

Group Responsibilities:

Nicholas: compare function, overload << function, use arrays/vectors

Cole: second sorting algorithm

Mika: testing, error checking, main menu, writing pdf on who did what

Patrina: first sorting algorithm

Jessica: class creation

Weekly Progress:

Start Date: Oct 23

Oct 23: Divided up tasks appropriately

Oct 24: Started with setting up the classes as well as implementing the basic class functions (get, set, and constructors) and started out lining how to do the sorting functions

Oct 25: Implemented the remaining class (compare) functions and started on setting up main properly for the user input and to be able to use the sorting functions properly

Oct 26: Implemented the sorting functions for all the attributes but noticed a few errors

Oct 27: Implemented the a large amount of the user input portion but still had error checking to do

Oct 28: Finalized the user input section and wrinkled out the errors with the sorting. Added various levels of error checking into the user input.

Testing and test cases:

For testing we tried various different cases and from the results we accommodated for various different inputs

Regular cases:

- Legal numeric inputs
- Legal numeric inputs that have no function within the user input section
- Typical sorting operations. eg. sorting the default vector for the first time

Corner cases:

- Sorting the same array multiple times, before and after using the sort all function. Especially for the international students vector for which the sort all returns a vector that removes certain students
- Repeatedly switching between which student vector to operate on

Illegal cases:

- Illegal non-numeric inputs. eg. chars when the expected input is an integer
- Illegal inputs such as blank lines and spaces
- Valid inputs concatenated with illegal inputs. eg 'lg' when the input should just be a number such as '1'

The results of these cases allowed us to create a good user input that can recognize and properly behave on various different types of inputs.