

Presented to the Industrial Engineering Department De La Salle University – Manila Campus Term 1, A.Y. 2023 - 2024

In partial fulfillment of the course LBYEC2B

Bank Transaction Organizer

Team Apollo

Submitted by:
ANG, Lorenzo Jacob
CUA, Sean Austin
ABE, Kousuke Gutierez
EB4

Submitted to:
Professor Ruiz Ramon
November 13, 2023

I. Introduction

The project focuses on allowing users to log-in, sign up, deposit, withdraw, and send money using the application in MATLAB. The user will also be able to check their current balance as well. This kind of application is important because as we have an ever growing society, the need for convenience is a must and that we need technology to cater to our needs of being able to access our money anytime and anywhere safely. Basic functionalities like sending money is a must in our time as people tend to work and live distant from each other thus being able to conveniently send money without having to go to establishments can prove to benefit society greatly by saving time.

The goal of this project is to create a small database for users that aren't technologically savvy so we plan to create a very simple yet functional application that will allow users to carry out tasks that will prove to be efficient in saving time and energy.

The scope of this project will be very small in scale and will not be able to store memory inside an external database wherein accounts created will be forgotten after closing the program. The program however takes the steps towards creating the interface and functionality of a bank that will process transactions requested by the user.

II. Methodology

Phase 1- Creating the Code

- Choosing between Logging in or Creating a new account
 - a. Option A- Login
 - b. Option B- Create new account
- 2. Login information
 - a. 8 digit account number
 - b. 6 digit pin for verification
- 3. Creating new accounts
 - a. For people to create new accounts to be stored.
 - i. Given new 8 digit account number
 - ii. Installation of 6 digit pin for verification
- 4. Checking Balance
 - a. Able to see current balance (like Gcash)
- 5. Sending/Transfer Money
 - Able to send money to existing account/s and reflect deductions and addition of money to the respective accounts
- 6. Cashing In
 - a. Able to cash in money with a maximum amount of P100,000.
 - b. Then would display the new balance
- 7. Cash Withdrawal

- a. Able to withdraw money with a maximum withdrawal amount set by the user (defaulted: P15,000)
- 8. Logging Out
 - a. Confirming you want to log out
 - b. Bring you to the first page when you can login to a different account or create new account
- Phase 2 Testing the code and editing to make it to look better
- Phase 3 Making the sample videos

III. Deliverables

Present a Gantt chart of your deliverables.

	Week#11	Week#12	Week#13	Week#14
Finishing the Proposal and Start with Coding				
Continue Coding and Hopefully Finish				
Film The Sample Video and Trial of Our Code Working				
Submitting of Final Code				

PHASE 1 - Making Of Code Distribution (to be done in Week 11-12):

Kousuke Abe - Choosing between Logging in or Creating a new account, Login information, Creating new accounts

Lorenzo Jacob Ang- Checking Balance, Sending/Transfer Money, Cashing In, Cash Withdrawal Sean Cua - Cash Withdrawal, Logging Out

PHASE 2 - Video Demo (Week 13) - Sean Cua

PHASE 3 - Submission (Week 14) - All

There would be clear instructions to follow. It can be in terms of a user manual to be written before the code performs. A quick overview of the functionality of the code.

IV. Evaluation

Criteria to be met by the program:

- Integration Testing: Verify that different functions work together without errors or issues.
- End-to-End Testing: Simulate complete transactions to assess the flow and functionality.
- Interface Testing: Check the user interface to ensure it's clear, consistent, and easy to navigate.
- Error Testing: Intentionally create errors and assess how the application handles them (e.g., incorrect PIN)

V. Conclusion

This project aims to develop a simplified yet efficient MATLAB application enabling essential financial transactions such as logging in, signing up, depositing, withdrawing, and sending money. Its significance lies in addressing the escalating need for convenient, secure, and accessible financial services in our evolving society. With an emphasis on user convenience, the application acknowledges the necessity for technology that allows seamless access to finances from any location.

Primarily designed for users less familiar with technology, this project concentrates on simplicity and functionality. Its limited scope, without long-term data storage, serves as an initial step towards offering an interface and functionality akin to a bank, catering to user-initiated transactions and promoting a user-friendly financial experience.