Class Woo

Instance Variables:
- Int xpos   //store the user input for x-coordinate so that we can pass it into the Checkers
- Int ypos   //same as above
- Checkers play //instantiate the checker object
- Board game   //instantiate the game object
- String move   //store the user input for movement (fl, fr, br, bl)
- Int numMove   //store the number of moves the user made
- String userName   //store the player's username to be displayed in scoreboard

Method
- + Default constructors
- + Int getPos()
- + Int getnumMove()
- + String getUserName
- + Void new game()

Class Board:

Instance Variables:
- Final static int SIZE = 8
- Checkers[][] board

Method
- + Default constructor
- + void initBoard(): populate the board with correct number of checkers on each side
- + void printBoard(): print the checker pieces and empty space. Add label to each column and row to insure clarity
- + Void setColor(): set each object (checker piece) to its appropriate color
- + String getColor(): get color of each checker piece

Abstract Class Checkers

Instance Variables:
- Int Rleft;   //Check how many red checkers are left
- Int Bleft;   //Check how many black checkers are left
- Boolean redTurn   // true = red turn and false = black turn
- String color   // r for red, b for black

Method
- + Default constructor
- + Abstract boolean frValid(xpos, ypos)
- + Abstract void frMove(xpos,ypos)
- + Abstract boolean flValid(xpos, ypos)

+   Abstract void flMove(xpos,ypos)
+   Abstract boolean inBoard(xpos,ypos)
+   Boolean forcedCapture(xpos,ypos)
+   Void MultJump()   // I am not sure where to put the mult jump though
+   Int getRleft()
+   Int getBleft()
+   Boolean getTurn()
+   Void setColor(): set each object (checker piece) to its appropriate color
+   String getColor(): get color of each checker piece

Class RCheckers
New Instance Variables:
-   Can't think of any new ones

Method
+   constructors
+   Boolean frValid(xpos, ypos)
+   Void frMove(xpos,ypos)
+   Boolean flValid(xpos,ypos)
+   Void flMove(xpos,ypos)
+   Boolean inBoard(xpos,ypos)

Class BCheckers
New Instance Variables:
-   Can't think of any right now

Method (different implementation from RCheckers):
+   constructors
+   Boolean frValid(xpos, ypos)
+   Void frMove(xpos,ypos)
+   Boolean flValid(xpos,ypos)
+   Void flMove(xpos,ypos)
+   Boolean inBoard(xpos,ypos)

Class BKings
New Instance Variables:
-   Can't think of any right now

Method:
+   constructors
+   Boolean isKing()
+   Boolean frValid(xpos, ypos)

+ Void frMove(xpos,ypos)
+ Boolean flValid(xpos,ypos)
+ Void flMove(xpos,ypos)
+ Boolean blValid(xpos,ypos)
+ Void blMove(xpos,ypos)
+ Boolean brValid(xpos,ypos)
+ Void brMove(xpos,ypos)
+ Boolean inBoard(xpos,ypos)

Class RKings
New instance Variables:
- Can't think of any right now

Method:
+ constructors
+ Boolean isKing()
+ Boolean frValid(xpos, ypos)
+ Void frMove(xpos,ypos)
+ Boolean flValid(xpos,ypos)
+ Void flMove(xpos,ypos)
+ Boolean blValid(xpos,ypos)
+ Void blMove(xpos,ypos)
+ Boolean brValid(xpos,ypos)
+ Void brMove(xpos,ypos)
+ Boolean inBoard(xpos,ypos)

Class Scoreboard
New Instance Variables:
- Comparable hiScores[][] // for the current hiScores

Method:
+ Void changeScores(userWin, userLose, numMoves) //puts the info into the scores.txt file in a format of "userWin beat userLose in numMoves moves" at the correct location to keep the scores sorted. Removes lowest score from the list to keep the amount of scores at 5.
+ String toString() //overloaded toString method