## **Bug list:**

- MyConnectFour.java : Line 4 : Inconsistent class and constructor name : syntax
- Solution: Change name from 'myconnectfour' to 'MyConnectFour'
- MyConnectFour.java : Line 30 : Incorrect capitalisation of variable : syntax
- Solution: Change 'getuserInput' to 'getUserInput'
- MyConnectFour.java : Line 31,73 : Non integer entered where int expected : runtime
- Solution: Guard against non integer inputs
- MyConnectFour.java : Line 152, 165 : user input Integer out of bounds of board : runtime
- Solution: Guard against the user entering an integer out of the range of 1-7.
- MyConnectFour.java : Line 32 : Incorrect variable used for function : syntax
- Solution: Change 'userInput' to 'move'
- MyConnectFour.java : Line 40, 56 : Incorrect boolean comparison : logic
- Solution: Changed '>' to '>='
- MyConnectFour.java : Line 90, 106 : Command outside of else statement on line 86 : logic
- Solution: Moved lines 90, 106 to line 87, 103 respectively
- MyConnectFour.java : Line 113 : Win output Statement within while loop : logic
- Solution: Moved outside to line 115, after the while loop.
- MyConnectFour.java : Line 121 : Duplicate type definition : syntax
- Solution: Remove 'String'
- MyConnectFour.java : Line 130 : Excess semicolon on line end : syntax
- Solution: Removed semicolon
- MyConnectFour.java : Line 131 : Incorrect variable spelling : syntax
- Solution: Change 'baord' to 'board'
- MyConnectFour.java : Line 130, 131 : Incorrect upper bound on for loop : logic
- Solution: Remove '-1' from the upper bound
- MyConnectFour.java : Line 132, 135 : Incorrect indexing ordering : runtime
- Solution: Change '[j][i]' to '[i][j]'
- MyConnectFour.java : Line 150 : Incorrect iteration in for loop : runtime
- Solution: Change 'i++' to 'i--'
- MyConnectFour.java: Line 152, 155, 156: 0 based counting not accounted for giving possible out of bounds error, and incorrect placement of counter: runtime and logic
- Solution: Subtract 1 from user input variable 'position'
- MyConnectFour.java : Line 157 : Incorrect spelling of true : syntax
- Solution: Change 'ture' to 'true'
- MyConnectFour.java : Line 165 : Incorrect boolean comparison : syntax
- Solution: Change '=' to '=='

## **Omissions List:**

- MyConnectFour.java : Line 23, 108, 121, 169 : Missing semicolon
- Solution: Add semicolon to line end
- MyConnectFour.java: Line 70: Missing Al player, user controls inputs for both player 1 and 2.
- Solution: Add logic for an Al and loop between taking user and ai input

- MyConnectFour.java : Line 70 : Missing diagonal win condition evaluation
   Solution: Add said evaluation
- MyConnectFour.java: Line 113: Missing evaluation for end of game in the case where no more moves can be played and no player has won.
  Solution: Add a check for if there are no remaining moves to be played.