

UNIVERSIDAD DE LAS FUERZAS ARMADAS

ESPE



Object-oriented programming

NRC: 9642

U2 Workshop N° 38

Topic: Exam U3 Correction

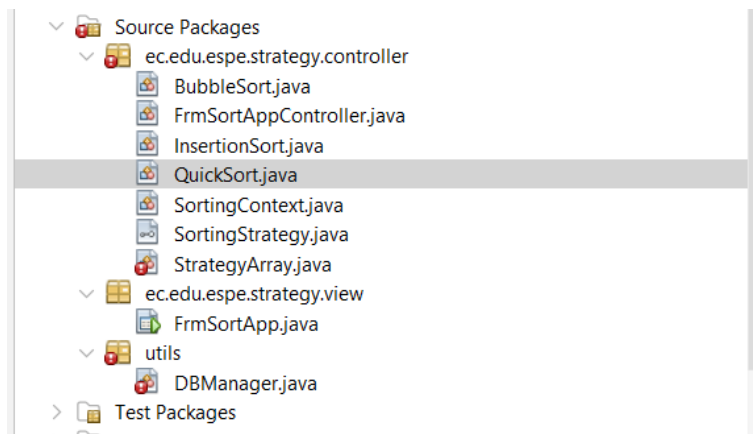
Ing. Jorge Edison Lascano. Ph.D.

1. GUAMAN ALCIVAR JORDAN ALEXANDER

Inspector: Adonny Calero

- Rubric:

1. Strategy Pattern 10/10



```
package ec.edu.espe.strategy.controller;

/**
 *
 * @author Jordan Guaman, Software Juniors, DCCO-ESPE
 */
public class QuickSort implements SortingStrategy {

    @Override
    public String sort(int[] data) {
        System.out.println("QuickSort");
        quicksort(data, left: 0, data.length - 1);
        return "QuickSort";
    }

    private static int split(int data[], int left, int right) {

        int pivot = data[left];

        while (true) {

            while (data[left] < pivot) {
                left++;
            }

            while (data[right] > pivot) {
                right--;
            }

            if (left >= right) {
```

```
package ec.edu.espe.strategy.controller;

/**
 *
 * @author Jordan Guaman, Software Juniors, DCCO-ESPE
 */
public class BubbleSort implements SortingStrategy {

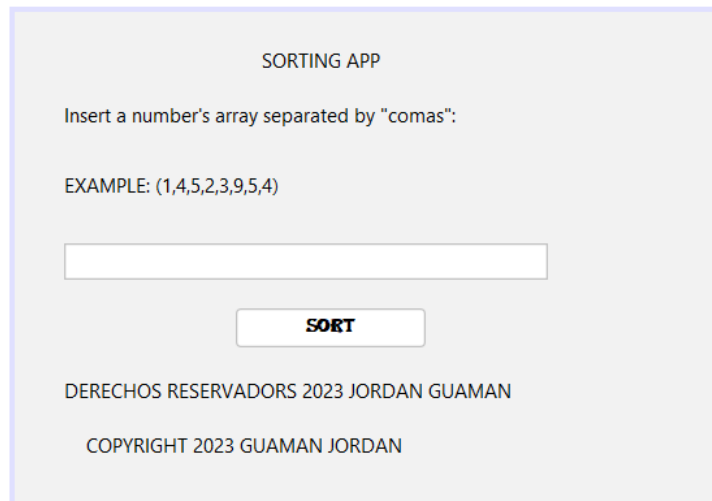
    @Override
    public String sort(int[] data) {
        int size = data.length;
        int temp;

        System.out.println("BubbleSort");

        for (int i = 0; i < size; i++) {
            for (int j = 1; j < (size - i); j++) {
                if (data[j - 1] > data[j]) {
                    temp = data[j - 1];
                    data[j - 1] = data[j];
                    data[j] = temp;
                }
            }
        }

        return "BubbleSort";
    }
}
```

GUI:10/10



SORTING APP

Insert a number's array separated by ",\"comas\":

EXAMPLE: (1,4,5,2,3,9,5,4)

