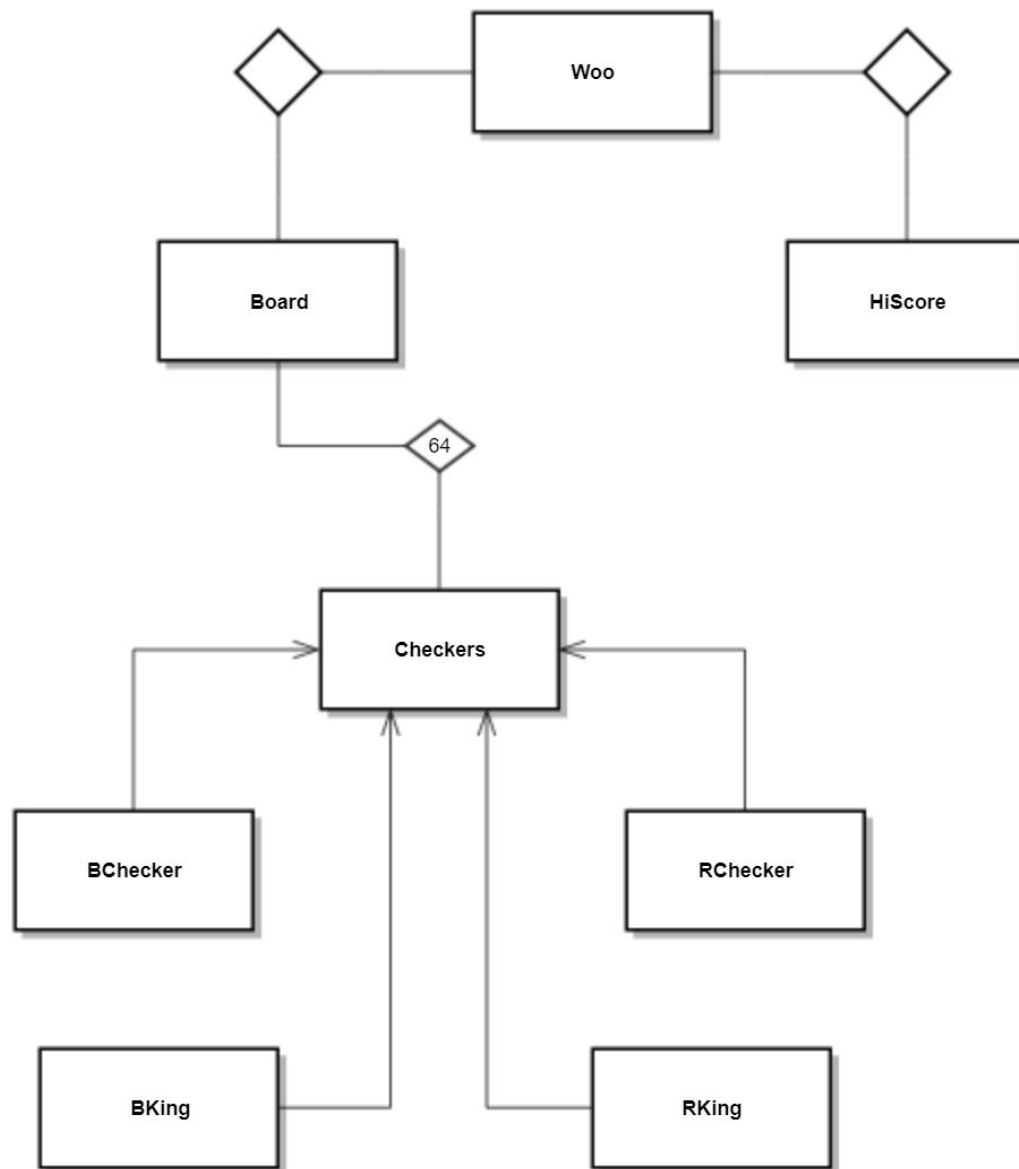


Final Project UML
Checkers Board Game



Class Woo

Instance Variables:

- private boolean ingame;
- private int row;
- private int column;
- private String move;
- private int rnumMove;
- private int bnumMove;
- private char whoseturn;
- private String userName1;
- private String userName2;

Method

- + Default constructors
- + Int[] getPos()
- + Void printPos
- + Int getrnumMove()
- + Int getbnumMove()
- + String getUserNamel()
- + String getUserNamel2()
- + Boolean inBoardx(int x)
- + Boolean inBoardy(int y)
- + Void chooseXCoord()
- + Void chooseYCoord()
- + Boolean validChecker(Board b)
- + Void chooseChecker(Board b)
- + Void movements(Board b)
- + Void jump(Board b)
- + Void runGame()
- + boolean inBoardx(int x)
- + Boolean inBoardy(int y)
- + Void runGame()
- + Static void main(String[] args)

Class Board:

Instance Variables:

- private char whoseTurn;
- private final static int SIZE = 8;
- private Checkers[][] board;
- private int rLeft = 12;
- private int bLeft = 12;
- private String winner;

- private ArrayList<Integer> posr = new ArrayList<Integer>(12);
- private ArrayList<Integer> posc = new ArrayList<Integer>(12);

Method

- + Default constructor
- + void initBoard():
- + void printBoard():
- + Void clearposr()
- + Void clearposc()
- + ArrayList<Integer> getposc()
- + ArrayList<Integer> getposr()
- + Boolean checkF(int r, int, int m)
- + Void setbLeft()
- + Int getbLeft()
- + Void setrLeft()
- + Void getrLeft()
- + Boolean flValid(int r, int c)
- + Boolean frValid(int r, int c)
- + Boolean blValid(int r, int c)
- + Boolean brValid(int r, int c)
- + Void flMove(int r, int c)
- + Void frMove(int r, int c)
- + Void brMove(int r, int c)
- + Void blMove(int r, int c)
- + Boolean fljumpValid(int r, int c)
- + Boolean frjumpValid(int r, int c)
- + Boolean brjumpValid(int r, int c)
- + Boolean bljumpValid(int r, int c)
- + Void flJump(int r, int c)
- + Void frJump(int r, int c)
- + Void blJump(int r, int c)
- + Void brJump(int r, int c)
- + Boolean isKing()
- + Boolean forcedCapture()
- + Char boardCheckerColor(int r, int c)

Class Checkers

Instance Variables:

- Protected char color

Method

- + Default constructor
- + String toString()

- + char getColor()

Class RCheckers

Method

- + Constructors
- + String toString()

Class BCheckers

Method (different implementation from RCheckers):

- + Constructors
- + String toString()

Class BKings

Method:

- + Constructors
- + String toString()

Class RKings

Method:

- + Constructors
- + String toString()

Class Scoreboard (Did not implement in MVP)

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