**Personal Budget Analysis SQL Project**

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**Introduction**

This project aims to analyse personal budget data using SQL queries. The goal is to gain insights into spending habits, budget allocation, and financial management. The dataset contains various attributes related to personal expenses, categories, vendors, and transaction dates.

**Dataset**

The dataset used for this analysis is named personal\_budget. It includes the following fields:

* Transaction\_ID: Unique identifier for each transaction
* Transaction\_Date: Date of the transaction
* Category: Category of the expense (e.g., Food, Transportation, Utilities)
* Vendor: Vendor name for the transaction
* Spent\_Amount: Amount spent in the transaction
* Budget\_Amount: Amount budgeted for the category
* Account\_Type: Type of account used for the transaction
* Balance: Remaining balance after the transaction

**SQL Queries**

This project includes a series of SQL queries designed to extract useful insights from the dataset. Below are some key queries:

1. **Total Spending by Category**

*SELECT Category, SUM(Spent\_Amount) AS Total\_Spent*

*FROM personal\_budget*

*GROUP BY Category;*

1. **Budget vs. Spending Analysis**

*SELECT Category, Budget\_Amount, SUM(Spent\_Amount) AS Total\_Spent,*

*(Budget\_Amount - SUM(Spent\_Amount)) AS Remaining\_Budget*

*FROM personal\_budget*

*GROUP BY Category, Budget\_Amount*

*HAVING SUM(Spent\_Amount) > Budget\_Amount;*

1. **Monthly Spending Trends**

*SELECT DATE\_FORMAT(Transaction\_Date, '%Y-%m') AS Month,*

*SUM(Spent\_Amount) AS Total\_Spent*

*FROM personal\_budget*

*GROUP BY Month*

*ORDER BY Month;*

*For a complete list of SQL queries, please refer to the sql\_queries.sql file.*

**Installation**

1. **Clone the repository:**

git clone https://github.com/yourusername/personal-budget-analysis.git

1. **Navigate to the project directory:**

cd personal-budget-analysis

**Usage**

1. Open your SQL client (e.g., MySQL Workbench, PostgreSQL).
2. Load the dataset into your database.
3. Execute the SQL queries provided in the sql\_queries.sql file to analyze the data.

**Contributing**

Contributions are welcome! If you have suggestions for improvements or new features, please create a pull request or open an issue.

**License**

This project is licensed under the MIT License - see the LICENSE file for details.