## User Interfaces

## Main View

|  |  |  |  |
| --- | --- | --- | --- |
| Algorithms Teacher | | | |
| Bubble Sort – Icon | Selection Sort – Icon | Insertion Sort – Icon | Merge Sort - Icon |
| Quick Sort – Icon |  |  | Comparisons - Icon |
|  |  |  |  |

X (Bubble, Selection, Insertion… etc.) Sort Icon click will open a new window.

## Sort Demo view

|  |  |
| --- | --- |
| **X Sort** | |
| X Sort Description - Contrary to popular belief, Lorem Ipsum is not simply random text. It has roots in a piece of classical Latin literature from 45 BC, making it over 2000 years old.  Time Complexities and stability.   |  |  |  |  | | --- | --- | --- | --- | | **Average** | **Best** | **Worst** | **Stability** | | O(n) | O(1) | O(n)2 | Yes / No | | |
| **Setup Demo Data Set** | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | 50 | 40 | 30 | 20 | 10 |  |  |  |  |  |  | | --- | --- | --- | --- | --- | | Data Set Size : | |  |  |  | | --- | --- | --- | | - | 5 | + | | | Case : | |  |  |  | | --- | --- | --- | | O Average | O Worst | O Best | | | Speed | |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1x | 2x | 3x | 4x | 5x | | |  | |  |  | | --- | --- | | Sort | Reset | | | |
| **Bar Chart visualizer** | **Array visualizer**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 10 | 20 | 30 | 40 | 50 | |
| **Analysis**  **25 Comparisons**  **20 Swaps**  **Total of 45 operations for Data set of 5 items in a Worst case scenario** | |
| **Steps Followed**   1. Step 1 2. Setp2 | |