

Use Case – Single Turn in the Memory Game, 2 guesses

1. User inputs a row number, board updates its 'row' field
2. User inputs a column number, board updates its 'column' field
3. User clicks backspace to clear their guess and start a new one or clicks enter to flip the card at that position
4. User repeats steps 1-3 for their 2nd piece
5. If the characters on the 2 game pieces are the same, keep the two pieces visible and do not increment the turn number and start a new guess
6. If the characters on the 2 game pieces are not the same, allow the pieces to be visible for 2 more seconds before flipping them back over, increment the turn number and start a new guess
7. When the user guesses the last 2 pieces, open a new window with the message "Congratulations! You won the game in ____ turns!" and display leaderboard

Use case extension – invalid piece chosen (input is out of bounds or piece is already visible)

1. In steps 1 and 2, the user inputs 2 numbers, with 1 or both numbers being out of bounds (e.g choosing row #4 when the board is 3 rows by 4 columns)
2. The board will not update its row field nor its column field, and the user must choose a new valid number
3. In steps 1 - 3, user inputs a position in which the game piece is already visible
4. Board and turn number do not change, user's guess is cleared and a new one starts