DISKCOUNTER

V8.2

Diskcounter Copyright © 2021, Fabian Liemawan Adji

Diskcounter is a simple financial manager that I created to fill my needs of a clean financial documentation. The idea is to use Microsoft Excel to store the transactions data and utilize VBA to calculate the simple but repetitive calculations.

The program is currently in version 8.2, which is and will be the latest version I developed as it already has all features that I need for personal use.

Main features of Diskcounter are:

- 1. Inputting income and expenses through a user interface
- 2. The VBA scripts calculate the numbers, maintain a clean transactions record, and provide a good insight about the money that has gone in and out.
- 3. Manage monthly expenses through the user interface and the program automatically inputs the expense in the due date.
- 4. A financial planner sheet to have insight about estimated expenses every month and how much money is available to be saved.
- 5. Income manager based on financial planner. The program allocates income into two tiers of saving every month depending on your financial planner.

The current limitations are:

- 1. 3 maximum manageable accounts (inclusive Cash account)
- 2. Current supported currencies are: Rupiah, Euro, Dollar, and Poundsterling.
- 12 maximal income categories and unlimited expense categories (although it's recommended to use as many as necessary expense categories to preserve good insight).
- 4. Created accounts can't be deleted.



Diskcounter contains 5 sheets in default, which you should <u>never delete.</u>

- 1. LemonTree
- 2. Overview_Template
- 3. History_Template
- 4. Moonspense
- 5. Nancyplan

You are allowed to use Diskcounter or even modify it for your personal use, but you aren't allowed to commercialize it without my authority. If you are a developer, you can read LICENSE for more detailed informations about what you may and may not do. You can contact me either in Github or via email: fabianliemawan@gmail.com.

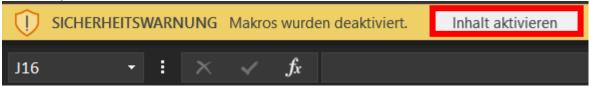
Like I said, I am not going to intensively develop this program any further as I have another project in mind and will only remove bugs which I encounter or big bugs which decapitate the program's functionality.

TABLE OF CONTENTS

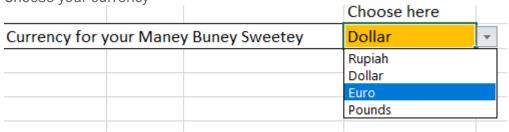
1.	Getting Started	4
2.	The User Interface	6
3.	Inputting Income or Expense	8
4.	Interbanking Transactions	. 10
5.	Changing Account Data	. 11
6.	History Sheet	. 13
7.	Overview Sheet	. 14
8.	The Financial Planner	. 16
9	Manage Monthly Expenses	19



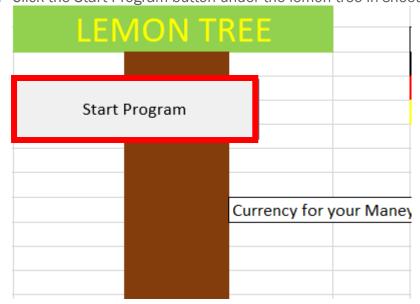
1. To start, you have to activate macro in Excel



2. Choose your currency



3. Click the Start Program button under the lemon tree in sheet LemonTree.





4. You have to initialize your accounts in your first use by checking how many account you want to use and giving them name and starting balance. Names and starting balances can be edited later too. Click Update to initialize

UserForm1

Edit Your Ban	king Account	
	Name	Balance
™ Bank 1	Bank Rupt	1500
™ Bank 2	Cash Cow	75
□Bank 3		
		Update

5. The initialization is now finished. Your starting point is recorded in sheet History[Current Year] (in my case History2021).

