Application Requirements Specification

For

<Application for Bookkeeping >

Prepared By:

<WanChing Huang>

Purpose and Scope Statement

The purpose of this bookkeeping application is to provide a user-friendly interface for individuals and businesses to keep track of their financial transactions. The application will allow users to easily record their transactions, categorize them, and set budget limits for each category. The application will also store the recorded transactions in a database, which can be accessed by the users at any time.
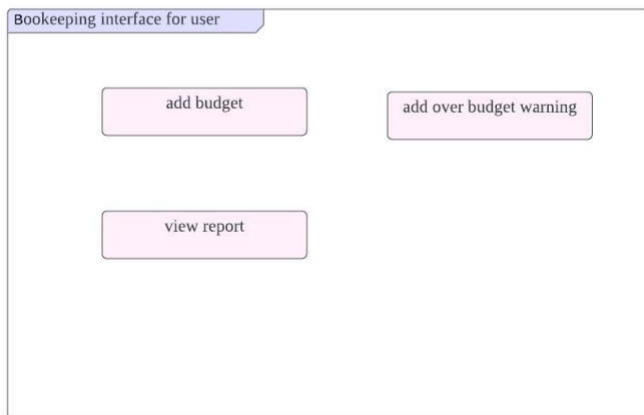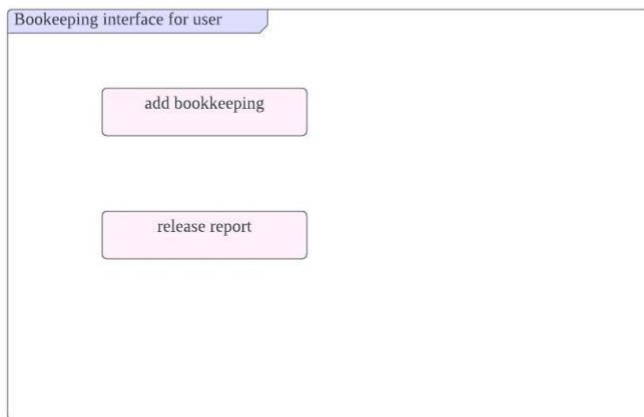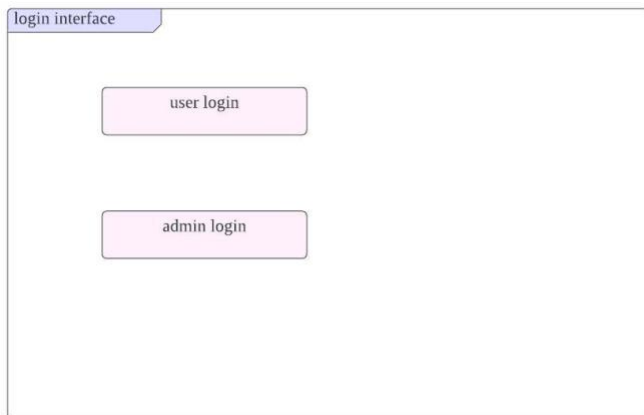
Requirements Narrative

Admin can perform the following functions.

1. Set Budget
2. Set Notice of over budget
3. View Bookkeeping report
4. View Bookkeeping record
5. View Bookkeeping record by category
6. Set category
7. Release Booking report

➤ User can perform the following functions.

1. Set bookkeeping record
2. View bookkeeping record
3. Set bookkeeping record by category
4. View bookkeeping report
5. Release bookkeeping report
6. Update receipt picture

Objectives

login interface

> user login

> admin login

Bookkeeping interface for user

> add bookkeeping

> release report

Bookeeping interface for user

> add budget

> add over budget warning

> view report

Functional Specification

The program is primarily segregated into two categories of users, namely **Admin and User.** The system determines which functionality to execute based on the user who logs in. Functions f will be available exclusively to the **admin**.

The functionality to be invoked is based on who logs in to the system.

