Personal Expense Consultant (P.E.C.)

USER MANUAL

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Welcome to Personal Expense Consultant application!

Thank you for your interest! We believe you will be happy with how the Personal Expense Consultant application (from this point on referred to as the App) works and what it can do for you.

The main function of the App is to collect and aggregate your financial transactions, summarize them, analyze the summaries, and produce easy-to-understand and easy-to-follow advice. We truly believe that following that advice will help you establish a financial equilibrium and hopefully more than that: **achieve your financial goals**.

The main App features are:

1. Secure Account Creation and Login

When the App starts for the first time, you'll see a small dialog window informing you about fixing the database. That is because the database does not exist yet. As soon as the App creates it, a Create an Account Window will appear. Please, follow the instructions and create a PEC account.

Speaking of database, you should know, that all of your sensitive information stored in the local MySQL database is encrypted with 256-bit AES algorithm, which just means it's really secure.

If you're running the app for the second time and on, you'll see a Login Window instead. It that case, fill out your login credentials and the App will let you in.

If you've forgotten your password, follow the Login Window "Forgot your password?" link and the App will let you retrieve the password using Security Questions and Answers, established at Account Creation.
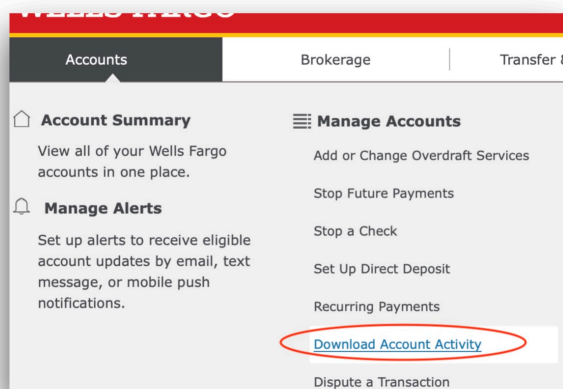
2. Import Account Activity

When you log in for the first time, you'll see an instruction to go to Menu and click How To Start. That will bring up an informational poster explaining OFX files and how to import

Personal Expense Consultant (P.E.C.)

Dear Customer,
    this program is designed to help you recognize and achieve your short and long term financial goals. It does so through analyzing your bank transactions, which it helps you to categorize for easier and more detailed analysis. In order to do so, this program needs data from your financial institution/ bank. This data is stored in a database in an <u>encrypted</u> form, and <u>never shared</u> with any third party.

Download your OFX files from your bank's website (<u>Fig. 2</u>)

Accounts   Brokerage   Transfer &

🏠 **Account Summary**
View all of your Wells Fargo accounts in one place.

🔔 **Manage Alerts**
Set up alerts to receive eligible account updates by email, text message, or mobile push notifications.

≡ **Manage Accounts**
Add or Change Overdraft Services
Stop Future Payments
Stop a Check
Set Up Direct Deposit
Recurring Payments
Download Account Activity
Dispute a Transaction

OFX File (<u>Fig. 1</u>)


```
OFXHEADER:100DATA:OFXSGMLVERSION:102SE
EOLDFILEUID:NONENEWFILEUID:NONE<OFX><S
SAGE>SUCCESS</STATUS><DTSERVER>2023012
FI><SESSCOOKIE>acb6824f-7930-4ab3-86d7
RID>sXXXXXXXX0</SONRS></
SIGNONMSGSRSV1><CREDITCARDMSGSRSV1><CC
GE>SUCCESS</STATUS><CCSTMTRS><CURDEF>U
CCACCTFROM><BANKTRANLIST><DTSTART>2022
]<STMTTRN><TRNTYPE>DEBIT<DTPOSTED>2022
```

