MARIANO MARCOS STATE UNIVERSITY

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DEPARTMENT OF INFORMATION TECNOLOGY
BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY

EXPENSE TRACKER SYSTEM

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PROGRAM OVERVIEW

Expense Tracker System is a console-based application designed to help users to manage their finances by tracking income and expenses. It offers the following key features:

KEY FEATURES:

1. **Display Summary**: Provides a clear overview of the user's financial status, including total balance, income, and expenses.
2. **Add Income:** Allows users to record various sources of income, accurately updating the total balance.
3. **Add Expense**: Enables users to log different expenses, ensuring deductions from the total balance.
4. **Display Transactions:** Presents a detailed list of all recorded transactions, including their type, amount, and transaction type (income or expense).
5. **Save to File:** Persists transaction data and financial summary to a file named "transactions.txt" for future reference and data preservation.
6. **Load from File:** Retrieves previously saved data from the file, ensuring continuity of financial tracking.

CODE STRUCTURE

KEY DATA STRUCTURES:

1. **Transaction:** A struct representing a single transaction, containing type, amount, and transaction type (income or expense).
2. **ExpenseTracker:** A struct representing the overall expense tracker, holding:
   o Total Balance
   o Income
   o Expenses
   o Filename for Data Storage
   o Array of Transactions
   o Number of Transactions
3.

FUNCTIONALITY:

- **Welcome Page:** Presents a welcome message with basic instructions.
- **Header:** Displays a header with the system's name for visual clarity.
- **Display Menu:** Presents the main menu with options for users to interact with the system.
- **Display Summary:** Presents a summary of the user's financial status.
- **Add Income:** Facilitates the addition of income, updating the balance and transaction history.
- **Add Expense:** Enables the addition of expenses, adjusting the balance and transaction history.
- **Display Transactions:** Shows a list of all recorded transactions.

- **Save to File:** Stores transaction data and summary to the specified file.
- **Load from File:** Retrieves data from the file, updating the tracker accordingly.
- **Exit Page:** Displays a thank you message and exits the program.
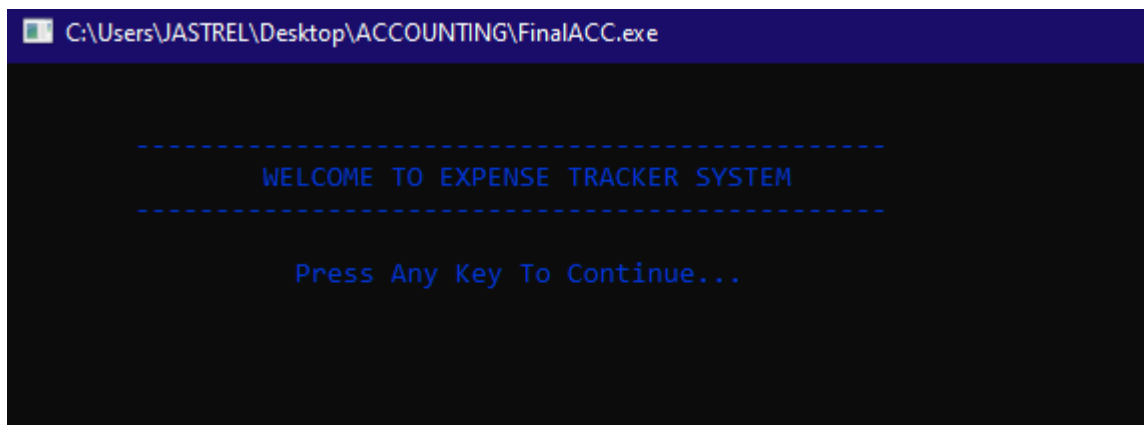
ADDITIONAL FEATURES:

- **Input Validation:** Ensures that user input is valid, preventing errors and maintaining data integrity.
- **Colored Text:** Uses console colors for visual appeal and improved readability.

CONCLUSION

This Expense Tracker System offers essential features for personal financial management. Its console-based interface, data persistence, and input validation make it a valuable tool for individuals seeking to track their income and expenses effectively.

SCREENSHOTS OF ENTRY FORMS AND SAMPLE OUTPUTS

WELCOME PAGE

Press Any In The Keyboard To Continue

MAIN PAGE

```
C:\Users\JASTREL\Desktop\ACCOUNTING\FinalACC.exe

    ------------------------------------------
                 EXPENSE TRACKER SYSTEM
    ------------------------------------------

    1. Display Summary
    2. Add Income
    3. Add Expense
    4. Display Transactions
    5. Exit
    Enter your choice: _
```

Enter your choice like 1,2,3,4, or 5.

DISPLAY SUMMARY

```
C:\Users\JASTREL\Desktop\ACCOUNTING\FinalACC.exe

    --------------------------------------------------
                  EXPENSE TRACKER SYSTEM
    --------------------------------------------------

           ---------- Summary ----------
           Total Balance: 2410 PHP
           Income: 3000PHP
           Expenses: 590PHP
           ----------------------------

    1. Display Summary
    2. Add Income
    3. Add Expense
    4. Display Transactions
    5. Exit
    Enter your choice:
```

In the display summary you can check the summary of your total balance the income and the expense.

ADD INCOME

```
C:\Users\JASTREL\Desktop\ACCOUNTING\FinalACC.exe

        ------------------------------------------------
                    EXPENSE TRACKER SYSTEM
        ------------------------------------------------


    Enter Income Amount: 90
    Enter Income Type: SALARY

            Income added successfully!

    Type: SALARY
    Amount: 90PHP

    1. Display Summary
    2. Add Income
    3. Add Expense
    4. Display Transactions
    5. Exit
    Enter your choice:
```

In the add income first you need to enter the amount of your income in the picture 90 is the income next is income type enter the income type in the output the income type is salary and after that the system will display income added successfully.

