CS FINAL PROJECT

**Summary of what we did**

Nov. 8, 2014: 2:55pm-3:30pm

Begin to formulate the structure of the final project. Additions to the SubjectTutor program including class implementation to create personal student files, report their scores to a report card file, and transcribe all tests to individual files as attempted.

November 20, 2014, 12:50pm-2:10pm

Used available class time to start out Student class that stores the user’s name while program is being used.

Began to format the file writing code to get transcript of each user’s exams.

Considered throwing out ASCII art, as it is wasted code.

November 23, 2014, 7:40pm-9:30pm

Recreated ASCII art to include Hannes. Rewrote loops for volume, perimeter, and area functions to not use while(true) and just use if/else.

Wrote score report function, needs work!!!

November 25, 2014, 1:30pm-2:10pm

Added date entry function to be used in file organization.

December 2, 2014 1:00pm-2:10pm

Wrote code for percentage of correct arithmetic

Still need to add Boolean true/false variables in each function to report to use in score report

December 2, 2014 7:30pm-9:00pm

Working on score report to try and output a percentage score across multiple test sections without overlapping and adding to the previous attempts

Added partially functional fout statement to begin writing the actual report cards.

Discovered error when adding Student.h to Source.cpp. 🡪 **Ask pete on thusday.**

December 4, 2014 1:30pm-2:10pm

Got the output file stream in menu exit to work to place file on desktop.

Figured out how we need to add a student object to the main right before MAIN\_MENU() to be used in all functions from then on.

MUST CREATE/MODIFY POWERPOINT FOR PRESENTATION NEXT WEEK.

December 6, 2014, 6:45pm-10:45pm

Corrected error from total percentage in each section

General code cleaning

Wrote total percentage function

Tried to include date and name into fout statement, but are unsure of initialization protocol

December 7, 2014, 12:15pm-3:15pm

Writing into file before main menu works

Wrote new report function using fout to write scores into file

Edited all problem functions

Created a real report card, still not where we want it to be easily accessible

Ran full test and found many errors in problem statements, and corrected appropriately

**Individual work**

* Made a student class
* Added a score function to retrieve scores for sections and gave the functions parameters
* Wrote code for the percentage of correct arithmetic
* Made changes to edit and correct the percentage functions
* Wrote the remaining percentage functions for area, volume, and perimeter
* Fixed problems with percentage code and cleaned up code for easier access and readability
* Both Hillel and I created a report card with the percentage functions and ran the code to correct any errors found with loops, sentence structure or any other errors we encountered

**Individual Assessment and Importance**

The project that I and Hillel worked on was a math tutoring program for basic algebra and geometry. This program is important because it can be used to help anyone study there mathematic skills and improve upon them. The most challenging part of the project for me was the initial writing of the code for the percentage function. The problem that I was presented by was for each section if nothing was done in that section the score for that section would be zero. That number was them divided by the number of subjects tested in for that section and if that number was zero I would receive an error because 0/0 is undefined not zero. So I had to implement an if else statement that gave two different percentages based on whether or not the section was used or not to get the correct percentage. The most rewarding thing for me was probably when we got our code to run correctly for the first time with no errors to our code and that it did exactly what we had wanted it to do. So in other words the work that we put into our project really paid off and gave a really good feeling of satisfaction.

**UML**

[https://github.com/hillelzweig/REAL-FINAL-PROJECT/tree/master/REAL%20Final%20Project](https://github.com/hillelzweig/REAL-FINAL-PROJECT/tree/master/REAL%20Final%20Project%20)