One of the most effortless methods for obtaining a transaction record is to go to your bank's website, log in, and download an <u>OFX file</u> (Open Financial Exchange file, Figure 1). This file is often used for Quicken® software and your bank may refer to it that way. It will typically have a ".ofx" or ".qfx" format/ extension. There is an example of what your bank's menu could look like in Figure 2, but if you're not sure where to look, you can also Google the expression "how to get ofx file at" + your bank's name.
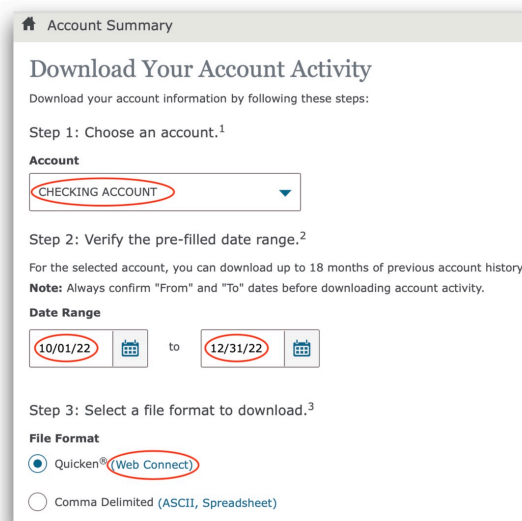Please make sure you download just the activity of <u>one account at a time</u> in the <u>maximum range of three (3) months</u> (Figure 3). If you want to download more, repeat your

action. If you do, make sure, when choosing the date range, that you don't create gaps between your time periods. Those may result in inaccuracies in the P.E.C. function. When you've obtained your OFX file, use the <u>"Import Account Activity"</u> option in the Menu of this program. A dialog window will open and let you choose your file. Once imported and added to your history (done automatically), you will want to change each transaction's Category from "<OTHER>" to the most fitting Category provided, or create your own, custom Category.
    When done, you can let this program create financial summaries, and/ or predictions and financial advice, based on your history. We believe that if you adjust your financial behavior accordingly, you'll soon discover your monetary situation will start improving.
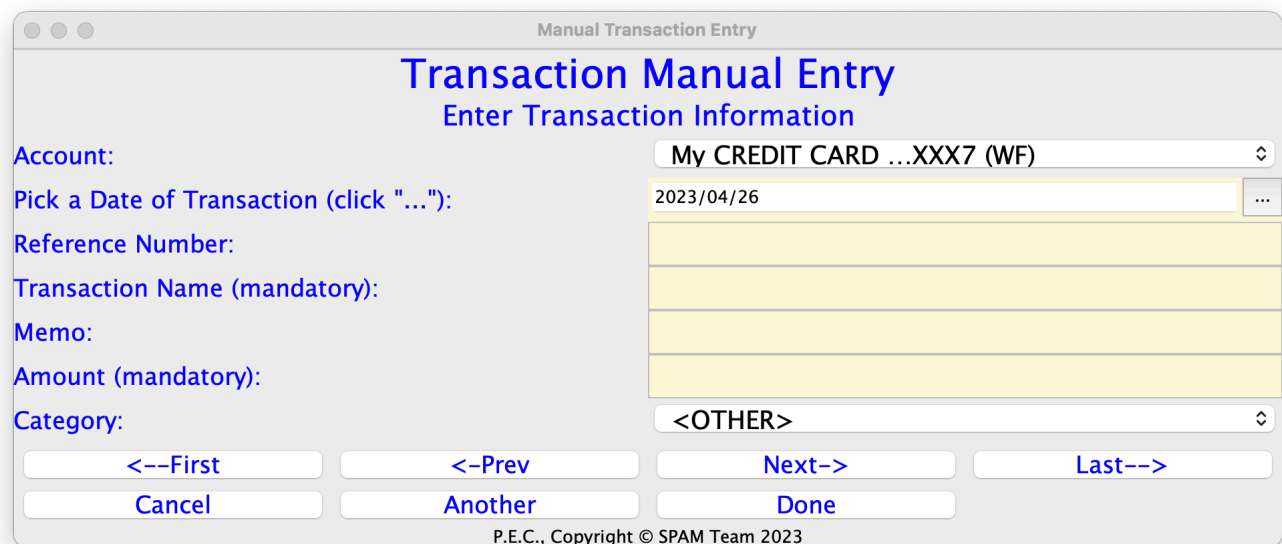
Good luck! 🍀

Choose an account, date range, and Web Connect (OFX/QFX) format (<u>Fig. 3</u>)

🏠 Account Summary

Download Your Account Activity

Download your account information by following these steps:

Step 1: Choose an account.[1]

Account
CHECKING ACCOUNT ▼

Step 2: Verify the pre-filled date range.[2]

For the selected account, you can download up to 18 months of previous account history.
Note: Always confirm "From" and "To" dates before downloading account activity.

