuously moves the Cats toward the Mouse whenever the Mouse is moved.
9. The player collects all the Cheeses.
10. The player moves Mouse to the exit.
11. The system displays a Win screen with the player's total score and time finished, along with a button to return to the home screen.

Exceptions:

<u>Ex#1: Mouse is on a mousetrap, and the player's total score is less than the mousetraps' punishment value.</u>

1. The player moves the Mouse to a mousetrap.
2. The system reduces the player's total score by the mousetrap's punishment value.
3. The system recognizes the player's total score is negative.
4. The system displays a Lose screen with a function button to go back to home screen.
5. Return to Scenario step 2.

<u>Ex#2: Mouse is captured by Cats.</u>

1. One or more Cats collide with Mouse.
2. The system recognizes Mouse and Cat(s) are on the same square cell.
3. Return to Ex#1 step 4.

Priority: High priority, this use case encompasses the basic functionalities of the game.

When available: First increment.

Frequency of use: Very frequent

Channel to actor: Via a PC that can run this Desktop application

Secondary actors: System, keyboard and mouse

Channels to secondary actors:

1. System: PC
2. Keyboard and mouse: wired/wireless connectivity to PC

Open issues:

1. Will there be any bugs that prevent the application from running?
2. Will the game be responsive?
3. Will we develop multiple levels with different difficulties in the future?