➢ The admin will have functions for
  1. SetBudget()
  2. SetNoticeOfOverBudget()
  3. ViewBookkeepingReport()
  4. ViewBookkeepingRecord()
  5. ViewBookkeepingRecordByCategory()
  6. SetCategory()
  7. ReleaseReport()

➢ The user will have functions for
  1. SetBookkeepingRecord()
  2. ViewBookkeepingRecord()
  3. SetBookkeepingRecordByCategory()
  4. ViewBookkeepingReport()
  5. ReleaseBookkeepingReport()
  6. UpdateReceiptPicture()

➢ Class Needed
  1. User Class

     This class will have attributes that define a user and user limits of authority.
  2. Admin Class

     This class will have attributes that define a user and user limits of authority.
  3. Bookkeeping Item Class

     This class will have attributes that define a bookkeeping items and method to set and view it.
  4. Bookkeeping Item directory Class

This class will have attributes that define a bookkeeping directory and method to set and view it.

5. Bookkeeping Report Class

This class will have attributes that define a bookkeeping report and method and excel API to release monthly report.

➢ Technologies Needed

Microsoft office API
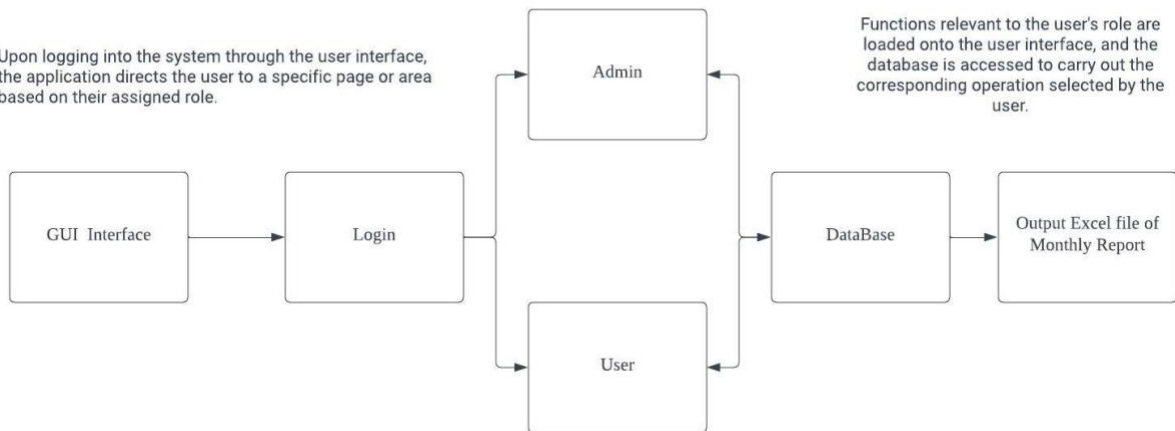
UI for application- JFrame

Logic Specification

To set a budget, the admin will use the SetBudget() function, which will take in the budget amount and the category to which the budget applies. If a user exceeds their budget, the system will send a notice of over-budget using the SetNoticeOfOverBudget() function.

To view bookkeeping records, both the admin and user can use the ViewBookkeepingRecord() function, which will display a list of bookkeeping items, including their amount, category, and date of the transaction. The ViewBookkeepingRecordByCategory() function will display a list of bookkeeping items for a specific category.

The SetBookkeepingRecord() function will allow users to add a new bookkeeping item to the directory, including the amount, category, and date of the transaction. The UpdateReceiptPicture() function will allow users to attach a picture of the receipt for the transaction.

Finally, the ReleaseBookkeepingReport() function will generate a monthly report of bookkeeping records for a specific period, using the Bookkeeping Report Class and Excel API.

Upon logging into the system through the user interface, the application directs the user to a specific page or area based on their assigned role.

Functions relevant to the user's role are loaded onto the user interface, and the database is accessed to carry out the corresponding operation selected by the user.

```
GUI Interface  →  Login  →  Admin
                            User   →  DataBase  →  Output Excel file of Monthly Report
```

Admin

User

GUI Interface

Login

DataBase

Output Excel file of Monthly Report