

Lab 1-1 Write-Up

By Abhinav Singh and Jake Veazey

Initial Decisions:

We decided to use Java mostly because it was what was expected in the lab and our environments varied for the both of us. In general we just had a text editor set-up along with the terminal to test any code that we wrote.

Internal Architecture:

For our internal architecture our first design decision was on how to deal with the students.txt file, In our case we decided to just read the file once upon start-up and then store all that data in an array list. For each student, we created a student object in order to better manage all the student data in the arraylist. On a smaller note we went with an arraylist since we did not know the size of students and this would work for most sizes that do not exceed our memory, also an arraylist is fairly intuitive for what we are doing. Furthermore, about the architecture we just simply broke up all the parts into different functions that are called from a controller of sorts.

Tasks:

Task	Student Performing	Start Time	End Time	Total Hours
Getting the program to start up with prompt and load from command line(R1, R2, R3)	Abhinav Singh	9/21/2018 3:10pm	9/21/2018 3:30pm	20 Minutes
Created the student Object file which stores all the data for a student	Jake Veazey	9/21/2018 3:10pm	9/21/2018 4:00pm	50 minutes
All Odd number exercises with some evens included (R4, R5, R7, R9, R11, R12)	Abhinav Singh	9/22/2018 12:10pm	9/22/2018 1:15pm	1 hour and 5 minutes

All Even Number Exercises with parsing students.txt file(R6, R8, R10, R13)	Jake Veazey	9/24/2018 3:10pm	9/24/2018 4:30pm	1 hour and 20 minutes
Error Checking and Testing	Abhinav Singh and Jake Veazey	9/25/2018 5:00pm	9/24/2018 6:15pm	1 hour and 15 minutes

Notes on Testing:

There weren't too many bugs that we found, however, the first bug was found by Jake in the student search method on 9/24 Monday. The problem with student search was that it wasn't correctly handling the splitting of a string and processing arguments. Then Abhinav managed to fix it in around 15 minutes after finding out about it. Other bugs that were found by the both of us just involved dealing with passing a string that was not an integer to Integer.parseInt so we just changed our code to handle this case and it took around 5 minutes to fix and we found this bug on Tuesday 9/25. Overall testing took around a little over an hour.

Final Notes:

Overall I think the project we submit is working well with some minor checks that were not made because we felt they weren't needed and the requirements didn't specify them. However, our program is case insensitive and allows you to enter the short or long form of the option.