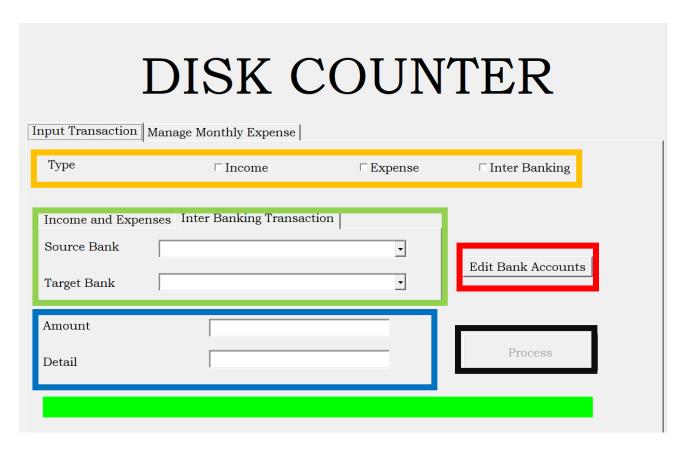
	1 A	В	С	D	Е	F	G	Н	1
1								Balance	
2	Date	In	Out	Detail	Category	Bank	Bank Rupt	Cash Cow	Inactive
3	01.05.2021			Starting Point			\$1.500,00	\$75,00	

ATTENTION: DO NOT DELETE ANY SHEET BESIDES OVERVIEW[YEAR] AND HISTORY[YEAR]!!

2. THE USER INTERFACE

The user interface has 2 tabs, one for inputting transactions and the other to manage monthly expense.

The tab Input Transaction is used to input all transactions, including transferring money between accounts.



The orange box contains the type of the transaction and must be chosen before inputting details of the transaction. Three types are available: income, expense, interbanking (for example transferring money between banks or take out cash from a bank account).

The green box contains the transaction specific details. In case of expense or income you have to input the category of the transaction and which bank is used. In case of Interbanking you have to define the giver and the taker banks.



The blue box is the last input before your process your transaction using the Process button (black box). Amount is an obligatory input, whereas details are only optional for expense or income in case you want to give descriptions to the transaction.

Last but not least, the red box is used to edit your financial accounts, such as changing the names and the <u>starting</u> balances.

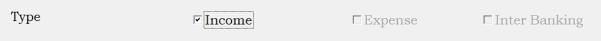
The tab Manage Monthly Expense is used to add and change your monthly expenses.

Input Transaction Manage Monthly Expense Choose/Add Expense Expense's Category Monthly Cost Monthly Due Date Payment Bank Status This Month

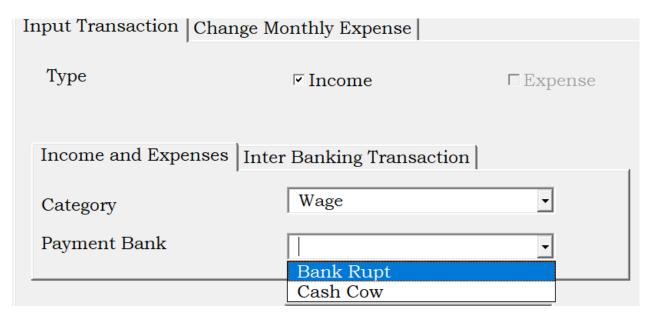
The user interface works with the expense, it checks automatically whether the monthly expense is already input. If this is the case, then the button will turn into an update button and you can edit the details of the chosen expense before updating it. In the other case, the button is an adding button and you have to input all details about the new expense.

3. INPUTTING INCOME OR EXPENSE

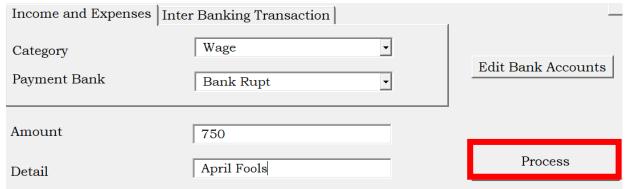
- 1. Click the Start Program button in sheet LemonTree. The user interface will be opened.
- 2. Choose a type. You can choose either an income or expense.



3. Input your category and select a bank for the transaction



4. Then enter the amount of the transaction. Amount must be positive. You can enter details about the transaction, but it's optional. Click Process button to process the transaction.





5. Check your History sheet for the input. The idea is to check your accounts' balance after the transaction, that they match the balances in your real accounts.