ADD EXPENSE

```
C:\Users\JASTREL\Desktop\ACCOUNTING\FinalACC.exe

        ------------------------------------------------
                    EXPENSE TRACKER SYSTEM
        ------------------------------------------------


    Enter expense amount: 90
    Enter Expense Type: FOOD

            Expense added successfully!

    Type: FOOD
    Amount: 90PHP

    1. Display Summary
    2. Add Income
    3. Add Expense
    4. Display Transactions
    5. Exit
    Enter your choice: _
```

In the add you enter the amount you expense and where do you expense that money example food, transportation, rent, etc. After that the system will display the message that you successfully add the expense.
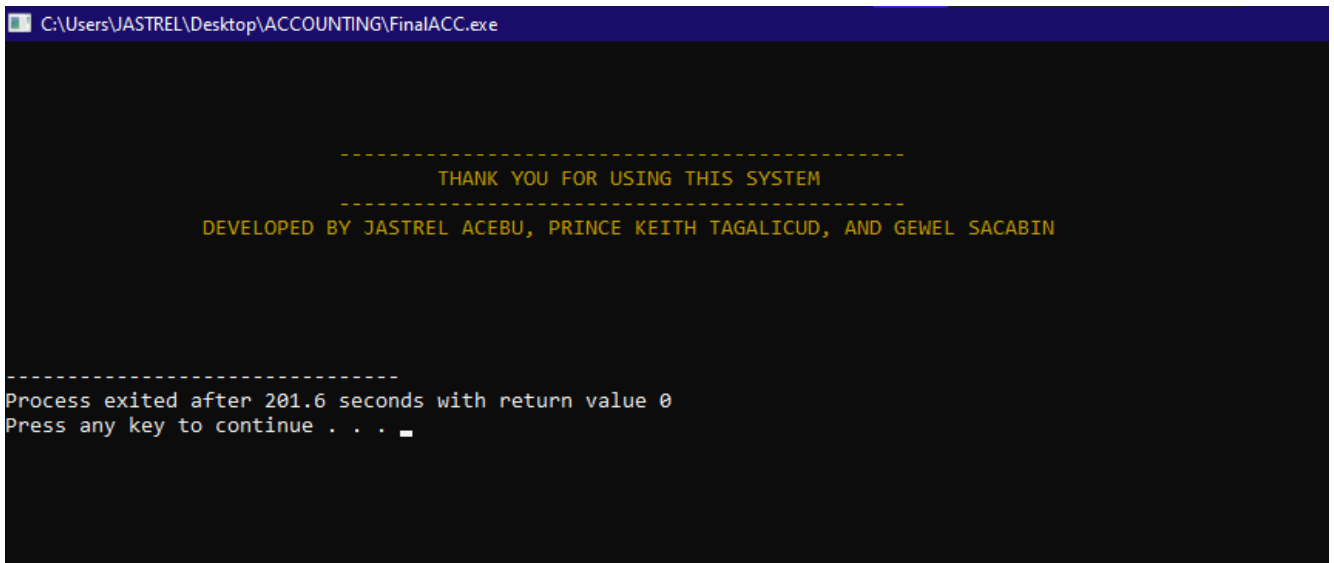
DISPLAY TRANSACTIONS

In the display Transactions you will see the breakdown of your transactions you can see the expense and income and the type where do you get the money or where do you expense.
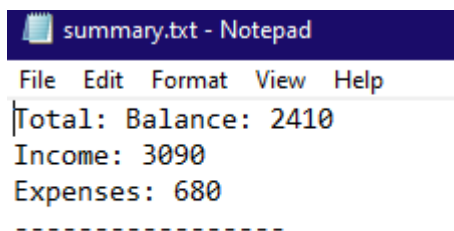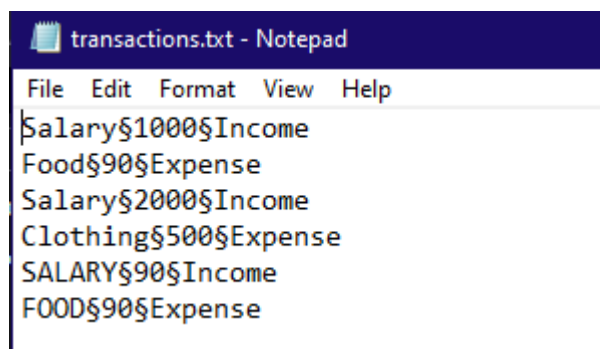
```
C:\Users\JASTREL\Desktop\ACCOUNTING\FinalACC.exe

                    ------------------------------------------------
                            THANK YOU FOR USING THIS SYSTEM
                    ------------------------------------------------
             DEVELOPED BY JASTREL ACEBU, PRINCE KEITH TAGALICUD, AND GEWEL SACABIN




------------------------------
Process exited after 201.6 seconds with return value 0
Press any key to continue . . . _
```

If you enter the number 5 in the main menu it will be exited the program and will be directed to this page.

And after the you exit the program the data will be save to the files and if you open again the data will be load to the program again.


```
summary.txt - Notepad

File  Edit  Format  View  Help
Total: Balance: 2410
Income: 3090
Expenses: 680
-----------------
```



```
transactions.txt - Notepad

File  Edit  Format  View  Help
Salary§1000§Income
Food§90§Expense
Salary§2000§Income
Clothing§500§Expense
SALARY§90§Income
FOOD§90§Expense
```

WE ARE READY FOR DEFENSE