

Ryan Kirkpatrick  
Andrew Lau  
Lab 1  
CSC 365-03  
Sep 26, Fall 2018

#### Initial Decision:

We decided to write the program in **Java**.

#### Internal Architecture:

There is a data model called Student.java which includes a field for :

- Student last name
- Student first name
- Grade
- Classroom
- Bus
- Gpa
- Teacher last name
- Teacher first name

This allows each student and their data to be encapsulated in a Java object which allows for easy sorting and matching using Java Library functions.

#### Task Log

- Create parser for the commands - 1hr
- Create Scanner to read in files - 30 min
- Have functions to execute commands - 3hrs
- Valid Command Checking - 1 hr

#### Notes on testing

- Went through every function and checked if output matched expected result
- We found a bug in the GPA High/Low function which incorrectly printed all of the students and their GPA rather than just the highest or lowest.
- Edge cases, implemented some code to handle the errors appropriately