Date Range
10/01/22 📅 to 12/31/22 📅

Step 3: Select a file format to download.[3]

File Format
🔘 Quicken®(Web Connect)
⚪ Comma Delimited (ASCII, Spreadsheet)

them into the App. For an easier understanding and completeness of explanation we're showing the How To Start poster just above. At this point, please read the poster. It's entitled "Personal Expense Consultant (P.E.C.)"

You can import multiple OFX files for the same account and they will get organized by the transaction date automatically. The main viewer allows to display a list of maximum 3 months worth of transactions, so if your imports exceed the span of 3 months, the list will split into 3-month portions and will get uploaded to the database. Navigation between these 3-month "chunks" is discussed in section 4. IMPORTANT! The Import will only let you add BEFORE or AFTER your account's transaction history, not in the middle. We trust there will be no need for transactions to be added in the middle of existing history, as the transactions occur on a linear timeline and the OFX files don't forget any transactions.

3. Manual Transaction Entry

As an alternative (or complement) to the automatic Import, there's the option of using Manual Transaction Entry. This dialog window lets you insert multiple transactions into the same account in each session. Just like the Import, the App only allows adding transactions BEFORE or AFTER the whole account history. Besides the Account identifier, Date, and Category, which are pre-filled for you (you can change those, though), the only mandatory fields are Transaction name and Amount (negative or positive). For an easier identification of the manual entries in the

future we recommend you fill out as much information as is available to you. If you fail to correctly fill the mandatory fields, the App will outline those in red and won't let you add them. After you've filled out one and want to add another one, just click Another. The window will bring up a clean form for your next entry. If you're filling out multiple transaction forms, the window lets you navigate between them and edit them by using the First, Previous, Next, and Last navigation buttons. In this window, you can add and use new Categories or new Accounts to your liking. During this editing phase, if you decide you want to delete one of those new transactions, just navigate to it and clear all four typing fields (Reference Number, Transaction Name, Memo, and Amount), and then navigate away from such an empty form. It will be automatically removed from your additions. One last rule here: no future transactions! You can only mark your entries with a past or a present date. Future dates are not allowed. You can input your transactions in any order; before the App attempts to merge them with the account history, they will get sorted by date, from oldest to newest. To end the Manual Entry session, hit Done or Cancel. Manual Transaction Entry is also fantastic for those users, who want to keep track of CASH expenses and incomes, where there is no bank involved.

4. Main Window + Navigation

The primary function of the main window containing the transaction table is to view your transaction history and assign Categories to your individual transactions. This is a vital function because the more detailed your Category list is and the more Categories you utilize in each view, the better the Summaries and Advising will get. You should have a Category for everything you want to keep track of, but we suggest you categorize the whole history. The App comes with 17 preset Categories, but you're encouraged to add many more. To create a new category, you have to use the Category drop-down menu in either the Main Window or in Manual Entry Window. Choose <NEW CATEGORY> and use your imagination. To assign a Category to a transaction, you just have to choose the Category and click any transaction in the list. You can change any transaction Category as many times as you like. In the Main Window, you can change the order of the columns any way you like, you can resize them, and sort them in an ascending or descending order by any column you like for easier search. Because the columns are sortable, we chose not to implement a search feature in the App. To navigate forward and backward between the 3-month periods in the account history, please use the buttons on the bottom of the window

(First, Previous, Next, and Last). To change the viewed account, there is a Account drop-down menu in the upper-left portion of the Main Window.