							Balance		Storage	
Date	In	Out	Detail	Category	Bank	Bank Rupt	Cash Cow	Inactive	Current Row	8
01.05.2021			Starting Point			\$1.500,00	\$75,00		Last Categories	11
26.05.2021	\$750,00		April Fools	Wage	Bank Rupt	\$2.250,00	\$75,00		This Month	4
26.05.2021		\$125,00	Now it's real	Rent	Bank Rupt	\$2.125,00	\$75,00			
26.05.2021		\$15,00	Luxurious Steak baby!	Eating	Cash Cow	\$2.125,00	\$60,00		Categories	Total
26.05.2021		\$50,00	Perfect Dinner Date gone wrong	Dating	Cash Cow	\$2.125,00	\$10,00		Dating	-\$50,00
									Eating	-\$15,00
									Rent	-\$125,00
									Wage	\$750,00

- 6. Your Overview sheet must now be updated too. You can always see your incomes and expenses here.
- 7. If you want to delete a false input, just simply delete the lines completely and click the start button in sheet LemonTree. The program will automatically update the changes.

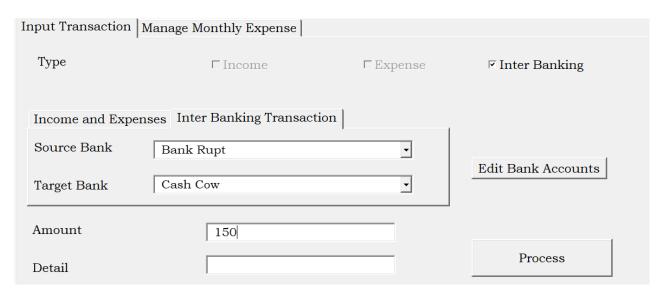
							Balance	
Date	In	Out	Detail	Category	Bank	Bank Rupt	Cash Cow	Inactive
01.05.2021			Starting Point			\$1.500,00	\$75,00	
26.05.2021		\$125,00	Now it's real	Rent	Bank Rupt	-\$125,00	\$0,00	
26.05.2021		\$15,00	Luxurious Steak baby!	Eating	Cash Cow	-\$125,00	-\$15,00	
26.05.2021		\$50,00	Perfect Dinner Date gone wrong	Dating	Cash Cow	-\$125,00	-\$65,00	

	П						Balance	
Date	In	Out	Detail	Category	Bank	Bank Rupt	Cash Cow	Inactive
01.05.2021			Starting Point			\$1.500,00	\$75,00	
26.05.2021		\$125,00	Now it's real	Rent	Bank Rupt	\$1.375,00	\$75,00	
26.05.2021		\$15,00	Luxurious Steak baby!	Eating	Cash Cow	\$1.375,00	\$60,00	
26.05.2021		\$50,00	Perfect Dinner Date gone wrong	Dating	Cash Cow	\$1.375,00	\$10,00	

ATTENTION: YOU CAN CHANGE THE DATE MANUALLY, BUT IT'S NOT RECOMMENDED. IF YOU DO SO, NEVER CHANGE IT BEYOND THE STARTING POINT, IN THE EXAMPLE NOT EARLIER THAN $1^{\rm ST}$ MAY 2021!!

4. INTERBANKING TRANSACTIONS

- 1. To move money between accounts you have to check Interbanking as Type
- 2. Then choose both Giver and Taker banks for the transactions.
- 3. Last but not least you have to enter a valid amount of money. For interbanking transactions you can't input any details to be saved.
- 4. Click Process button to finish the transaction



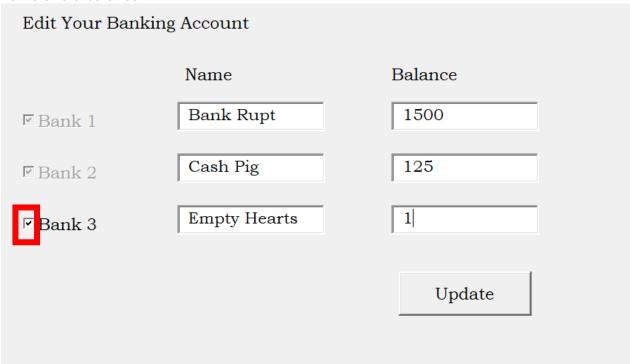
							Balance	
Date	In	Out	Detail	Category	Bank	Bank Rupt	Cash Cow	Inactive
01.05.2021			Starting Point			\$1.500,00	\$75,00	
26.05.2021		\$125,00	Now it's real	Rent	Bank Rupt	\$1.375,00	\$75,00	
26.05.2021		\$15,00	Luxurious Steak baby!	Eating	Cash Cow	\$1.375,00	\$60,00	
26.05.2021		\$50,00	Perfect Dinner Date gone wrong	Dating	Cash Cow	\$1.375,00	\$10,00	
26.05.2021	\$150,00	\$150,00	Bank Rupt to Cash Cow			\$1.225,00	\$160,00	



