PROJECT 2 USER MANUAL

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   1. Executing the program for Project 2

      This program will read a file called transacton.txt which contains the listing of all transactions for the month; a file called accounts.txt which contains a list of all customers, along with their account ids and it will compute and print a report with a specific format at the console and write it in a file called monthly_report.txt. To run the program the user will need a copy of the executable program file cs121_p2.exe, a file correctly formatted that contains all customers with their ids, a file correctly formatted that contains all transactions. To run the executable, just double click cs121_p2.exe, if you are using the CLI, in your filesystem go to the correct location and run it.

      As the program runs, you will be prompted to provide the path name of a correctly formatted accounts database, and transactions data which will provide the input for the program. These files must already exist when you run the program. If you provide the correct pathname, these files can be at any location. In the account.txt the first line represents the number of entries, and the program will check whether the number of entries is valid. Then print on the console for all accounts entries and the respective customer. The user will be prompted to enter the transactions file, each line of this file represents a customer account, with customer account number, beginning balance, and all transactions preceded by a letter code to represent deposits or withdrawals. The program will compute all transactions based on this information and print the report on the console. The program will prompt the user to enter the correct pathname of the file where the report will be written. After the user press any key, the program will terminate, leaving the user at the DOS prompt.

   2. Input Requirements

The program needs two specifically formatted files to execute correctly. Each line of the account file must have the following format:

The first entry is the amount of entry. This must only contain digits, no decimal points, letters, or other characters.

The remaining are entries of the form account number followed by customer name.

Each line of the transactions file must have the following format:

The first entry is the account number, followed by the current account balance at the beginning of the month. The remaining of the line contains all the transactions of the customer for the month: if the entry begins with a 'd' the number that follows is the amount of deposit; if it begins with a 'w', the number that follows is the amount withdrawn.

3. Input Restrictions

a)   The account number must be a positive integer.

b)   The letter code for the transactions type must be lowercase 'd' or 'w'.

4. Output

The program output is sent to the screen and consist of a report on the monthly activities of the account based on the transactions file. The output gives the customer's name, the account number, the beginning balance written in two decimal places, the ending balance written in two decimal places, the amount deposited written in two decimal places, the number of deposits, the amount withdrawn written in two decimal places, and the number of withdrawals.

Sample Input files:

Account file:

5

123   daffy

345   goofy

639   sneezy

890   dopey

666   grumpy

Transaction file:

123   34.67 d45.10 d50.45 d198.56   w45.67

345   123.89

639   1945.76   d1000.34   d1234.56   w34.33 w345.87   w22.13

890   12345667.90 d345.67   d123.67   d45.99 d45.99 w34.77

666   666.66 d66.60 d666.66   d6.66 d66.6 d6666.66

Corresponding screen Output:

Please enter the path to the database accounts file!

Please enter the fully qualified name of the input text file (i.e., including the path):

→ C:\Users\merve\OneDrive – Erie Community College\C121\accounts.txt

Hooray!

Number of entries: 5

123 daffy

345 goofy

639 sneezy

890 dopey

666 grumpy

Please enter the path to the account's monthly transactions file!

Please enter the fully qualified name of the input text file (i.e., including the path):

➔ C:\Users\merve\OneDrive – Erie Community College\C121\transactions.txt

Hooray!

 i: 0

Account number: 123

Account: daffy, Account number: 123, Balance: $283.11

Beginning Balance: $34.67

Ending Balance: $283.11

Amount Deposited: $294.11

Number of Deposits: 3

Amount Withdrawn: $45.67

Number of Withdrawals: 1

 i: 1

Account number: 345

Account: goofy, Account number: 345, Balance: $123.89

Beginning Balance: $123.89

Ending Balance: $123.89

Amount Deposited: $0.00

Number of Deposits: 0

Amount Withdrawn: $0.00

Number of Withdrawals: 0

 i: 2

Account number: 639

Account: sneezy, Account number: 639, Balance: $3778.33

Beginning Balance: $1945.76

Ending Balance: $3778.33

Amount Deposited: $2234.90

Number of Deposits: 2

Amount Withdrawn: $402.33

Number of Withdrawals: 3

 i: 3

Account number: 890

Account: dopey, Account number: 890, Balance: $12346194.45

Beginning Balance: $12345667.90

Ending Balance: $12346194.45

Amount Deposited: $561.32

Number of Deposits: 4

Amount Withdrawn: $34.77

Number of Withdrawals: 1

 i: 4

Account number: 666

Account: grumpy, Account number: 666, Balance: $8139.84

Beginning Balance: $666.66

Ending Balance: $8139.84

Amount Deposited: $7473.18

Number of Deposits: 5

Amount Withdrawn: $0.00

Number of Withdrawals: 0

Please enter the path to the monthly report file

Please enter the fully qualified name of the input text file (i.e., including the path):

C:\Users\merve\OneDrive - Erie Community College\C121\cs121_P2\monthly_report.txt

Hooray!

Monthly report generated successfully!

Press any key to exit.