

Milestone 1

Zyron James M. Sumulong
CYSE 250



Project Goal/Purpose

This project is a simple budget management system that will allow users to manage their personal finances.

Users will be able to create an account and log in securely.

Encryption will be utilized to protect login credentials

Users will be able to input their income, and the system will calculate their budget breakdown.

Data is transferred between the client and server through socket programming.

Key Features



User Authentication

Users will be able to create an account, log in, and store their credential securely. This will be utilized through encryption and authentication mechanisms.



Budget Tracking

Users will be able to input their income and expenses, and the program will respond with the a calculation of the users current budget balance.



Data Protection

Encryption and decryption will be used to store and send sensitive data (passwords) securely.



How the program will work...

Client Side:

- User will be prompted to log in or create an account

- User will input their income and expenses

- Sends data to server and displays budget breakdown in response.

Server Side:

- Verifies login or account creation data from the client

- Processes the user's financial data

- Sends results back to client for display

How I will use...



Loops

Repeatedly prompt users for login attempts or income input.



Functions

Will aid in organizing the program by separating tasks into reusable blocks of code for encryption, decryption, authentication and budget calculations.



Lists/Dictionaries and Files

Store a list of income, expenses, usernames and passwords

Will store budget data, and ensures data is saved even after the program ends.



Conclusion

- This project will demonstrate the practical use of socket programming for secure client-server communication.
Will apply encryption, authentication, and data processing to simulate a budget tracker.
By utilizing Python concepts, the program will showcase security and functionality in a user-friendly way.