ABSTRACT

The objectives of this thesis project are to provide an easy learning method for sorting algorithm learners, and improve some weaknesses of the existing programs.

The program has several features, such as Sorting Tutorial, Sorting Interactive, and Sorting Comparison. Sorting tutorial is used to help learners to understand sorting algorithm by adding tutorial and animation. Sorting interactive enables the users to input their own choice numbers to be sorted. Sorting comparison compares two different sorting algorithms in one page and provides the comparison frequency counter to let the users measure the effectiveness of the algorithms.

By using the system, the users will be able to learn sorting algorithm through visualization. The sorting process will be complemented by small information to let the users know what the sorting process does. The users can also measure the effectiveness of certain sorting algorithms by comparing the real time frequency counter. This counter will increase by one point for each swapping occurrence.

The program has overcome some weaknesses on the existing programs. New features are added to ease the learning process. And based on the survey, the respondents agree that the program is useful as a learning tool for new learners. Improvement on the program will enhance the quality of the program in the future.

Key words
Sorting, algorithm, visualization, numbers, comparison, tutorial, interactive