COSC2082 - Programming 2 Lecturer: George Nguyen

Assignment 1 REPORT

GROUP MEMBER:

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Question 1: What data structures you have used to hold the record of marbles that were placed?

First, the Random object is applied to add random integer to Set<Integer>. Then, we take all the values stored in that Set and pass them to the "answerKey" array for future data handling.

Another array, called userGuesses, is created to save the record of the chosen clicked-object, e.g. icon. Then we compare values in both arrays to identify whether the icon chosen is in right position, in wrong position and not referred to in the answerKey.

We use GridBagLayout to set the location for the icons and their placeholders because it allows us to easily modify those components' locations on the GUI.

Question 2: Why did you choose these data structures? What makes them appropriate for this design?

GridBagLayout lets us set the elements to the expected location that we want. Other layout manager like FlowLayout, GridLayout, BorderLayout do not allow such flexible modification on the components' locations.

Array is good enough for us in this case because we mainly deal with primitive data type and we do not to modify the number collection.