SORT

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MongoDB: 8/10

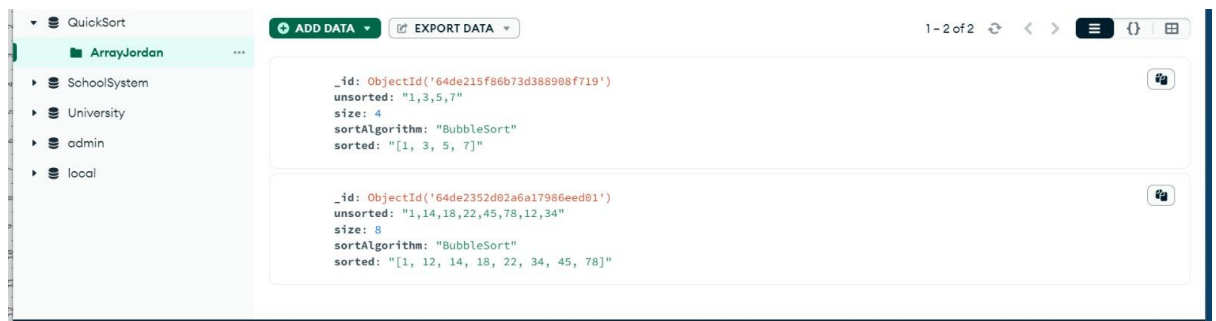
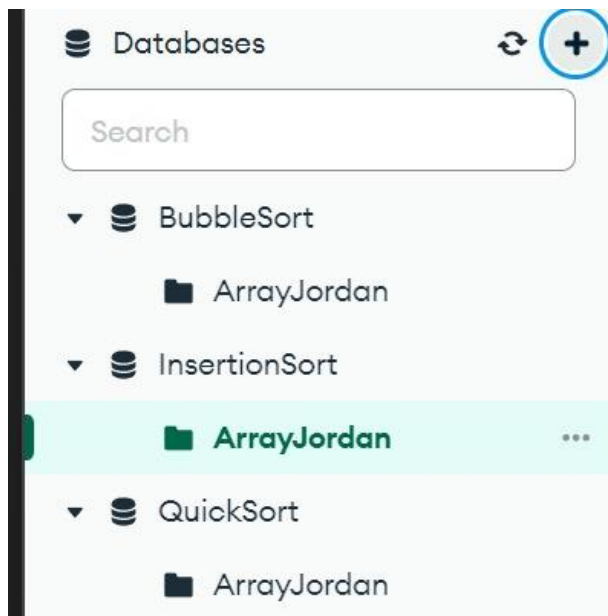
2/2 unsorted

