

Online Ledger Account: Pocket Box

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ABSTRACT:

The idea behind this research paper is to digitally maintain the records of the day-to-day transactions made by the person, who lent money to his/her customers. The problem that we have identified is that the user cannot keep the record of the money which was lent or borrowed at some point of time.

This research paper is a solution for a given problem where we have developed an application to maintain the ledger account in a more efficient and useful manner, in a digital manner. It hence reduces the paper work. It is cost effective and can be accessed from anywhere by having access to the server. The user who is indebted to pay a stipulated amount must also be aware about it, which is the main aim behind this research. The study recommends that power and electricity infrastructures should be put in place properly to provide support for cashless transactions.[1]

I. INTRODUCTION:

With the advent of digital money, the world has seen a lot of change in the field of economic transactions. We now have various modes of payment not including the one that involves the transaction of physical cash. The use of physical cash is considered as of old school now. In fact the reason of cashless transactions is being popularly accepted throughout the world as it is a quick and convenient process. Being easy to make any transaction, any time, from anywhere without having to fill up your wallets with cash is something everyone desires.[2] The idea behind research paper is to create an application that can be treated as a personal financial log book which keeps the history of the money lent or borrowed by a person, in an organized manner. To maintain a two way communication more conveniently, we develop an application named, "PocketBOX". It consists of certain pages like, user profile, transaction history, sending alerts and add customer to the transactions, by proper verification.

Verification at the time of adding customer to the list and also, at the time of repaying from the other end, has been done, through OTP. Users can send alerts for the repayment of their money with the help of emails. The application helps in notifying the borrower about the money taken by him and also about the number of days left for the repayment of the money, etc. This application can be used by Shopkeepers, Retailers, Wholesale sellers, Manufacturing units, Bread / Milk Vendors, Medicine Shops, Hardware Stores.

II. LITERATURE REVIEW

Every business that does the bookkeeping needs to be recording its transactions somewhere. When we have multiple customers and vendors at our end, it can be a hectic task to consolidate all our sales and purchases in just a notebook. We need proper organization, so that when tax or audit season rolls around, we are not left scrambling at the last minute. Transaction records are very important because they are a proof of how our money is being interchanged or exchanged, how regularly, and with whom. But, where do we record the movement of money to and from our business? Also, how do we record such uncommon transactions like depreciation, bad debt, and the sale of assets? This is where ledger accounts come into play. [4][5] We have hence, developed a java based utility application, which involves many user-interactive features. The user can register himself for the first time and then use it for maintaining the financial records digitally. Adding the credit records is also very easy. The application helps in notifying the borrower about the money taken by him/her and also about the number of days left for the repayment of the money, etc. It is a convenient, easy to use and at the same time has reports, which can be seen as per the requirement. Creating a new transaction record now just takes a matter of seconds with full safety as all the data will be stored in the database. No one can hence, see or make a copy of the same. This

application can also be used by anyone who manages money and where the transactions are not completed instantly. All bank services can also become readily available anytime and anywhere.[3]

III. POCKET BOX

“POCKETBOX” is an application that bridges the communication gap between lender and borrower of the money. This helps in safely keeping the records of the transactions made through proper verification at each step. It also helps in sending alerts to the borrower, for repayment of the money.

Methodology:

The methodology we are using is based on **ITERATIVE WATERFALL MODEL**. This model provides a feedback mechanism from each of its preceding phase. When errors are detected in the application at some later phase, these feedback paths allow correcting errors committed

by programmers during specific phase. But, no feedback path is seen in the model.

In the figure, various phases of Iterative Waterfall Model are shown. This model is the modified model of original Waterfall model, which had many disadvantages. This model is created to overcome all the disadvantages of the previously made Waterfall Model. Almost all the web applications are made using Iterative Waterfall Model for its tremendous performance and overall growth. Feedbacks play a vital role in the development of any technology. They help the developers know about the shortcomings of their application from the users' end. It helps to know about the demand of the market at a particular period of time.

Through this model, we can make any application and can also do modification in the application from time to time. That's why this is the best and efficient implementation model.

