LAB211 Assignment

Type: Short Assignment Code: J1.S.P0020

LOC: 40 Slot(s): 1

Title

Selection sort algorithm.

Background Context

Selection sort is a simple and well-known sorting algorithm. Selection sort belongs to $O(n^2)$ sorting algorithms, which makes it quite inefficient for sorting large data volumes. Selection sort is **stable** and **adaptive**.

Program Specifications

Design a program that allows users to input the number of array, enter elements. Display unsorted array and sorted array using selection sort.

Function details:

- 1. Display a screen to prompt users to input a size of an array (positive decimal number).
 - o Users run the program, display a screen to ask users to enter a positive decimal number.
 - Users input elements of array. Then, perform **Function 2**.
- 2. Display & sort array.
 - o Display array before and after sorting.

Expectation of User interface:

```
Enter number of array:

10

Unsorted array: [2, 6, 3, 6, 8, 6, 1, 2, 9, 8]

Sorted array: [1, 2, 2, 3, 6, 6, 6, 8, 8, 9] BUILD SUCCESSFUL (total time: 1 second)
```