

## Use cases for The 15 puzzle

### UC1 Starts a game

#### Main scenario

1. Starts when a user wants to play the game
2. System asks for name and requests the user to click a button to start the game
3. User provides a name and clicks the button
4. System shuffles the numbers in the game panel and informs the user to start clicking numbers to move them.

#### Alternate Scenarios

- 3a. User clicks the start button without entering a username
  - System informs the user he must enter a user name

### UC2 Plays a game

#### Main scenario

1. Starts after a user has entered a name and clicked the start button
2. Iteration >
  - I. User clicks a number next to the empty slot
  - II. System display total number of moves
  - III. System evaluates if the game is completed
3. System displays a text the puzzle is solved

#### Alternate Scenarios

- 2a. User clicks a button that is not next to the empty spot
  - System informs the user he must click a number next to the empty spot

### UC3 User restarts a game

#### Main scenario

1. Starts after a user has entered a name and clicked the start button and perhaps clicked/moved numbers around
2. User clicks the restart button
3. System reshuffles the numbers but keep the user name
4. Iteration >
  - I. User clicks a number next to the empty slot
  - II. System display total number of moves
  - III. System evaluates if the game is completed
5. System displays a text the puzzle is solved

## **UC4 User resends page during a game**

### **Main scenario**

1. Starts after a user has entered a name and clicked the start button and perhaps clicked/moved numbers around
2. User press the F5 key to resend page
3. System resends the page as it was prior to the resend