

# Use Case 4: Play Tutorial

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## Characteristic Information

**Goal in Context:** Play a local game against AI players to learn Scrabble and improve skills. Assistance in learning the rules of the game and understanding the application.

**Scope:** Game

**Level:** Primary – extends “UC 2: Play Scrabble”

**Primary Actor:** User

**Stakeholders & Interests:**

- ❖ User: Wants to learn the basics of the game and how the application works quickly and hands-on if he doesn't already know them.

**Preconditions:** User has started the game and selected the tutorial mode.

**Success Guarantee (Postconditions):** All the rules have been explained, the user has played some basic moves in the game and understood the structure of the application.

**Trigger:** User starts tutorial mode on the main UI of the application.

## Main Success Scenario

1. Game welcomes the user to the tutorial and shows the rules of Scrabble.
2. User clicks continue.
3. The user interface of the game (buttons, elements, etc.) is presented.
4. User clicks continue.
5. Game requests the user to make a move with defined tiles.
6. Results of move are presented.
7. Spare tiles are drawn.
8. Game sets predefined move.
9. Loops back to step 5 until all the different placement options and rules of Scrabble were explained.
10. Tutorial explains score
11. Tutorial explains different field types
12. Tutorial explains game goal and win/lose conditions
13. User leaves tutorial mode or plays against a simple bot for the rest of the game

## Extensions

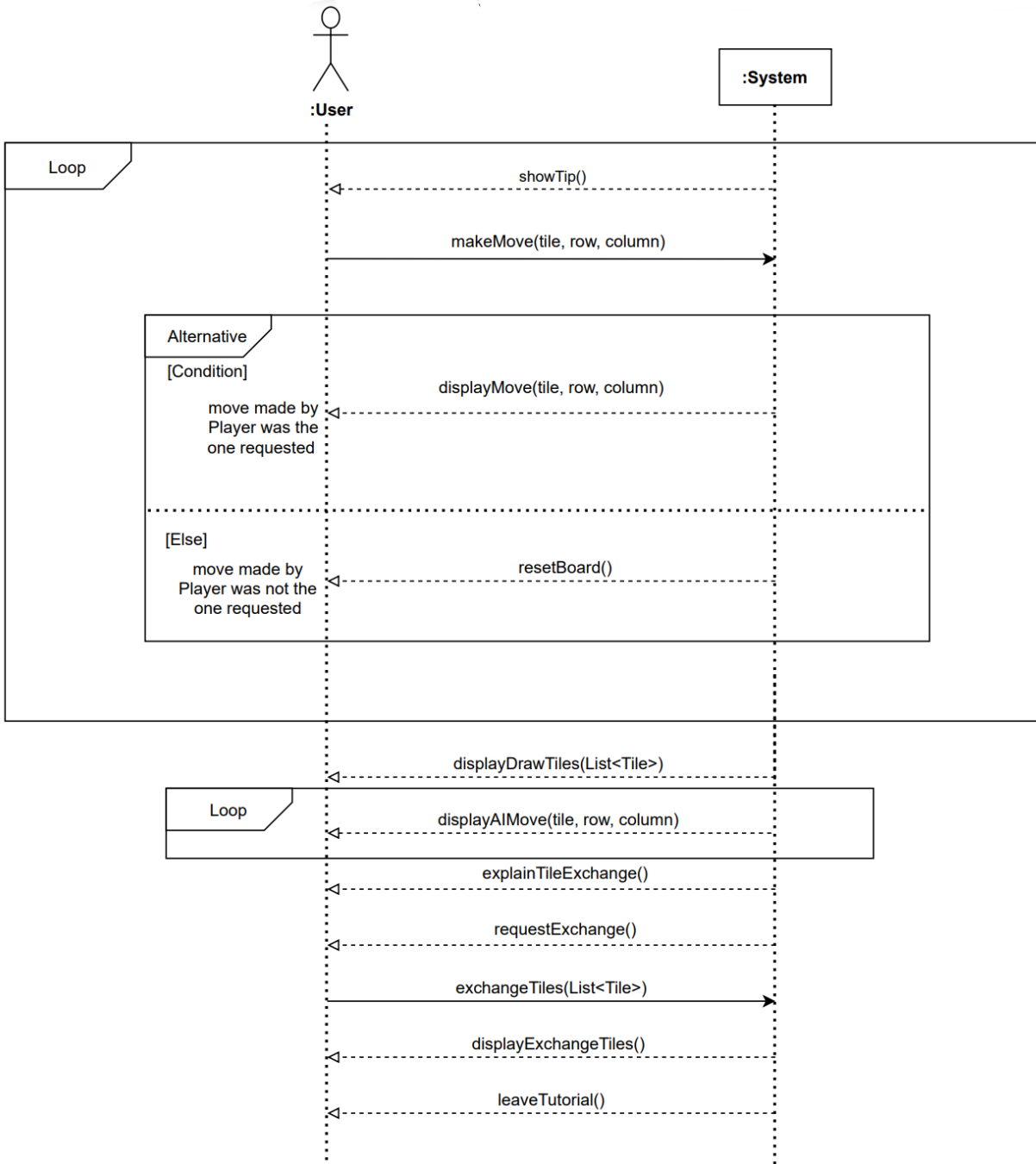
- \*a. At any time, System fails:
  - 1. System reopens system, logs in, and requests recovery of prior state.
  - 2. System reconstructs prior state.
    - 2a. System detects anomalies preventing recovery: System signals error and records the error. System starts new tutorial.
  - 3. Warning sign that the game crashed appears.
- 2-13a. User leaves tutorial mode:
  - 1. Exit tutorial mode.
- 6a. User doesn't play a valid move.
  - 1. Ask the user to make a move again, which complies with the rules.

## Due Date

17.05.2021

# System Sequence Diagram

Author: Vincent Hofmann



# Operation Contracts

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Author: Vincent Hofmann

## Contract 4.1: makeMove

**Operation:** makeMove(tile : Tile, row : integer, column : column) : void

**Cross References:** UC 4: Play Tutorial Mode

**Preconditions:**

- User entered tutorial mode and clicked continue
- User player p was associated with Game g and g was running

**Postconditions:**

- tile was disassociated from player
- tile was associated on BoardField bf associated with Board at given row and column, associated with g

## Contract 4.2: exchangeTiles

**Operation:** exchangeTiles(tiles : List<Tile>) : List<Tile>

**Cross References:** UC 4: Play Tutorial Mode

**Preconditions:**

- User selected tile instances associated with user's player
- User Player p was associated with Game g and g was running

**Postconditions:**

- Selected tiles were disassociated from p and associated with g
- Returned list of tiles were disassociated from g and associated with p