- 1. Click the Start Program button in sheet Lemon Tree
- 2. Click the button Edit Bank Account

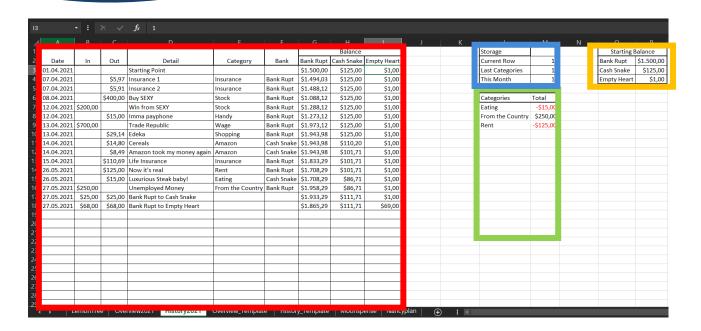


3. You can now freely change your financial accounts' name and <u>starting</u> balances. If you haven't initialized all three possible accounts, you can add a new account by checking the empty account (in this case in the red box for Bank 3) and give the new account a name and a balance.



4. The click the Update button

6. HISTORY SHEET



The history sheets contain every detail to your transactions with how the transactions affect your accounts' balances.

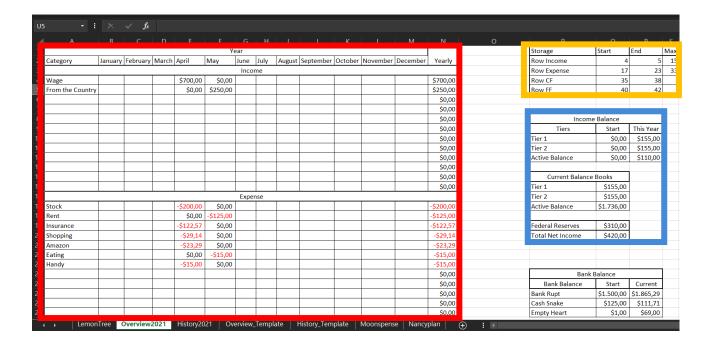
On the green box you will find the list of categories of transactions that have been closed in the current month.

The red box contains the records of your transactions, the details, categories, and which account is involved. And then you have the Balance column which shows you the accounts' balance after each transaction.

The blue box saves data about rows etc that the program needs to run properly. **Do not edit** this box if you don't understand how the rows impact the program.

The orange box contains the starting data about your accounts. <u>I recommend you to edit these informations through the user interface.</u>

7. OVERVIEW SHEET



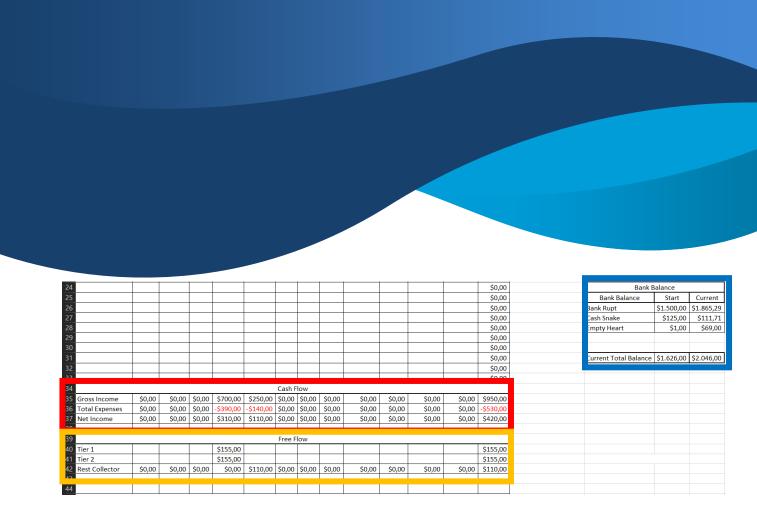
Let's start with the upper part of the overview sheet.