2/2 size

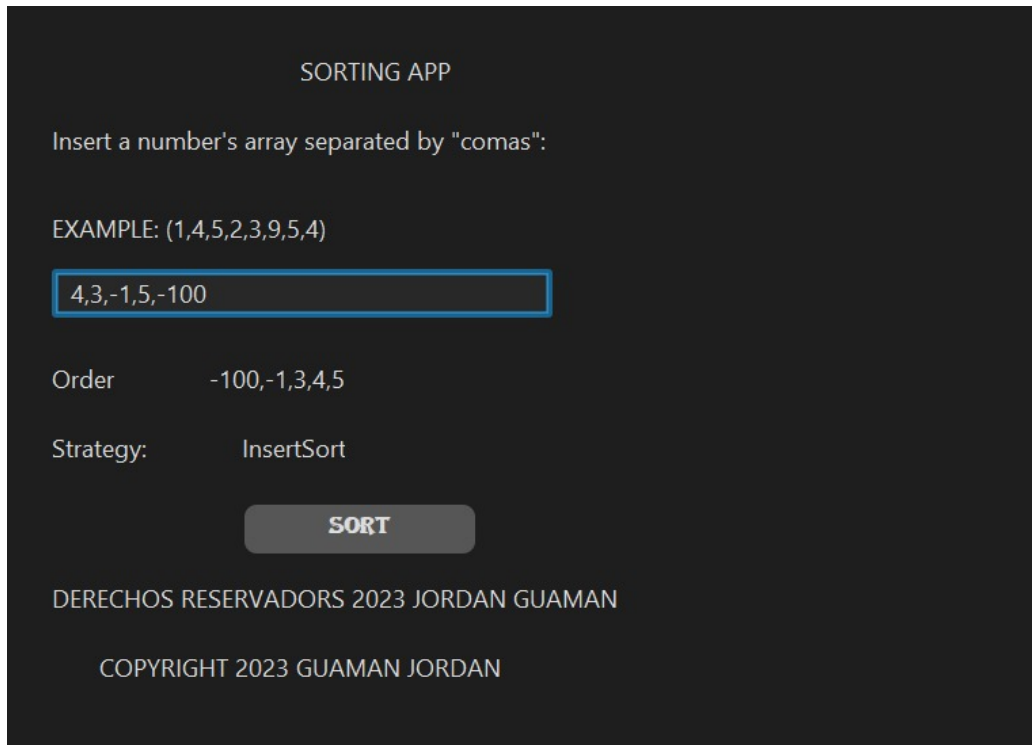
2/2 sortAlgorithm

2/2 sorted

0/2 StrategyJordan

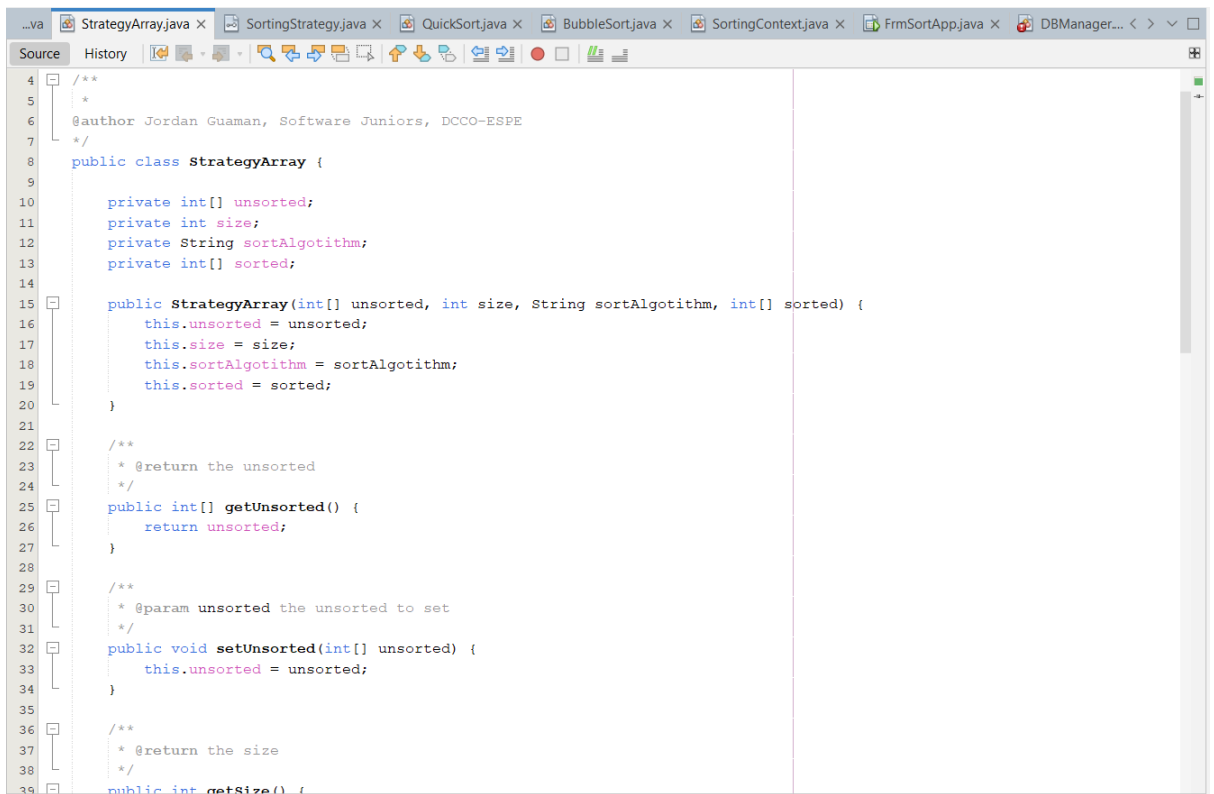
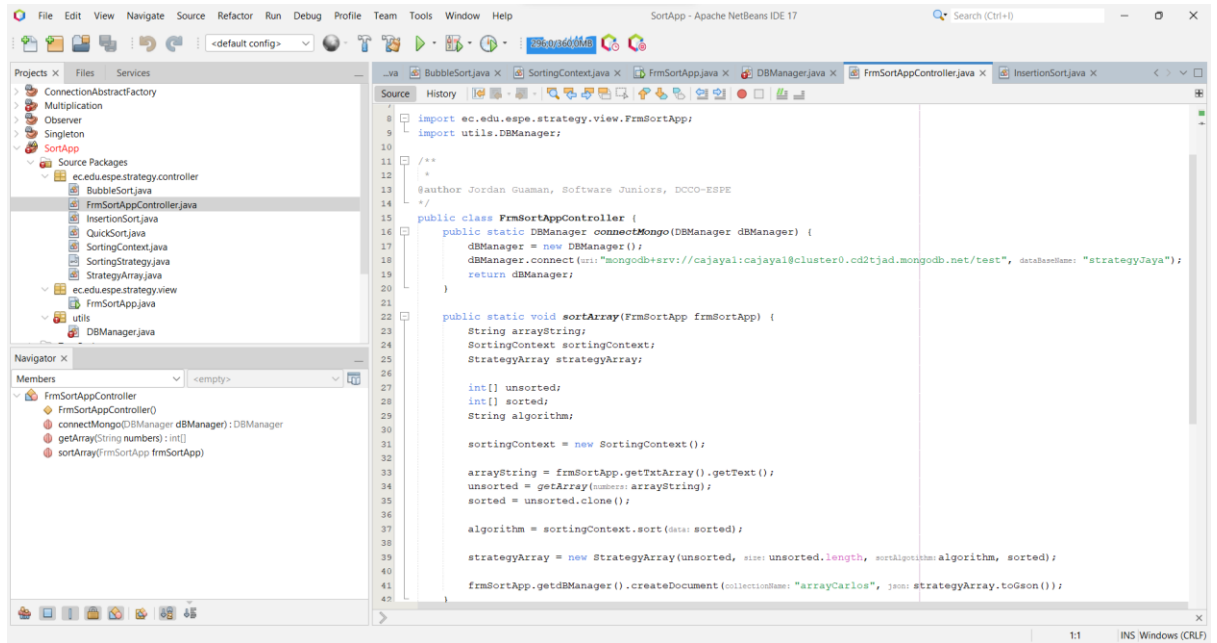


