Team Members:
Allen Zhai
Wei Lin
Steven Gandham

Lab 1 Write Up

Programming Language: Python
Environments: VIM, Atom.
Internal Architecture and Implementation: We created a Student class containing student last and first name, grade, classroom, bus, GPA, and teacher last and first name. Overall, we parsed the text file and created a list of student objects. Required commands were generally fulfilled by traversing through the list and finding the matching key (StLastName, Grade, TLastName, etc). Therefore commands R4-R11 are O(n).

Task Log:

Name of Task:	Assigned To:	Start Time:	End Time:	Total Person-Hours for Completion:
Setup functions.py, transferred R4-R11 function names and descriptions from requirements	Allen Zhai	1/7/20 8:45AM	1/7/20 10:00 AM	1.25
R9	Steven Gandham	1/7/20 11AM	1/7/20 11:30 AM	.5
R10	Steven Gandham	1/7/20 2:30 PM	1/7/20 3:15 PM	.75
R11	Steven Gandham	1/7/20 3:15 PM	1/7/20 3:45 PM	.5
R4	Allen Zhai	1/6/20 12:20 PM	1/6/20 12:25 PM	.08
R5	Allen Zhai	1/6/20 12:25 PM	1/6/20 12:35 PM	.16
R3	Allen Zhai	1/7/20 7:30 PM	1/7/20 8:15 PM	.75
R6	Wei Lin	1/6/20 11 AM	1/6/20 11:10 AM	.16

R7	Wei Lin	1/6/20 11:10 AM	1/6/20 11:15 AM	.08
R8	Wei Lin	1/6/20 11:15 AM	1/6/20 11:20 AM	.08
Command Error Handling	Wei Lin	1/8/20 8:40 AM	1/8/20 9:00 AM	.33
File Error Handling	Allen Zhai	1/8/20 8:50 AM	1/8/20 9:00 AM	.16
Writing test cases for R6-R8	Wei Lin	1/9/20 10:05 AM	1/9/20 10:20 AM	.25
General print output function and changed each print statement in all functions in functions.py as a double nested list as the return type	Wei Lin	1/9/20 10:20 AM	1/9/20 11:00 AM	.67
Writing Test Cases for R9-R11	Steven Gandham	1/9/20 3:00 PM	1/9/20 3:40 PM	.67
Wrote test cases for R4-R5	Allen Zhai	1/9/20 5:00 PM	1/9/20 5:15 PM	.25
Error handling function to check if students.txt is loaded	Wei Lin	1/10/20 8:50 AM	1/10/20 9:00 AM	.16
Wrote tests.txt	Wei Lin	1/10/20 10:20 AM	1/10/20 11:30 AM	1.16
Added empty test cases R4-R11	Allen Zhai	1/10/20 8:00 AM	1/10/20 8:30 AM	.5
Changed Student attributes to their appropriate data	Allen Zhai	1/10/20 8:30 AM	1/10/20 9:00 AM	.5

types and debugged related code				

Notes on Testing:

When:	Who:	Bug Description:	How Long:	# of Bugs Found:	How long it took to fix:
1/7/20 - 11-11:20AM - During Testing schoolSearch.py from Atom console	Steven Gandham	schoolSearch.py would not run due to a non-ASCII character '\xe2' to a single quote in "schoolSearch.py"	20 min	1	15 min
1/9/20 - 10:05-11AM - During testing schoolSearch.py from linux server	Wei Lin	The A[verage] command would error if there are no students in that grade, thus cannot find the average GPA of that grade. Another bug was that we must append all instances found into a list first before returning the list containing all entries in each function in functions.py	55 min	2	10 min

Team Members:
Allen Zhai
Wei Lin
Steven Gandham

Lab 1 Part 2 Write Up

Programming Language: Python

Environments: VIM, Atom.

Internal Architecture and Implementation: We created a Student class containing student last and first name, grade, classroom, bus, GPA, and teacher last and first name. Overall, we parsed the two different text file and created a list of student objects. Required commands were generally fulfilled by traversing through the list and finding the matching key (StLastName, Grade, TLastName, etc). Therefore commands NR1-NR5 are O(n).

Decisions you made on how to modify your Part 1 code to accommodate new input data. Which parts of the code were affected?

For NR3, since we already have grade option implemented in our Part 1, we simply added on an option onto the existing code to accommodate for NR3. For NR1, NR2, NR4, and NR5, we added new options in the prompt when the program initially starts. The only part of the code that is affected is the main loop where we check for the user input option. We either added on more options --for NR1, NR2, NR4 and NR5 we added C[lass]: <number> S[tudents] option, C[lass]: <number> T[eachers] option, E[nrollment] option and D[ata] option respectively upon program execution-- or we simple added an option for the commands--for NR3 we added a T[eachers] option for G[rade]: <number> command.

Task Log:

Name of Task:	Assigned To:	Start Time:	End Time:	Total Person-Hours for Completion:
Added new functions and comment	Wei Lin	1/13/20 8:30 AM	1/13/20 8:35 AM	.08
Change student parsing function to accommodate list.txt and	Allen Zhai	1/13/20 8:15 AM	1/13/20 8:45 AM	.5

teachers.txt				
Updated	Steven Gandham	1/13/20 8:40 AM	1/13/20 9:00 AM	.2
NR3 and a testcase	Allen Zhai	1/13/20 4:30 PM	1/13/20 4:45 PM	.25
NR2	Allen Zhai	1/13/20 4:50 PM	1/13/20 5:00 PM	.16
NR4	Wei Lin	1/13/20 10:00 PM	1/13/20 10:30 PM	.5
NR4 test cases and fixed error handling test cases	Wei Lin	1/13/20 10:30 PM	1/13/20 11:00 PM	.5
NR5	Wei Lin	1/16/20 10:45 AM	1/16/20 12:00 PM	1.25
NR1 - NR3 prompts in main (files got deleted due to git pull and push at the same time so I had to do this twice)	Allen Zhai	1/16/20 12:00 PM	1/16/20 2:00 PM	2
Modified prompting for D[ata] option	Wei Lin	1/16/20 2:30 PM	1/16/20 3:00 PM	.5
Test cases for NR5	Wei Lin	1/16/20 3:10 PM	1/16/20 3:40 PM	.5
Updated tests.txt to for piping into schoolsearch.py and created tests.out	Wei Lin	1/17/20 10:15 AM	1/17/20 10:30 AM	.25

Notes on Testing:

When:	Who:	Bug Description:	How Long:	# of Bugs Found:	How long it took to fix:
1/17/2020 8:10-8:30 - during testing schoolsearch.py	Wei Lin	If you enter an invalid option for Grade: <number> and then anything but "T", "H", "L", the program errors	20 min	1	5 min