3a. Requirements - New Use Case Description 1: Place a Piece

Place a Piece

Primary Actors	Human players
Stakeholders and Interests	Human players, Developers, Testers
Preconditions	Preconditions for implementing placing a piece are: 1. The first precondition is that the user is able to run the program as intended, if this condition is not met then placing a piece will not be possible. 2. A functional user interface is present and the player is able to initiate the game. Refer to our use case description in iteration one/two. 3. To place a piece the piece code needs to be fully implemented. This means that we have to consider the functionality of the pieces. For example before placing the piece the user may want to rotate it or choose a different piece. If this is the case then other preconditions come into place such as a rotate function is implemented. 4. The board or the grid for the pieces to go on needs to be implemented. If the board is not present the player will not have anything to place the pieces on.
Postconditions	The successful implementation of this use case comes from the player able to select a piece, possibly alter it by rotating it and finally being able to position/place it on the board. Postconditions are: 1. The current state of the board and the position the pieces are placed is displayed. The player places a piece at the position that is valid and intended. The next player adapts to the current state of the board and has to place his piece to another valid spot. 2. After the piece is placed the particular piece is removed from the selection options 3. Once the piece has been placed on the board by the player and the turn has ended, the player is not allowed to alter that piece anymore that mean it can't be moved or rotated. 4. After the player has placed the piece it should eventually impact the score

	that way the game has an objective when it's implemented. 5. After the player has placed the piece and the game has recorded it and is displaying the piece then the active player changes to the next player.
Main Success Scenario	1. The program has started as intended showing the functional main menu and user interface. 2. Player initiates the game by choosing the difficulty level and number of players and is navigated to the game page. 3. A grid/board is present and a selection of pieces is there for the player to choose from. 4. The player has selected their piece and now has the opportunity to alter the pieces by flipping it or rotating it before placing it. 5. Player drags the piece over the board and decides a spot to place the piece. 6. If the mouse is released when the piece is on the board and the spot is valid then piece is placed and can't be changed after. 7. The turn is ended and the selection of pieces is changed for the next player.
Alternative Flows	1. One of the alternative flow scenario is when a piece is selected and dragged on to the board but the player has changed his/her mind and decided not to place the piece. So the player needs to drag the piece outside the board and select another piece. Or we must implement a clear way for this cancellation. 2. There is no valid spot with the pieces given to the players. Basically no valid move even with rotations. Then the player can't place any pieces and has to surrender the turn.
Exceptions	The board does not update when the piece is placed is an exception. Also when the player is trying to place a piece but it does not register and the game is bugged the players turn never ends because a piece is not placed.
Special Requirements	Special requirements includes the ability to change the color of the pieces and the board so it's easier to see valid spots to place for each player.