

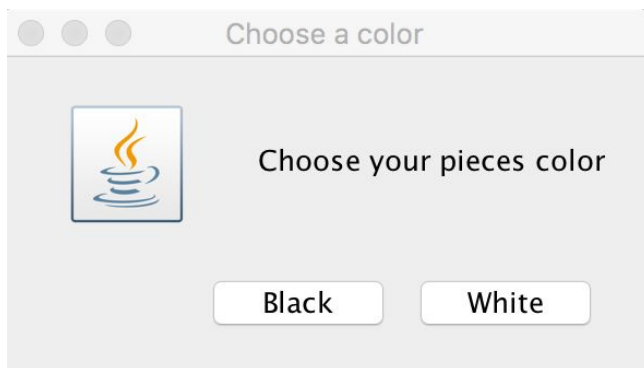
Manual Test Plan

Before Game start:

1. Enter the first player's name. It cannot be empty, otherwise it will continue forcing user to input a valid name.



2. For the same user, choose the pieces' color.



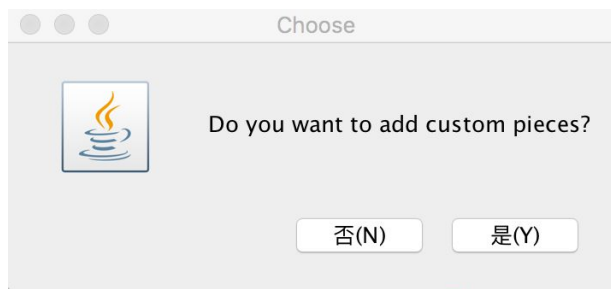
3. Let another player enter a valid name which cannot be empty and cannot be same as the first player's name. By default, this player choose another pieces's color.



4. Then, it should pop a message says "Let's start a new game!"



5. An option window shows up to let users make a choice, whether add custom pieces for this game or not.



6. Another option window shows up to let users make a choice that who goes first. And the option button will show the name of two players.

Game Start:

- **Game panel:**
 - There should be three buttons on the top, with function Undo, Restart and Forfeit.
 - Below three buttons are score panel, which shows Player's name and corresponding score.
 - Chess Board are set up with 8X8 grids and grids are in the correct alternate background color. Black pieces are on the top and white pieces are on the bottom.

- If users choose 'No' in add custom pieces option window, there should not exist custom pieces.



- **Game Action**

- Assume ABCD plays white piece, and goes first.
- If this is not XYZ's turn, but black piece(XYZ's) are chosen to move, it will pop an error message.



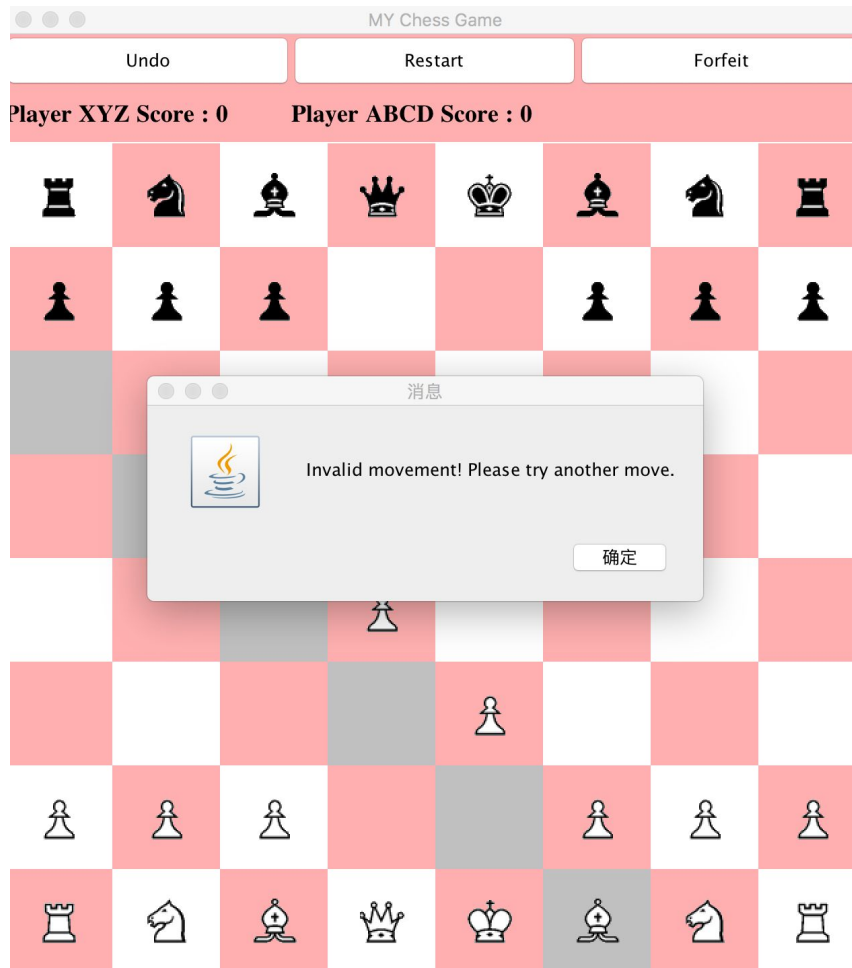
- Once a player choose a piece, the piece's background color will change to grey and all this piece possible move destination will be highlight.



- If a player click the same piece twice, the piece will be highlight first and then cancel selected status, and the player can choose another ally piece.



- If the player present an invalid movement, an error message will pop up, and the player will not lose his turn. Then turns are alternative, a player cannot play two steps in one turn.



- If the player select an void grid at first in his turn, an error message will pop up.



- Pieces are all goes according to their own rules, and capture opponent's pieces correctly.





- When the player check opponent's king, an alert message will pop up.



- If the player wrongly move a piece which induce the king in check, a message will pop up



- If a player reached checkmate status, a message will pop up to show Checkmate and Who is win.



After check confirmation button, a message will pop up to cue a new game, and the score panel will add 5 points to the winner.



- Once a new game start, “add custom pieces” choice option and “who goes first” choice option will appear sequentially.



- If we choose add custom pieces, the chessboard should place custom pieces in the correct places. Once finished making choices, a new board will appear. Score panel should record previous cumulate scores.



- **Undo, Restart, Forfeit Button**

- A player only have right to press “Undo” button during his own turn. Once the Undo button is pressed, a confirm message will pop up to ask the present player whether he is sure to undo a step. A player is allowed to press multiple times of Undo button until he performed the first step. Each press will undo one step, and the game is still in his turn. If a player press no option in the confirm message window, the chessboard will not perform any changes.



- A player only have right to press “Restart” button during his own turn. Once the Restart button is pressed, a confirm message will pop up to ask the present player sure to restart a game, and then ask whether the other player agree to restart a game. If both players agree to restart a game, the present game will be stopped and both players earn 0 points, and then a new game will start. If one of the players press no option in the confirm message window, a message will pop up shows restart fail and the chessboard will not perform any changes.







- A player only have right to press “Forfeit” button during his own turn. Once the Forfeit button is pressed, a confirm message will pop up to ask the present player whether he is sure to forfeit the present game. Once the player press yes, the opponent player will get 5 points and a new game will start. If a player press no option in the confirm message window, the chessboard will not perform any changes.



The opponent Score will add 5 points.



