

## Group 9 Use cases

Primary actor: User of video game / player

Goal: To play a fun game on your computer

Preconditions: The application as well as Java downloaded onto the users computer.

Trigger: The player wants to play our game

Scenario1 (overall application overview, collecting rainbow eggs and dying, dying to hunter)

1. The user opens the application, a welcome page appears titled "Easter Bunny hunt" with some text that says "click any key to start".
2. The user clicks any key.
3. A rule screen appears, showing a bunny character with 'w' 'a' 's' 'd' button direction instructions as well as other instructions describing how to pause the game ("press the esc to pause, once paused press esc to quit or 'R' to resume"). The user clicks any key to continue.
4. The map of the game is displayed with trees enclosing the game, rainbow eggs at random locations, trees scattered throughout the map, bear traps scattered throughout the map, a hunter in the top right, a closed door on the edge of the map and a bunny(users character) in the bottom left.
5. The bottom of the map also displays a score box and a timer box.
6. The user sees that the score and timer display 0.
7. After 3 seconds the timer begins incrementing every second.
8. The hunter character begins to move from block to block going around trees towards the bunny character.
9. The user moves the bunny to any adjacent non-tree block using the 'w' 'a' 's' 'd' keys on the keyboard.
10. The user attempts to move into a tree block but the character does not move positions.
11. The user moves square to square till they reach a rainbow egg, they move to the egg square, the egg disappears, they gain a point on the score display.
12. The user presses no keys and remains stationary, the hunter continues to move closer to the bunny(user).
13. The hunter reaches the same square the user is on and the game ends, a "YOU LOSE" screen is displayed, the screen says "click any key to return to start or click x to terminate the game".
14. The user clicks the x and closes the application.

Scenario 2 (demonstrating pausing and escape feature)

1. The user opens the application, on the welcome page they press a key to start.
2. The user attempts to move with the keys but the bunny character remains stationary.
3. After 3 seconds the hunter begins moving, and the user can now move their character.
4. The user wants to talk to their parents so they hit the escape key.
5. The timer stops, all characters remain stationary and a screen appears that says "PAUSED" as well as a "click R to resume or click esc to quit" in the middle of the screen.
6. The user returns to their game and clicks the 'R' key which resumes the game
7. The game screen returns, the timer resumes counting, the bunny character is movable, and the hunter resumes moving.
8. The user needs to attend an online lecture, the user presses the 'escape' key to pause the game, then the user presses the 'escape' key once more and the application closes.

Scenario 3 (demonstrate bonus golden egg, + bear trap + bear trap loss)

1. The user opens the application, on the welcome page they press a key to start.
2. After 3 seconds the character and hunter begin moving.
3. After moving through the game, a special golden egg appears at a random location.

4. The user moves the bunny towards the golden egg but after a few seconds the golden egg disappears.
5. The user continues to collect the regular rainbow eggs on the board then randomly another golden egg appears.
6. The user goes to the location of the golden egg, the egg disappears and the users score display is incremented by a random amount.
7. The user then moves the bunny to a bear trap, the bear trap disappears and the user loses 2 points, the score display is decremented by 2.
8. The user continues to move the bunny into bear traps until a score of 0 is on the display.
9. The user accidentally moves the bunny into another bear trap, resulting in a negative score which ends the game and a "YOU LOSE" screen is displayed.
10. The user closes the application window.

#### Scenario 4 (demonstrating hunters traps)

1. The user opens the application, on the welcome page they press a key to start.
2. After 3 seconds the character and hunter begin moving.
3. The user begins collecting eggs.
4. The hunter, while moving, occasionally leaves a snare behind himself on empty ground.
5. The user while trying to escape the hunter moves onto a snare, the snare disappears, and the user while attempting to move their bunny remains immovable/stationary for 1 second while the hunter comes closer.
6. The user is able to move the bunny again but moves onto another snare, while the bunny is immobilized for 1 second the hunter catches up to the same location of the bunny, the game ends and the "YOU LOSE" screen appears.
7. The user closes the application window.

#### Scenario 5 (victory)

1. The user opens the application, on the welcome page they press any key to start.
2. After 3 seconds the character and hunter begin moving.
3. The user begins to collect regular rainbow eggs, gaining points in the display for each egg.
4. The user continues to dodge the hunter and the bear traps and collects the final rainbow egg.
5. The door on the map opens.
6. The user moves their character to the open door, enters and the game ends.
7. A "You WIN" screen is displayed to the user along with their time and score.
8. The user closes the application window.