5. Generate Summary

First thing you will see, when you choose this item from the menu, is a small dialog window that has you choose the account to view a Summary of, and the "from" and "to" dates from a drop-down list. The dates correspond with the actual begin-end dates of database entries. A Summary can be generated on just a single period from the history, multiple, or all. The statistics will aggregate, and you will see a window with a section for Expenses and a section for Incomes, each populated with a pie chart and a corresponding table.
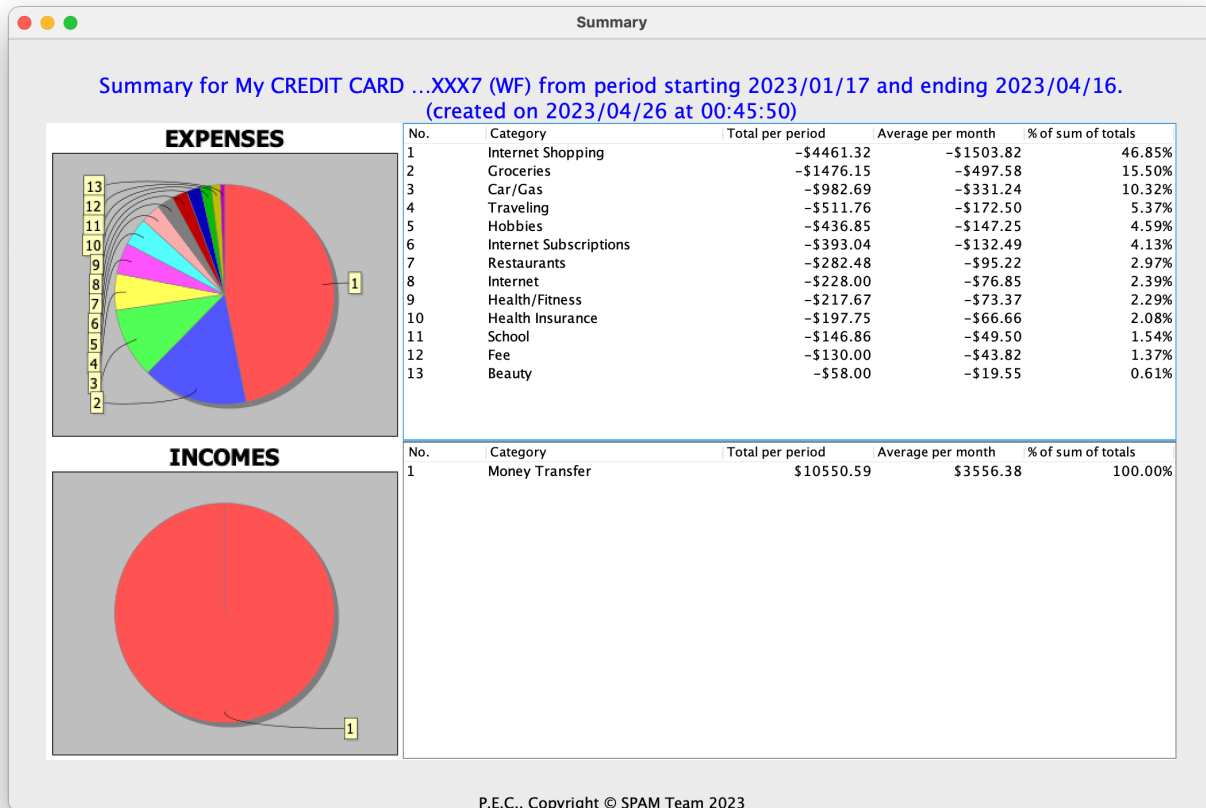
Each pie chart/ table duo will list all Categories used in the history chosen for the Summary, and the statistics for each particular Category. Again, the tables are sortable. You can create and compare multiple Summaries, make changes to the Main Window, and then compare some more. The previously generated Summaries are immutable, so we added a timestamp to

each Summary Window. That way, if someone makes changes to the transactions without dismissing the Summary Window, they will know whether the information is now obsolete.

6. Get Advice

Analysis

The analysis is based on comparison of EXPENSES (and their relative change) between Period 1 and Period 2. Select & click OK button.

Account: My CREDIT CARD …XXX7 (WF) ⊙ Period 1: 2022/10/30–2023/01/16 ⊙ Period 2: 2023/01/17–2023/04/16 ⊙ OK

Listed categories are ones that appear in BOTH Period 1 and 2 EXPENSE Summaries.

For different scope of future expense prediction, please select from the drop-down menu below.

