### **Fully Use Case Description of**

# Alter the State of the piece

Primary Actor: Player

### Stakeholders and Interests:

• *Player:* They can change the orientation of piece to their desired or needed orientation.

### **Preconditions:**

• It's the user's turn and they have selected a piece

#### **Postconditions:**

• The system has rotated and/ or flipped a selected piece of user's

### **Main Success Scenario:**

- 1. The system provides the option to rotate and/or flip the piece. (Alt1: The user declines to rotate and/or flip)
- 2. The user rotates the piece. (Alt2: The user doesn't rotate the piece).
- **3.** The user rotates the piece clockwise. (Alt3: The user rotates the piece counterclockwise).
- **4.** The system displays the new orientation of piece.
- **5.** The user is satisfied with the rotation of piece. (Alt4: The user is not satisfied with the rotation)
- **6.** The user flips the piece. (Alt5: The user doesn't want to flip the piece)
- 7. The user flips the piece vertically (Alt6: The user flips the piece horizontally).
- **8.** The system displays the new orientation of piece.
- **9.** The user is satisfied with the flipped piece. (Alt7: The user is not satisfied with the flipped piece)
- **10.** The user is ready to play with the piece. (Alt8: The user is not satisfied and want to rotate and/or flip again)

#### **Alternative Flows:**

Alt1: The user declines to rotate and/or flips the piece

1. Flow resumes at Main Success Scenario Step 10

Alt2: The user doesn't rotate the piece

1. Flow resumes at Main Success Scenario Step 6.

Alt3: The user doesn't rotate the piece clockwise

- 1. The user rotates the piece counter-clockwise.
- 2. Flow resumes at Main Success Scenario Step4.

Alt4: The user is not satisfied with the rotation

1. Flow resumes at Main Success Scenario Step2.

Alt5: The user doesn't want to flip the piece

1. Flow resumes at Main Success Scenario Step10.

*Alt6: The user flips the piece horizontally* 

- 1. The user flips the piece horizontally.
- 2. Flow resumes at Main Success Scenario Step8.

Alt7: The user is not satisfied with the flipped piece

1. Flow resumes at Main Success Scenario Step6.

Alt8: The user is not satisfied and want to rotate and/or flip again

1. Flow resumes at Main Success Scenario Step1.

### **Exceptions:**

• If at any time, system is unable to rotate and/or flip the piece on the board despite the request has been made to do so, then the game gets crashed and the options of sending the report to the developer is provided.

# **Special Requirements:**

• Color of pieces used must provide – or be able to provide for color vision deficiency.

# **Open Issues:**

Does the system provide hints on default on player's first turn?

•	Does the system save the game before the crash and provides the user to play again from where the moment before crash?