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Financial Calculator

Financial calculator is a program that allows the user to keep track of multiple users while interacting with a variety of currencies. Currently, this program can insert new currency data and change a user's balance.

Financial Calculator was written in Python 3 and uses SQLite database to store persistent data. All the Python modules used in this program should be part of the standard Python library after Python 2.5

SQLite was chosen because it can create a database file that Python can directly interact with, removing the necessity of installing a database system. But if the user wishes to directly insert data then SQLite can be installed from this link:
SQLite download link: http://www.sqlite.org/download.html

This program takes the "gold standard" approach when dealing with currencies. All currencies are measured against the dollar. This means that, for example if one converts Euro to the Pound, the Euro is first converted into Dollar and then converted into Pound. This approach removes the need for long list of conversion tables and values (I estimate n^n rows for n currencies) but it forces the user to insert the dollar value of the currency when inserting new currency data and will display dollar values in some functions.

Furthermore, during the implementation it was decided that when users are inputting money values, they will not use signs such as "$" or "£" to indicate currency. But instead would use the 3-letter currency code such as USD or EUR. Inputting different currency symbol might require switching between keyboard languages or use of copy paste. Using the 3-letter code will, to the author's opinion, creates a better experience for the users.

Financial calculator has three major files required to run:

1. main.py – contains the main functions
2. financialCalcFunctions.py – contains majority of the functions of this program
3. financialCalcUserFunctions.py – contains user functions of the program
4. currency.db – The database file that the program uses

All files should be placed in the same directory. The location of the directory itself does not matter. Start main.py to start the program. main.py will prompt the user for additional commands. A list of commands can be displayed by typing in "help"

Example run: (logged in as admin)

```
*ADDUSER collegeStudent laulima 1 -40000
-"user added"
*WIRE collegeStudent admin 100000 EUR
-"user collegeStudent now has $-158000.0 in balance"
-"user admin now has $118483.75 in balance"
*ADD 5 CNY
-" You now have $118484.5 in balance"
-DELUSER collegeStudent
```