

Jackson Goyette, Spencer Schurk
CSC 365
Lab 1-1

Lab 1-1 (Why Databases?) Writeup

Team Members: Spencer Schurk and Jackson Goyette

Initial Decisions:

We created this program in Java, since that was one of the parameters of the lab. We decided to use GitHub as a collaborative platform, so we could both work on the lab outside of the lab itself and independently and still receive feedback on the changes we made.

Internal Architecture:

The main structure we used for storage was an ArrayList of Rows, a class we defined in the program. Every Row contains all of the data that would be found on a row of the text file input (Student First/Last name, grade, GPA, etc.). To populate this ArrayList, we used a buffered reader to parse through the file and create Rows in our ArrayList that contained the student information. For the inputs, we created separate functions to handle each, that an inputHandler function called.

Task Log:

- ArrayList and Row implementation: Spencer/Jackson, Fri. 9/21, approx. 1 hr
- inputHandler and main calls: Spencer, Sat. 9/22 - Mon. 9/24, approx. 2.5 hrs
- initRows and structure: Spencer/Jackson, Fri. 9/21 and Mon. 9/24, approx. 2 hrs
- Test cases: Spencer/Jackson, Mon 9/24 - Tues. 9/25, approx. 1 hr

Testing:

Running through the test cases, Spencer found only one bug: when attempting to find the average of a grade that didn't exist, schoolsearch would output "grade: 0" as opposed to not printing anything. It took about 2 minutes to fix up this bug.