Project Title: Len Den – Money Management

**CATEGORY:** Web & Mobile Application

**PURPOSE:**

This software is a simple ledger application that contains all cash credit and debits. User can plan their monthly budget with-ease. It will help the user prevent excessive spend from their end. It acts as a simple Cash Book - Cash Management maintains your credit-debit amounts and personal ledger (party-wise) like Daily Cash.

**SCOPE:**

It focuses on students and users who take or give money frequently and find it hard to remember which person and how much they have lent/borrowed. Also, it’s helpful in the Personal usage of students to maintain their udhar khata.

**INTRODUCTION:**

The introduction contains the following sub categories.

**Existing System:**

* **Current Model**
* Currently, many similar applications of ledger accounting exist, such as OkCredit facilitating the same.
* Users can add contacts and maintain debit/credit transactions with them.
* It also provides features to add notes and other details to each transaction and get daily, weekly or monthly reports of total transactions.
* It has an auto SMS reminder whenever a user makes a transaction and makes reminders through WhatsApp and other messaging platforms.
* **Limitations in such models**
* The current system’s web application is not very feature-rich as its mobile application, and the user can only view/make basic transactions on the web.
* Users can only interact with a contact one-on-one through notes attached with the transactions but not specifically chat with them.
* The current system is not flexible in maintaining groups of people together as a party to make debit/credit transactions.

**Proposed System:**

We propose a system where the user has ease-of-access while using the application.

It will become very convenient to manage your friends’ entries, get reminders for the due date, get a complete summary of all the contact’s entries in one place with a balance sheet, and become fearless of forgetting or losing information.

The functionalities include:

* **Ease of Access:** Simple and intuitive UI for easy navigations & Manage your ledger account book with a simple interface.
* **Flexible:** The application should be Flexible in adding, cancelling, and deleting a credit or debit entry.
* **Notify:** Transactions with due dates will send respective contact notifications automatically as a reminder.
* **Expense & Income:** Gives you a complete summary of your Debits and Credits amounts in one screen.
* **Group Expenses**: Split a particular bill into a group of friends when a specific person has to collect money for the same expense through multiple contacts.
* **Sub-Groups**: Separate contacts or groups into folders to categorize expenses depending on their type, e.g., Food, travel, etc.

**ADVANTAGES FOR STUDENTS:**

* Showing Current total cash in, cash out, and balance on Dashboard
* Filter your records with the date
* Backup & Restore
* Split amount among college students, groups & hostel expenses
* Send WhatsApp or SMS payment reminders to your contacts and manage all debit or credit easily.
* Our App is Flexible in adding, cancelling, and deleting a credit or debit entry.
* Make a Separate section for a group of contacts based on the type of expenses to ease the navigation.

**FUNCTIONAL REQUIREMENTS:**

The functional requirements of our system are explained below.

* Users must be authenticated to login and create their profiles.
* User can save contacts from maintaining expenses manually or via saved contacts on their phone.
* User can add Credit/Debit entry with attached notes.
* User can edit and Delete Entry within Cashbook / Accounts
* User can customize their profile. Also, they can edit the names of their contacts.
* Simple UI for easy navigations & Management.
* User can notify contacts about the due payment.
* User can get a whole summary of debit and credits in one place to reduce hassle.
* User can make a group of contact and split the bill among them and track the status.

**NON-FUNCTIONAL REQUIREMENTS:**

* Provide security of user data.
* 24\*7 access to the application.
* User-friendly and efficient UI to boost user performance.
* Flexible architecture for future integrations.

**SOFTWARE TOOLS**

* **Database Server**: MongoDB
* **Server Client**: Any web browser / Android
* **Programming Language**: JavaScript, Dart
* **Development tools**: VS Code, Github
* **Design Tools**: Figma
* **SDK (Mobile Application)**: Flutter
* **Environment**: NodeJS, Dart VM

**Deployment Tools**

* AWS EC2

**HARDWARE SPECIFICATION**

* Processor: Intel Core i3
* RAM: 2GB
* Modern Web Browser