The red box contains information about income's and expense's categories in monthly and yearly (in column N). The idea here is to have a good insight about your expense and incomes over the year.

The yellow box storages rows data like in the history sheet. I give you here the same warning, do not change these if you don't know about what they do and how they are noted.

The blue box stores about your income management. Your income will be allocated respectively to your financial planner, which will be covered in next chapter. The table Income Balance gives you insight about your income in the current year. Active Balance are basically rest of your income after Tier 1 and Tier 2 already get their shares based in financial planner.

The table Current Balance Books shows you the cumulated incomes since you started using the program. Active Balance in this table shows the total of all your balances minus your money in both Tiers. It is basically how much money you have if you exclude your savings in both tiers.



The lower part shows basically your cash flow and your free cash flow.

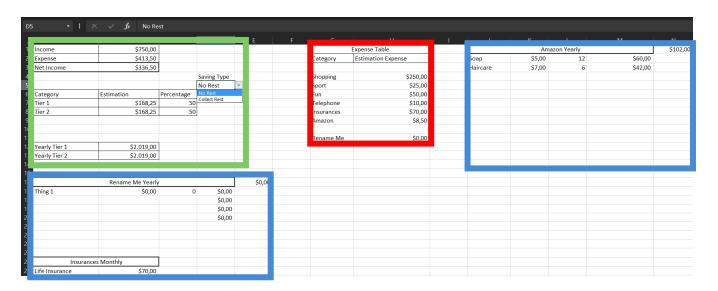
The red box gives you insight about the cash flow. It calculates your gross income based on your income tables and total expenses based on your expenses. A simple math finish the job to give an insight about the net income.

The orange box is about the free cash flow, it takes control of the allocation of your monthly net income. I will tell you in detail in next chapter about the logic of allocating income and expense.

The blue box contains the information about your account balances, comparing the balances from the start to the balances at this point.

8. THE FINANCIAL PLANNER

The Financial Planner is located in the sheet NancyPlan.



Let's start with the Expense Table (red box). You can input categories with the estimation of their monthly expenses. All expenses except Amazon, Insurance and Rename Me have to be inputted manually. The sum is automatically calculated in Expense Cell (B2) in green box.

Now let's go to the blue boxes, starting with Amazon, which you can rename. It's handy to handle subscriptions such as Amazon's, as you have to input the total of the money you pay per transaction (like 2 soap, each \$2.50 means \$5 per transaction) and the amount of the transactions in a year in the next column (12 mean 1 transaction per month, 6 means 2 months intervals, and so on). This way you can manage transactions in weeks intervals. The program calculated automatically how much it cost in a year and sum all the yearly costs in the right top beside the table's title. Then, the amount will be automatically divided by 12 in the expense table, that give you the monthly expense.

You can use the Rename Me Yearly in the same way. The Insurance Table works in a different way, as they are monthly transactions, so the sum will be directly inputted in the Expense Table.

Next, I am going to cover about the tiers.



4	А	В	С	D	
1	Income	\$750,00			
2	Expense	\$413,50			
3	Net Income	\$336,50			
4				Saving Type	
5				No Rest	~
6	Category	Estimation	Percentage	No Rest	
7	Tier 1	\$168,25	50	Collect Rest	
8	Tier 2	\$168,25	50		
9					
10					
11					
12	Yearly Tier 1	\$2.019,00			
13	Yearly Tier 2	\$2.019,00			

This is where you plan your income and expense. The income is automatically calculated based on the expense table, but you have to input your incomes yourselves. You can edit the name of both tiers as you like.

So first you have to choose the saving type. No rest means all your incomes will be allocated to both tiers aggressively depending on the percentage, whereas collect rest means only the estimated amount of each tier will be taken from the net income respectively and the rest will be saved in Active Balance. Either way, it's important for you to input the percentage. So in this case, if you choose No Rest, 50% of your net income will be allocated into both Tier 1 and 2, whereas choosing Collect Rest means only \$168.25 will be taken into each tier monthly and the rest will be sent to Active Balance. In the 12th and 13th row you will find the yearly estimation of each tier.