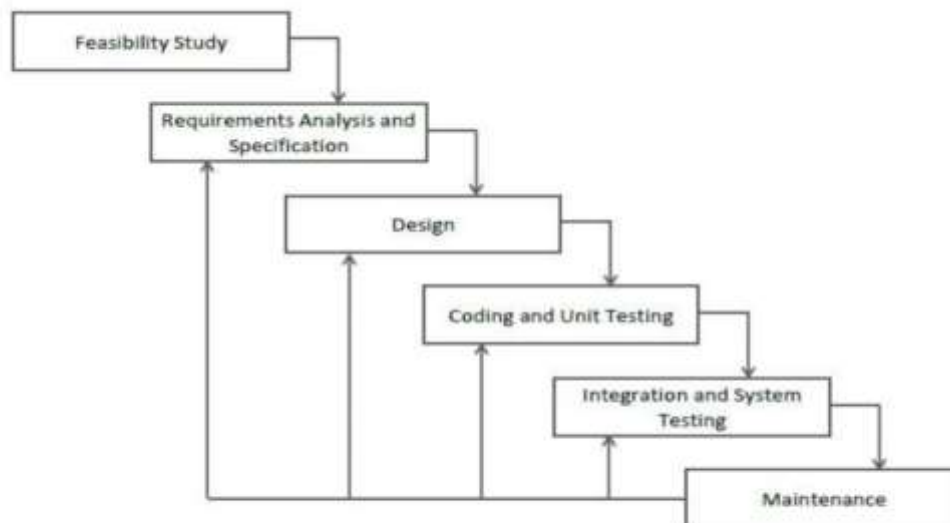
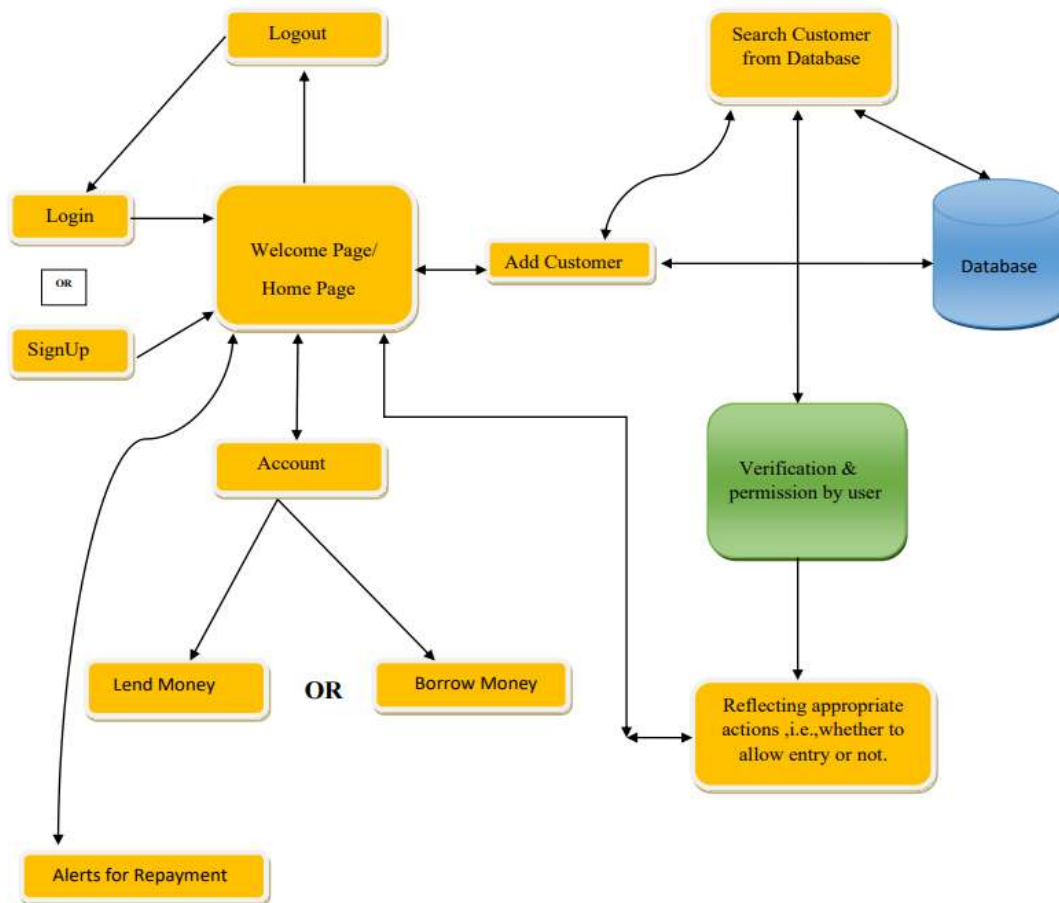


Fig: Iterative Waterfall Model[6]

IV. IMPLEMENTATION:



MODULES DESCRIPTION-

1. LOGIN-

This module is responsible to authenticate the user and provide the saved record of the user whenever the user logs in to the application. This block is build for the user, for logging into the application after successful validation and authentication.

2. WELCOME-

This module is basically the first page for user from where the user can navigate throughout the entire application. By using this, the user can logout from the application. Hence, ending the current session.

3. SERVICEREQUEST-

This module is responsible to seek for the task that is needed by the user to get performed for getting the appropriate result for the request.

4. SERVICERESPONSE-

This module of the application is responsible to get and display the appropriate results as per the choice of the user. It includes history of previous transactions, etc., if made any.