Program run 4/10



Clean Code:10/10

```
...va  BubbleSort.java x  SortingContext.java x  FrmSortApp.java x  DBManager.java x  FrmSortAppController.java x  InsertionSort.java x
Source  Design  History  [Icons]
10  /**
11  public class FrmSortApp extends javax.swing.JFrame {
12
13      DBManager dbManager;
14
15      /**
16       * Creates new form FrmSortApp
17       */
18      public FrmSortApp() {
19          initComponents();
20          dbManager = FrmSortAppController.connectMongo(dbManager);
21      }
22
23      /**
24       * This method is called from within the constructor to initialize the form.
25       * WARNING: Do NOT modify this code. The content of this method is always
26       * regenerated by the Form Editor.
27       */
28      @SuppressWarnings("unchecked")
29      Generated Code
112
113      private void txtArrayActionPerformed(java.awt.event.ActionEvent evt) {
114          // TODO add your handling code here:
115      }
116
117      private void btnSortActionPerformed(java.awt.event.ActionEvent evt) {
118          FrmSortAppController.sortArray(frmSortApp: this);
119      }
120
121      /**
122       * @param args the command line arguments
123       */
124      public static void main(String args[]) {
125          /* Set the Nimbus look and feel */
126          Look and feel setting code (optional)
127          // Look and feel setting code (optional)
128      }
```



There aren't a model package, and all classes has single responsibility, and all program is indented

TOTAL:42/50