

Assignment 2

CMPT 128

Inputs:

- Size of the board
 - Must be between and including 8 to 25
- Number of pieces in a straight, unbroken line to win
 - Must be between 4 and the size of the board – 4
- The column of the piece to be placed on the board
 - Must be a valid column that exists on the board

Outputs:

Screen outputs

- User prompts
 - *Please enter the size of the board*
 - *8 <= numRows <= 25:*
 - Prompt for the input for the size of the board
 - *Please enter the number of pieces in a row to win*
 - *4 <= numToConnect <= numRows – 4:*
 - Prompt for the input for the number of pieces in a row to win the game
 - *Enter the column where you wish to place your piece*
- Messages indicating to the players whose turn it is, as well as who has won.
 - *Red goes first*
 - *Red has forfeited their move*
 - *Black has forfeited their move*
 - *Red has moved*
 - *Black has moved*
 - *Red has won*
 - *Black has won*
- Error messages indicate to the players that something has gone wrong in the game, and could either be a program issue or a player issue
 - *ERROR: The board was not initialized*
 - Indicates the player that the game board was initialized incorrectly
 - *ERROR: COULD NOT DISPLAY BOARD*
 - *Illegal move*
 - *Column <columnChosen> is already completely full try again*
 - *Column number should be >= 0 and <= <numRowsInBoard - 1>*
 - Indicates that the column that the player chose no longer has space to place a piece

- ***Illegal move***
That column is not on the board: try again
Enter the column number where you want to put your piece
Column number should be ≥ 0 and \leq $\text{numRowsInBoard} - 1$
 - Indicates to the player that the column that the player has chosen does not exist on the game board
- ***ERROR: Invalid column chosen, cannot check for winner***
- **Board Outputs**
 - Initial board with the row and column numbers around the outer edges
 - Updated board with every move made
 - Will output after each move by each player