



All the methods below have connection with Square class and Coordinate class. Since they are obvious and space consuming, they are not listed details.

rowAllEqual() and colAllEqual() checks if all row or col coordinate of squares are equal.

sortByrow() and sortBycol() sort the the list of squares as ascending order by row or col coordinate. Squares are guaranteed no overlapping.

checkIsLinerow() and checkIsLinecol() check if row or col coordinate is upgrading one by one.

checkAdjacentWordrow() and checkAdjacentWordcol() should be executed after checking if the line has already formed a word. It returns the word to the opponent direction of row or col, or null if there is no word formed. So newWords.add(aWord) should check if aWord is null.

Inside checkAdjacentWord, if there is a word (no matter the word is valid or not), add the squares to board's list of wordSquares. One list inside wordSquares list indicates a word. It can be used to move() method to calculate word bonus.

If isValid() is false, we should not only retreat the tile and reset some game attributes, but also reset the attributes in board class, the currentSquares, wordSquares, newWord, etc.