Desktop Budget Tool Design Doc

**Main Project Objective**: to create a very easy to use budget tool that displays visual information about a person’s finances at a glance

Two different data structures to work with:

**Accounts** – which keep track of a ledger, and also the remaining money in the account, the name of the account.

**Ledger\_entry** – which keeps track of the number, name, description, category, debit or credit, notes, entry\_date, whether it is a recurring entry, notes, entry\_date, and last\_update\_date.

-both of these classes will also accept a JSON data entry (save JSON data files as custom file extensions) in the constructor, creating default attributes for the object if it does not exist.

-Should this be outsourced to a file method? To check if the json variable is valid that is.

-both classes have an option to “print out” option to output a json formatted variable that contains the information in the classes

-this will then be recorded to a file before ending the class program

**Accounts**

* Has the attributes named above, in addition to the optional json constructor
* method for opening and saving accounts
* method for adding ledger entries – takes the account and entry

**Ledger Entry**

* has attributes named above
* can be applied to multiple ledgers

Ledger

**Main UX design:**

Upcoming expenses frame Design:

* Starts as a labelframe with the text “Upcoming Expenses”
* Will contain a Grid of upcoming expenses

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Date | Credit/Debit | Remaining Balance |
| 1 | . |  |  |
| 1b | . |  |  |
| 1c | . |  |  |

* information is pulled from the periodic entries section of the ledger file
  + periodic entries is a will be a list of dictionaries, each of which contain specific

Total amount frame design

* Should display the remaining amount in the account (display the remaining spending money? Add as option)
* Change color (gradient) based on how much is left in the account
* offer projected account balance at the end of the month based on averaged spending habits?

Add expenses/periodic expense frame design

-should include buttons for:

* adding an expense (one time)
* adding a source of income
* adding a recurring (periodic) expense
* button to modify periodic and one time expenses

Expense graph frame design

* should offer a visual representation of expenses
* could also offer a time-gated representation of funds still available in account
* checkbox to switch between the two?