# Use Case UC1: Pattern Move in a TimedLevel

**Scope:** Chewy Lokum Legend

**Level:** player goal

**Primary Actor:**  Player

**Stakeholders and Interests:**

* User: Wants the ability to swap appropriate lokums and destroy lokums on the board. Wants to be able to gain additional time by destroying TimeLokums.

**Preconditions:** The program is running. There is an active game. The current level is a TimedLevel. There are lokums eligible to form a pattern match.

**Success Guarantee (or Postconditions):** Lokums are correctly destroyed. New and existing lokums correctly fall down to fill the gaps. If the pattern has more than 3 lokums, the dragged lokum is successfully transformed to a special lokum of the same color at the correct place. The correct special lokum is placed according to the type of pattern. Destroying a TimeLokum correctly adds the correct amount of time to the timer.

**Main Success Scenario (or Basic Flow): (Time lokum extension is added to the extensions part at 3e)**

1. Player recognizes the lokum pattern.
2. Player picks the desired lokum to swap.
3. Player drags the lokum vertically to make a horizontal quadruple.
4. System swaps the places of the dragged lokum and the lokum that the mouse was dragged to.
5. System destroys the lokums that create the pattern.
6. System creates a vertically striped lokum of the same color.
7. System drops all lokums above by one square to fill in the empty spaces.
8. System fills the gaps that occur at the top of the board with randomly generated lokums.

**Extensions (or Alternative Flows):**

3a. Player drags a lokum from a diagonal location:  
 1. Swapping occurs diagonally.  
3b. Player drags a lokum from a horizontal location:  
 1. Swapping occurs horizontally. A vertical pattern is formed instead.  
3c. Player forms a triple instead:  
 1. System swaps the places of the dragged lokum and the lokum that the mouse was dragged to.  
 2. System destroys the lokums that create the pattern. Scenario continues from 7.  
3d. Player forms a quintiple instead:  
 1. At step 6, System creates a Color Bomb lokum instead.  
 1a. The quintiple has a T or L shape:  
 1. System creates a Wrapped lokum instead.  
3e. The pattern contains a TimeLokum  
 1. System destroys the TimeLokum like a normal one.  
 2. System adds time to the scoreboard, the amount of which is specified by the lokum.  
5a. The dragged lokum does not complete a pattern:  
 1. System swaps the swapped lokums back to their places without destroying any lokums.  
5b. The lokum that was swapped to the first location also forms a pattern:  
 1. System destroys the other pattern too, except the swapped lokum.  
 2. System creates an appropriate special lokum if the pattern was quadruple or quintuple  
7-8a. The dropped lokums also form pattern(s):  
 1. System destroys the other patterns too, except the swapped lokum.  
 2. System creates an appropriate special lokum if the pattern was quadruple or quintuple

# Use Case UC2: Special Move (Two arbitrary lokums)

**Scope:** Chewy Lokum Legend

**Level:** player goal

**Primary Actor:**  Player

**Stakeholders and Interests:**

* User: Wants the ability to swap two arbitrary lokums and destroy patterns on the board if there are any.

**Preconditions:** The program is running. There is an active game.

**Success Guarantee (or Postconditions):** Selected lokums are correctly swapped, regardless of whether a pattern is formed or not. If patterns are formed, they are destroyed; and new and existing lokums correctly fall down to fill the gaps.

**Main Success Scenario (or Basic Flow):**

1. Player selects the special move option on the scoreboard.
2. Player clicks on one lokum to choose it as the first lokum to swap.
3. Player clicks on a second lokum to set it as the second lokum to swap.
4. System swaps the locations of the two lokums.
5. System destroys any pattern it recognizes.
6. System drops all lokums above to fill in the empty spaces.
7. System fills the gaps that occur at the top of the board with randomly generated lokums.

**Extensions (or Alternative Flows):**   
5a. There are no pattern(s) formed:  
 1. No further action is required. A swap that yields no pattern is allowed in this mode.  
6-7a. The dropped lokums also form pattern(s):  
 1. System destroys the other patterns too.  
 2. System creates an appropriate special lokum if the pattern was quadruple or quintuple