**CSC 365 Lab 1 Part 2**

List of team members

Malcolm Craney, Dylan Halland, Owen Kehlenbeck

Initial decisions

Programming Language: We went with python because everyone on the team knows the language and its good at parsing files and working with strings. It also requires minimal setup and is easy to code and run.

Selected Internal Architecture

We defined two different objects, Query & Student. Query is used to store information about what the user issued as a command, including choice and optional params. This is useful because we only need to parse a query once and then we can store all the information we’ll need later. The student object is used to hold all the information about a student. This is very useful because there are a lot of different fields that students.txt stored, and to have all that information in one object makes things easier. As we parse through the file, we create a Student object and add that to an array of students. The array is used so that we only need to parse through the file once, and then we can use that stored array of students for each of the different commands.

Task Log

NR1 – Malcolm,

NR2 – Malcolm,

NR3 – Dylan, 0.5 hours

NR4 – Dylan, 0.75 hours

NR5: GPA vs grade level – Owen, 0.75 hours

NR5: GPA vs teacher – Owen, 0.75 hours

NR5: GPA vs bus route – Owen, 0.75 hours

Notes on Testing

R4, R5, R6, R12, NR1, NR2 – Malcolm, 0.5 hours, 0 bugs found

R8, R11, E1, NR3, NR4 – Dylan, 0.5 hours, 0 bugs found

R7, R9, R10, E1, NR5 – Owen, 0.5 hours, 0 bugs found

Final Notes

These are the new commands and syntax for part 2. They can also be found in README.md

CRS (Students in classroom)

CRS: <Classroom Number>

CRT (Teachers in classroom)

CRT: <Classroom Number>

GT (Teachers for grade)

GT: <Grade>

CRE (Classroom enrollment)

CRE:

GPAG (GPA relationship with grade)

GPAG: <Grade>

GPAT (GPA relationship with teacher)

GPAT: <Classroom Number>

GPAB (GPA relationship with bus route)

GPAB: <Bus Route Number>