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Developer's Doc

The console application Wallet (Incomes and Expenses) has been implemented by combining several functions. Therefore, in the "Developer's Doc" I am simply going to talk about the major functions that I made which the program is solely standing on.

Structures:

Firstly, I would like to talk about two structures. There is a struct that implements the functionality of date, and there is another one that has been implemented to add income and expenses in which there are char and int type data.

Functions:

addincome():

This function allows the user to add a certain amount to the income database, it also lets the user to input date and category of the income. Therefore it satisfies also the requirement of the user being able to add category as he wishes.

addexpense():

This function is pretty much identical with the earlier one. Only difference is that it opens a totally different file or database for the expenditure.

showincome():

This function simply reads the data from the file and lists all of the income inputs of the user, therefore, it also satisfies the requirement of the program that the user should be able to view his total incomes. Dynamic memory allocation has been implemented in this function, as it was one of the requirements of the program. We have used **calloc()** function to implement dynamic memory allocation. Later on, **free()** was used to avoid memory leakage.

showexpense():

This can be called as a brother function of the earlier one because they're quite similar. It reads the expenseinfo.txt file that had been created earlier with the help of addexpense() function, and it views the user all his input in the expense function. Therefore, it satisfies the user's requirement that the user should be able to view all his expenses. Like the earlier function, in this function as well dynamic memory allocation has been implemented using the **calloc()** and **free()** function.

incomebydate():

This function allows the user to filter his income by date. All the user needs to do is input the date, and the program will view the amount that had been added to the income database on that day. This is also another major requirement which has been successfully implemented.

expensebydate():

Similarly, this is another challenging function, which is one of the key requirements of the program. This allows the user to filter his expenses from the database with the help of inputting proper date.

/*Thank you*/