Category	Sums Per.1	% of expense Per.1	Sums Per.2	% of expense Per.2	% change	Sums (in 3m)	% change (in 3m)
Traveling	−$3012.69	41.86%	−$511.76	5.37%	−36.48%	$0.00	0.00%
School	−$1312.00	18.23%	−$146.86	1.54%	−16.69%	$0.00	0.00%
Groceries	−$1285.38	17.86%	−$1476.15	15.50%	−2.36%	−$1669.04	−2.38%
Health Insurance	−$196.25	2.73%	−$197.75	2.08%	−0.65%	−$199.27	−0.66%
Internet	−$219.00	3.04%	−$228.00	2.39%	−0.65%	−$237.10	−0.66%
Restaurants	−$205.97	2.86%	−$282.48	2.97%	0.10%	−$359.84	0.11%
Beauty	−$30.00	0.42%	−$58.00	0.61%	0.19%	−$86.31	0.19%
Health/Fitness	−$122.40	1.70%	−$217.67	2.29%	0.59%	−$314.00	0.59%
Internet Subscriptions	−$223.08	3.10%	−$393.04	4.13%	1.03%	−$564.89	1.04%
Fee	−$17.79	0.25%	−$130.00	1.37%	1.12%	−$243.46	1.13%
Car/Gas	−$102.10	1.42%	−$982.69	10.32%	8.90%	−$1873.06	9.00%
Internet Shopping	−$34.48	0.48%	−$4461.32	46.85%	46.37%	−$8937.35	46.89%

Category	Sums Per.1	% of expense Per.1	Sums Per.2	% of expense Per.2	% change		
TOTAL	−$6761.14	93.94%	−$9085.72	95.41%	1.47%		

Your net income in the Period 1 was −$2098.52 and in the Period 2 was $1028.02, which is an increase of 148.99%. GOOD JOB!!! YOU ARE ABLE TO SAVE UP!!!
You could consider lowering your spending in categories like:

– Internet Shopping
– Car/Gas

Scope of Prediction: 3 months ⊙

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Advising Window works a bit differently than a Summary. First of all, you can only open one at a time. You can also change what you see—there are drop-down options right at the top: you can switch the account you're receiving advice for, and two periods the Advice is based on. That is another difference: Summaries aggregate (add up), Advice does not. We base the Advising on 2 discrete periods (1 and 2). To qualify, each of these 2 periods needs to contain at least ONE month of financial data. You can choose adjacent periods, or two periods from the opposite sides of the history. What's important is that the Advising is based on the chosen periods ONLY. What happened in between is not considered. The analysis is derived from the delta (the change) between the corresponding numbers in their periods. If a Category doesn't appear in BOTH examined periods, it will not show in the Advising window. For absolute simplicity: things are either getting better, or getting worse, and we help you see it. If the selected account doesn't have two qualifying periods, Advising for that account is NOT possible. We implemented

green and red color for an easy status recognition. The colored figures in the Advising Window are what the Advice is based on. What's green is either in positive or has changed to your benefit. Whatever's red is a negative absolute number or a percentage that indicates a change to your detriment. We believe that such a simple color-coding will ensure a better clarity of the point we try to get across. In addition to a VERBAL advice underneath the table, there may be a smaller table with suggested Categories to watch or cut down your spending on. We think that is a really helpful feature.

Besides the analysis and advice in this window, you can also find a small drop-down menu on the bottom, which allows you to choose a future timeframe to project your spending to. This represents what your spending would look like in the future, if you maintained the trend created by the difference between the period 1 and 2. That bit is usually not very realistic, but it's a fun (or scary) way to see where things are progressing to. Use it wisely.

7. Change Password

The App lets you change your password for the account you log into. That's a feature made for your convenience and security. Just choose the feature from the Menu→ Settings→ Change Password and follow the window instructions.

8. Close Account

The App allows for a safe removal of the user, along with all the data associated with the user, from the database. Besides having to enter your email and password, there are a few more safety mechanisms implemented, so that the user does not perform this action by accident, because this cannot be undone. Once you close your account (PEC account, NOT a bank account), the App says Thank you and terminates. Of course, you can always start it again and Create a New Account...

THANK YOU for choosing Personal Expense Consultant by SPAM Team © 2023 and we wish you many happy moments checking out your financial situation only to find out that things are getting better and better...!

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