**Name:** Nicholas Park

GUI Homework 5 :: Scrabble :: Writeup

**Fully Working Features:**

1. Letter tiles in the players hand are selected randomly from a data structure with the proper distribution of the letters
   1. Implemented using Ramon Meza’s list with one correction (letter N incorrectly has an amount of 5, corrected to 6.
   2. Using Ramon Meza’s list, built a temporary bag with each tile separated from eachother, i.e. instead of being A, amount: 9, in one array space, it is now 9 array spaces with A. Then this intermediary array was randomly distributed into another array which was used as the Bag to randomly pull tiles from.
2. Letter tiles can be dragged-and-dropped onto target Scrabble squares
   1. Implemented, though the squares do not snap nor do they adjust to fit over the tile, as long as they are 50% overlapped they will remain placed where the user wanted to. I don’t view this as partially implemented because this honestly recreates what normal scrabble feels like, where you look at the pieces and you are internally screaming they are improperly aligned.
3. Program identifies which letter tile is dropped onto which Scrabble square
   1. Yes.
4. Board includes at least two bonus squares
   1. 4 bonus squares are included, both double word and both double letter squares work
5. Score is tallied correctly, including consideration of bonus square multipliers.
   1. Yes, word score is calculated live; whenever a word is submitted the word score is added to the total score and the word score resets for the next board.
6. The board is cleared after each round so that a new word can be played.
   1. Yes.
7. Score is kept for multiple words until the user starts a new game.
   1. Yes, as per number 5.
8. Tiles can only be dragged from the rack to the board, if it is dropped anywhere else then it is bounded back to the rack.
   1. Yes.
9. Once the tile is placed on the scrabble board, it can be moved back to the rack.
   1. Yes.
10. User can always restart the game.
    1. Yes

**Partially Implemented Features:**

1. Any number of words can be played until the player wishes to quit or depletes all tiles.
   1. The player can play any number of tiles/words, but in the games current state it will not deplete from the bag. While a tile removed from the bag to be put on the rack is indeed removed from the bag; when the player moves on to the next word the bag will reset. I could fix this with minimal work.

**Unimplemented Features:**

1. After playing a word, only the number of letter tiles needed to bring the player’s hand back to 7 tiles are selected.
   1. This feature is completely unimplemented; with a moderate amount of editing I could probably implement it, but do not have the time to do so.
2. Except for the first letter, all sub-sequent letters must be placed directly next to another letter with no space. Else they will bounce back to the rack.
   1. This feature is completely unimplemented; I don’t think I could have implemented it without serious refactoring.

**No extra credit has been implemented.**

**No extra features have been implemented.**