

Project 1 – Grade Report (Part D)

For this part of the project, you will need to add a new entry to the menu that allows the user to print to a file all information related to the students.

Files given:

- **example.txt**
 - It shows you how your output file should look. The format is the same as the one that is printed in the console.
- **student_data.txt**
 - **This is the new text file to test your work.**
- **OutputHandler.h**
 - No need to modify anything in here. Simply add the file to your project.
- **Output_Part_D folder**
 - Contains the **output_part_d.exe** file and a **student_data.txt** file (the **newest** one) to compare the given output with yours.

Update your project as described below.

OutputHandler.h	<p>Add the OutputHandler.h file to your project by including it in the Header Files folder.</p> <p>The function implemented in this file, printAllStudentsToFile, asks the user to enter a file name and then calls the function printStudentsToFile of the StudentList class to retrieve the information necessary that will be printed on a text file.</p>
Student Class	<p>Add the following declaration in the Student.h file, right <u>before</u> the destructor: void printStudentInfoToFile(ofstream& out, double tuitionRate);</p> <p>Implement the function printStudentInfoToFile in the Student.cpp file. This function is very similar to the implementation you wrote for the function printStudentInfo, with the difference that instead of using “cout” you need to use “out” and you will not be able to call any of the print functions available.</p>
StudentList Class	<p>Add the following declaration in the StudentList.h file, right before the destroyStudentList function: void printStudentsToFile(ofstream& outp, double tuitionRate) const;</p> <p>The implementation of the function printStudentsToFile should traverse the list and call the function printStudentInfoToFile of the Student class</p>
Main.cpp	<p>In the processChoice function of the Main.cpp file, you will need to add an additional choice:</p> <p style="text-align: center;">Print students to file</p> <p>This should be choice #6 of the menu selection. Make the necessary changes to run your program.</p>

	<p>Switch statement: Check the given output and change the spacing for the following cases accordingly:</p> <ul style="list-style-type: none"> • default case (incorrect selection) • Selection 7: You do not have a switch case for this selection, and you should NOT add one, but if the user selects 7, you should print out the following message: <p style="color: red;">Thank you for using the OCC Gradebook. Good-bye!</p> <p>To accomplish this, you will need to:</p> <ol style="list-style-type: none"> 1. Change the WHILE loop into a DO/WHILE loop. 2. Inside your DO/WHILE loop add an IF/ELSE statement that will print out the message to the user in case the user selects 7, or will process the SWITCH statement in case the user makes another selection.
Main.cpp and StudentList Class	<p>Instead of having an error message in each function, to check whether there are any students in the list, you are going to perform this check in the Main.cpp file, by doing the following:</p> <ol style="list-style-type: none"> 1. For each case in the switch statement, except the default one, which should print, “Sorry. That is not a selection.”, use the function getNoOfStudents() of the StudentList class to check the number of students in the list before calling the necessary function. If there are no students, then print the error message, “There are no students in the list.” 2. Remove all error messages from all functions in the StudentList class—only the ones that print out if the list is empty.