You may ask, what happened to the rest 20% if you put 40% to each tier? The answer is pretty easy, it will be sent to Active Balance as the Active Balance always takes the rest.



So, now I will explain the logic how the program reacts to net income or net expenses:

- In case of net incomes, it will store based on your choice in this sheet.
 - o If net incomes are below the estimation, then the net income will be allocated 50:50 into both tiers.
- In case of net losses but with positive balances from the <u>Income Table (warning not Balance Books)</u>, think of a pyramid with Tier 1 as alpha, Tier 2 as beta, and Active Balance as the weaklings.
 - As long as your Active Balance (Rest Collector) in <u>Income Table</u> can handle the losses, it will be used to pay the loss and your Tier 1 and Tier 2 will be left unaffected, but both tiers won't get any addition to their balance books respectively.
 - o If your Rest Collector can't handle the losses, Tier 2 will be the second line defense that try to pay the losses. Tier 1 will be in this case unaffected. If the losses are too big, then Tier 1 will be your ultimate last defender.
 - If all your line of defenses can't handle the losses, then your Active Balance in <u>Balance Books</u> will be used and your Tier 1 will go into negative. Tier 2 and Rest Collector in Income Table will remain 0.
 - In case of net incomes in the next months, they will be allocated completely to bring Tier 1 back to 0 before it operates in upper logics. This way, your tiers won't eat the balance of your Active Balance in Balance Books and they stay in their line as last line defenders.

9. MANAGE MONTHLY EXPENSES

Click the Start Program Button in sheet LemonTree
 Choose the tab <u>Manage Monthly Expense</u>

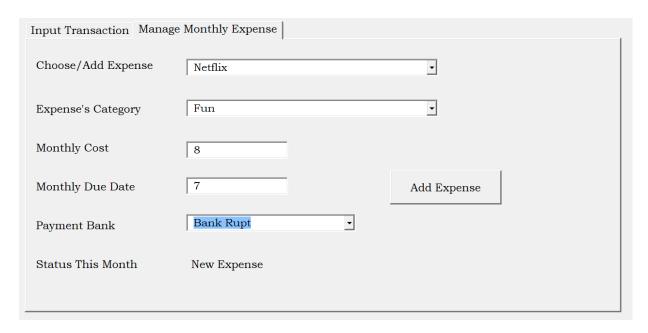
Input Transaction Manage	e Monthly Expense	
Choose/Add Expense		•
Expense's Category		•
Monthly Cost		
Monthly Due Date		Update Category
Payment Bank	•	
Status This Month		



3. To Add an Expense begin with inputting the expense name. Then fill the category, monthly cost, due date and select a payment Bank. Make sure you input a valid due date (between 1-28 because of February), otherwise the button will stay gray. As you see the button will update itself into an add button. The status will tell you, that it's a new expense.

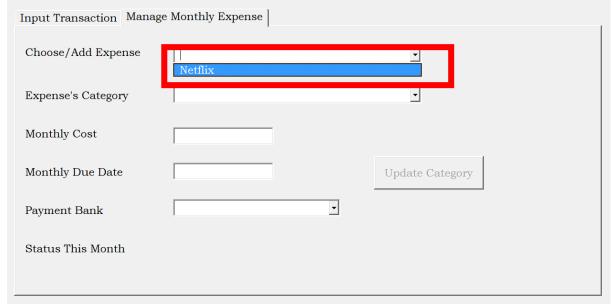
Choose/Add Expense	First One	¥
Expense's Category		•
Monthly Cost		
Monthly Due Date		Add Expense
Payment Bank	•	
Status This Month	New Expense	

4. Once you finish, the add button will be available and press it to finish your input.





5. Now to edit already created expense, choose the expense you added using the arrow on the right of the white box.



6. The details about the expense will be automatically filled. The button will change itself into update button and it shows the status in this month, whether the expense is already paid or still due to pay. Make your changes and then simply click the button Update Expense to finish the process.

