**Interview for Requirement Gathering of Sorting Algorithms Animation Software**

Time:

November 12, 2020

To help bring us a view of sorting algorithms visualizer in another perspective, an interview was appointed with a lecturer who teaches “Introduction to Programming and Algorithms” course in Year 1. We tried to acquire information about how Year 1 students learn sorting algorithms and what level they are expected to achieve as well. The information sheet is provided, and the consent form is signed by the interviewee.

**About the algorithm course**

Students in Y1 learn the algorithm using functional programming, and they have not been taught the lesson about for and while loop. They were taught everything by recursion. The interviewee showed us the PowerPoint he used for teaching, and it was mainly about recursion programming which is about the idea of divide and conquer. In the slides, a special part introduced by him is “trace” which would show changes after each step is done. He also stressed most of the students don’t ask questions to him

**Feedback on existing similar products**

Then, we showed some simple software we found, he said that the pseudo-code is not suitable for year one students, and they need to follow what is happening. For instance, giving some promotions like now it comes to condition check, because it does not match the condition, so it will continue to execute. Additionally, his idea is that we should consider the list size, which means let users decide the list size. For example, if the size is 1, it can show the basic case. We also need to provide different shuffle scheme instead of only randomize the array.

**Hierarchy of learning sorting algorithms**

When it came to the dependency of sorting algorithms, he thought bubble sort is quick and basic. Insert and merge sort are basic as well but should be introduced later if he can choose.

**About the platform**

The lecturer preferred the platform of Windows. He said that he would be happy to use our software for teaching sorting algorithms, and he thought animation is suitable for displaying sorting algorithms.