**Technical Design Document Template**

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**Date Created:** 09/24/2025

**Program Description:**

This program calculates the total, highest and lowest expense you have by entering the total number of expenses you have followed by inputting the type of expense and how much it drains your bank account. The program then analyzes the data and displays the financial damage done (Total, Highest, and lowest expense and the amount).

**Functions used in the Program (list in order as they are called):**

1. **Function Name:** get\_expenses

**Description:** Asks the user to enter their monthly expenses

**Parameters:** none

**Variables:**

* expenses : list

**Logical Steps:**

* Asks the user the number of expenses they have and loops through
* Asks the user for their expense type and amount

**Returns:** list of tuples containing the type of expense and the amount

2. **Function Name:** analyze\_expenses

**Description:** Analyzes each expense and uses the reduce function for finding the lowest, highest and total amount of expenses

**Parameters:**

* expenses : list

**Variables:**

* total : float
* highest : tuple
* lowest : tuple

**Logical Steps:**

* Uses a reduce function to find the total amount of expenses
* Uses a max to find the highest expense and min to find the lowest expense

**Returns:** The total amount of expenses along with the lowest and highest

3. **Function Name:** main

**Description:** Run's the program by collecting the user's expenses they input, analyzes them, and then displays the results

**Parameters:** none

**Variables:**

* expenses : list
* total : float
* highest : tuple
* lowest : tuple

**Logical Steps:**

* Runs through get\_expenses to ask use for data
* Then runs through analyze\_expenses to find the total, highest, and lowest expenses

**Returns:** Summary of the total amount of expenses, highest expense and lowest expense

**Logical Steps:**

1. The main function is called
2. The main function calls out the get\_expenses function and collects and users data
3. Then the main function calls out the analyze\_expenses function to analyze the data finding the total, highest and lowest expense
4. Displays the results of the Total, Highest and Lowest expense

**Link to your repository:** [www.yourrepository.com](http://www.yourrepository.com)

**Output Screenshot: (make sure big enough so I can see)**

A screen shot of a computer

AI-generated content may be incorrect.