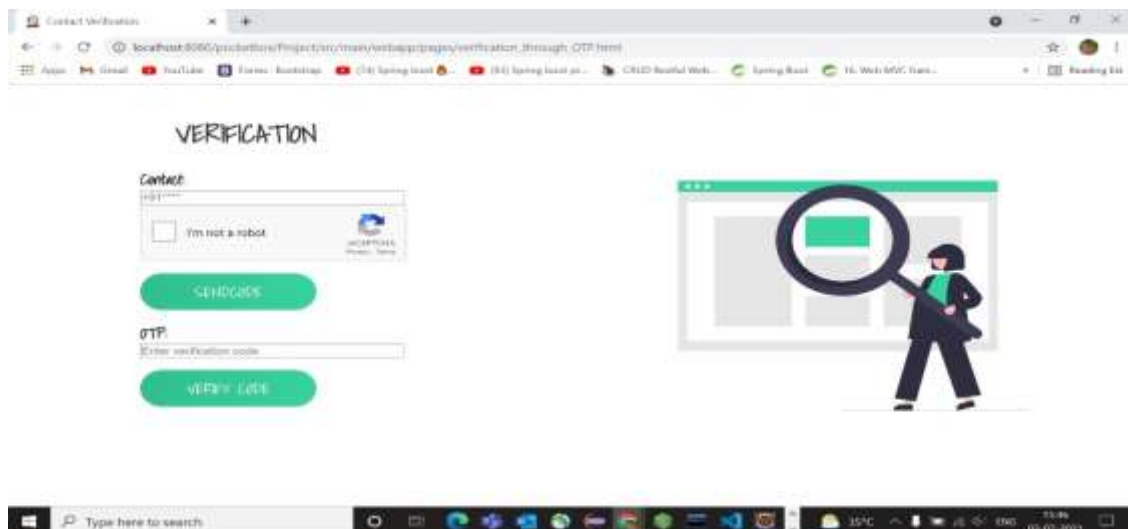
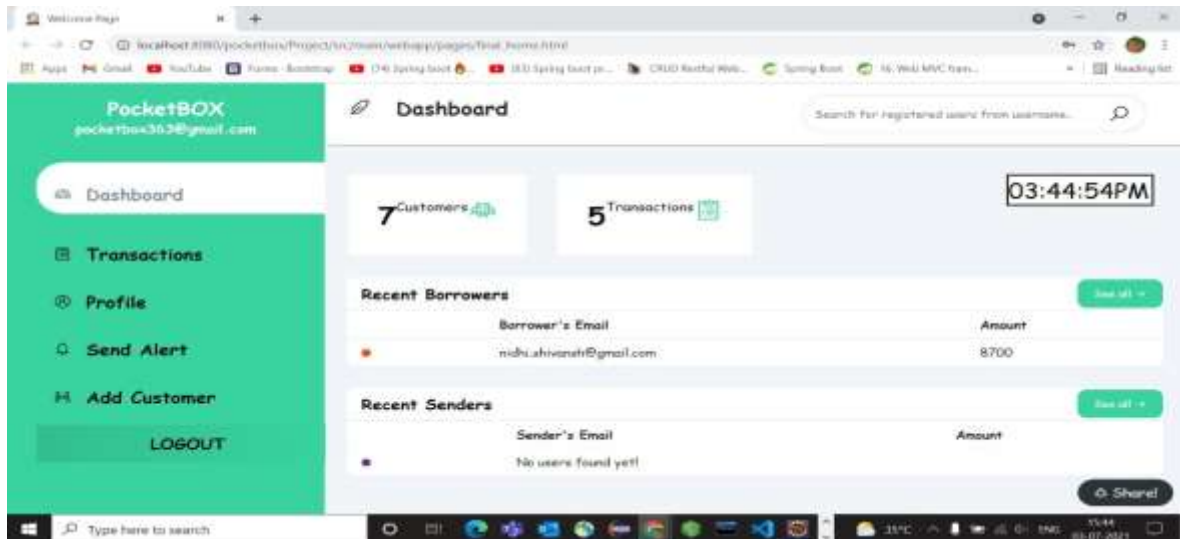
5. TRANSACTION PAGE-

This block is the personal page of every user which displays the previous transactions made by the logged in user, with several other details.

6. DATABASE-

The database is used to store all the transaction records and other specifications made by the particular user.

SNAPSHOTS:



V. RESULTS AND FUTURE SCOPE:

1. The application is more efficient, user-friendly and useful for the Retailers, Shopkeepers etc .
2. The application manages Credit Account.
3. The application is 100% secure.
4. It also helps to grow relations in a convenient manner.
5. The application is reliable one.
6. It is easy to use. It can be tested on Kirana Stores, Medical Shops, Vendors etc.

requirements of every individual, by helping in maintaining the transaction records safely. It is reliable. It is also secure as every data will be stored in a realtime database, which cannot be accessed by any outsider. All the ledger accounts are listed according to their debit and credit amounts. These accounts let the user keep all details of credit or debit for any number of customers across multiple business handy.

Also, all the transactions are visible as history to the user and hence, the user can repay the money more conveniently. This facilitates the customers to keep track of all their transactions in a proper way.

VI. CONCLUSION:

In the growing world of digitisation, digital ledger account serves the basic

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