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Group 6

INST326

0102

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## **Final Project Documentation**

### **Purpose of Each File**

pfm.py: This is a Python file that contains the main program for the Personal Finance Manager.

finance.txt: This is a text file where user expenses will be saved to. This includes the name of the expense, the category, and the amount, which is prompted in the program.

### **Instructions**

1. To run the program you can enter the following on the command line:

**For macOS:**

`“python3 pfm.py”`

**For Windows:**

`“python pfm.py”`

2. You will first be prompted to enter the name of a file path. This could be an existing file, or if you enter a file that does not exist, it will create a new file. For example, “finance.txt” has already been made but you can enter a new file path such as “expenses.txt”.
3. You will then be prompted to enter a monthly budget. You can enter any number.
4. You will then be prompted to enter the name of an expense of your choice. You can enter any name.
5. You will then be prompted to enter the amount of that expense. You can enter any number.
6. Next, you will be prompted to select a category to put that expense and its amount under. Enter the number that corresponds with the category.
7. You will then receive a summary of your expenses and their categories. It will also show how much you have spent in the month and your remaining budget. Your expenses will

also be written in the file path you specified in the following format: “expense, category, amount”.

8. You will be offered to see a graph of your expenses in which you can either enter “yes” or “no”, depending on your choice. If you select yes, then a bar plot will appear with your expenses and their amounts.
9. You will then be prompted to either add more expenses, delete an expense, or exit the program. If you want to add another expense, enter “add” and you will be able to add more. If you want to delete an expense, enter “delete” and the name of the expense you want to delete. It will delete the expense from the file path you specified.
10. You will then be prompted to add another expense which you can do as many times until you exit the program.

#### Attributions

Method/function	Primary author	Techniques demonstrated
<code>__repr__</code>	Kirk Laryea	Magic method
<code>get_expense</code>	Kirk Laryea	f-string
<code>generate_bar_graph</code>	Miles Rousseau	Visualizing data with Pyplot
<code>sort_expenses_by_category</code>	Miles Rousseau	Using a key function (a lambda expression) with one of the following commands <code>sort</code> and <code>sorted</code> .
<code>save_expense</code>	Bryan Moody	<code>with</code> statement
<code>delete_expense</code>	Bryan Moody	Conditional expression
<code>def_main</code>	Kevin Pham	Sequence unpacking
<code>summarize_expense</code>	Kevin Pham	List comprehension