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CSC 365 Lab 1 Part 1 and 2

We initially decided to use java because it was a language we were all familiar with. We wrote most of our code using Net Bean and Xcode while running the program using the command line. We decided on using an array list to store the data which would allow us to add and pull nodes out to create new arraylists for our results. This was done using the java 8 feature lamda to filter the arraylists and to store the filtered values into a new arraylist to print to the screen as the results. To help filter the user interface we used a switch for the main commands S, G, A etc. in a for loop and used regular expressions in each function to see which specific case the user was asking for.

Our part 1 code was modified by adding a data structure called teacher to hold the teacher info from the second text file. We then added the functionality to read the two text files and like before they were stored in an arraylist made up of students that had all the fields plus the teacher structure. We added R1 and R2 together so that when you type C <classroom number> it will list the students in the classroom and if you type C <classroom number> T it will display the teachers that use that classroom.

Our original grade function was edited to allow for the user to enter a grade and to print the teachers who taught in that grade. This was done in the format G <number> T.

A fourth function was created that when the E key was pressed it displayed the enrollment totals for each grade. All of the above, was done like our part 1, using a separate function and the creation of arraylists as well as using lambda to filter results.

Testing was done by those who wrote the individual functions. These test cases were then brought over into our testing suite.

Task Log:

Task	Christian	Jason S	Jason F	Start Time	End Time	Total Time(Hours)
ArrayList Structure			X	4:30pm	6:00pm	1.5
Reading from two separate lists, data structures		X		4:00pm	6:30pm	2.5
Initial Code Organization	X	X		4:30pm	6:00pm	1.5
Function Implantation G,A,B,I	X			4:30pm	9:30pm	5
Function Implantation E, P		X		6:30pm	7:30pm	1
Function Implantation G,C	X			4:00pm	7:00pm	3
Function Implantation S, T		X		4:30pm	5:30pm	1
Test Cases		X		4:30pm;7:30pm	8:30pm; 8:00pm	4.5
Write Up	X			4:30pm;7:00pm	5:00pm;7:30pm	1