Smart domestic payment system using biometric

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ABSTRACT: The main objective of the system is to develop an Embedded system like a ATM Machine, which is used to pay our personal bills like Electricity Bill, Water Bill, Income Tax, Property Tax etc., The user can pay their bills in a centralized system whereas the individual need not go for the concerned office. Personal users can save a lot of time and effort on paying bills every month. Hence, people can avoid their late payment fines. Organizations like Electricity Board, Panchayat Board, and Revenue Department can benefit from the system as users pay their payment in time, which saves the planet resources. Hence our proposed system is called as "the heart of the payment system" as it is highly beneficiary.

Keywords: Centralised payment System,ARM, LabView,UART.

INTRODUCTION

Nowadays people pay their bills in the individual office, So that the time taken for each and every process is high. Some bills are received monthly,some quarterly or yearly, and some are ad hoc. Many people have more than one credit cards so they receive multiple bills every month and it is very difficult to keep track of all the bills Even if more than one bill is from different cards from the same bank, they are in different bills and you need to pay for them separately. Different bills have different payment deadlines and late payments usually result in substantial penalties.

RELATED WORKS

There are no related papers on centralized payment systems for personal bills, but a paper titled as "Central Billing System for Personal Bills" is published by Yi Huang and Bin Wang at International Journal of Innovation, Management and Technology, August 2014. Their concept relies only on the consideration of bills and allow users to track the expenses in time. They uses a technique called "GIRO" to solve their problem. The main purpose of GIRO is that it automatically enables the transfer of money from one bank to another bank with stipulated dates and amounts on time. To handle this system people requires sufficient knowledge so as onlythe educated people can access soon when compared to the people who are not skilled. To operate the system many resources are needed like database maintenance and server usage maintenance.

EXISTING SYSTEM

At this moment people pay their bill in the concerned office and stand on the long queue to pay their bill for a single department. Their centralized system brings all the payment in a single center. Recent usage of system creates more time consumption and e-banking facility is accessed only by the people who are educated. Even e-banking provides individual payment system scheme, it solves only the problem of queue but the m ore time consumption still remains. Another possibility of payment is done by the vehicle mobile computing and if the payment date is missed users are allowed to pay the payment with penalty.

DRAWBACKS OF EXISTING SYSTEM

1. In e-banking system, hackers may defraud customers. Hence cost of mobile data is hiked.
2. We are not aware of the time when the vehicle mobile computing arrives for our area.

48

Sai Preetha E et al., Inter. J. Int. Adv. & Res. In Engg. Comp., Vol.–06(01) 2018 [47-48]

3. More officials are required for each and every processes.
4. Time consumption is high because of individual offices.
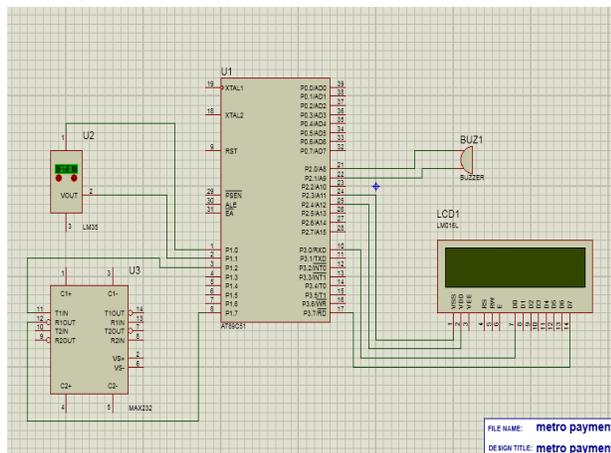
PROPOSED SYSTEM

Centralized system allows billing at anytime and anywhere which performs functions as similar to ATM system. Various billing system is made possible by a single server.The architectural design includes ARM7 CORTEX A8 which consist of power supply, touch screen with display, database and card reader. ARM7 CORTEX-A8 which is a 32 bit processor and it is compatible only with UBUNTU and LINUX. Data base contains the profile of all users.
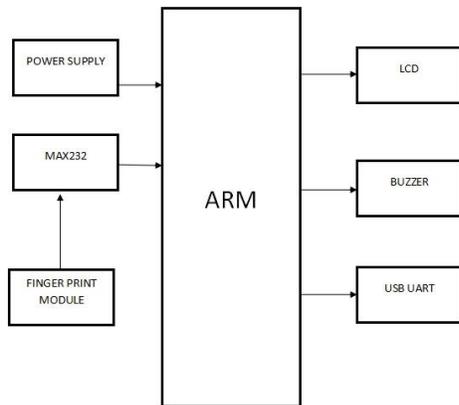
ARCHITECTURALDESIGN OF OUR PROPOSED SYSTEM

Card reader is used to read when the card is swiped which allows the user to access his/her account. Touch screen and display is used for displaying the picture and other account details.

CIRCUIT DIAGRAM

ADVANTAGES OF PROPOSED SYSTEM

1. The particular office don't need to open or no longer lines.
2. Faster in paying bills.
3. Easy to handle by all the users.

CONCLUSION

Thecentralized payment system provides more convenient to pay the personal bills.Hence it saves both time and potential cost.User can view the different payment system from different organizations(i.e.,electric,income,propert-yand water).Paying at the last moment of the bill can be avoided, as this system provides payment at anytime.This system facilitates easy,fast and accurate user identification and authentication.It can be used even in bank sectors.Authentication is done with the AADHAR CARD and no other proofs are necessary.No fraudulence can be done.Hence it is highly beneficiary for all the users who deserves our system for payment system.

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