Fingerprint Based Universal Debit Card

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Abstract: We are designing the system which will read the AADHAR CARD number which will act as a UNIVERSALDEBIT CARD. Using this card automatically it will deduct the ticket charges from your account. So, the passenger doesn't have to wait for a long time in a long queue. Due to its transparency, we can keep a tab on corruption. Using this system we can reduce human interference which effectively encourages corruption. It will make overall transaction digital and transparent. This transparency in money transaction will reduce the scope of corruption. It will also help to eradicate. Exploitation which otherwise may occur when the transaction is through notes. Moreover, this project can be a major step towards the success of Digital India drive of government.

Keywords: Fingerprint Sensor, ARM 7, 4×4 Matrix Keypad, GSM Module, Graphics LCD, Protos7.8i, Xilinx.

I. INTRODUCTION

A cashless society describes an economic state whereby financial transactions are not done by money in the form of notes or coins, but rather through the transfer of digital information (usually an electronic representation of money) between the transacting parties. Cashless societies have existed, based on barter and other methods of exchange, and cashless transactions have also become possible using digital currencies such as bitcoin.

However, this project is a move towards "cashless society" a society where cash is replaced by its digital equivalent every transaction done in a cashless manner

Such a concept are widely contemplated throughout the world, as the world is experiencing a rapid and increasing use of digital methods of recording, managing, and exchanging money in commerce, investment and daily life. Some countries have gone to extend of now set limiting transactions and transaction values for which non-electronic payment may be legally used

It marked the first time in Indian history when 80 percent currency was suddenly scrapped. It was the staggering decision which caused a lot of hardship to common people in India, a large business that moves through cash transactions have been largely affected. Note captive India is heading towards a cashless economy, which if true, it would take India to new heights. It will find that recent India cashless economy is growing quite fast. India is a country where people use a lot of cash in everyday life. We see that in the coming time which part of India and cashless digital becomes a new program run by the Government of India, which also promotes the cashless economy. Going forward, to see that India becomes cashless how quickly and how beautiful it is in India's future right.

As all the procedure is being done by humans thus requires more time in the procedure. So, the passenger has to wait for a long time in a queue. We are designing the system which will read the AADHAR CARD number which will act as a UNIVERSAL DEBIT CARD. Using this card automatically it will deduct the ticket charges from your account. So, the passenger doesn't have to wait for a long time in a long queue and not a single passenger travels without tickets

II. PROBLEM STATEMENT

Here we are designing a universal debit card which can be used in all the areas. In this project, we are mainly working on an AADHAR CARD of the individual. We will use the Thumb Scanner to capture the data of aadhar card. Using the character recognition we will get the aadhar card number. Using the aadhar card number we can access the account number of the particular individual. The entire database is stored in the memory. Ticket for the particular person traveling from a train is directly given by his universal debit card. We will use the touch screen and LCD for the input and output. So that he can just select the required destination station. And the cost of the ticket till the destination station will be automatically deducted from the account. After the

cost deducted from the account the message will be sent to the particular person using a GSM module. These eliminate the need for keeping track of keys or remembering a combination password, or PIN. It can only be opened when an authorized user is present since there are no keys or combinations to be copied or stolen or locks that can be picked.

III. LITERATURE SURVEY

We have gone through the different types of papers related to the given subject in which we can get the exact concept of the system and have been reported in the literature. However, few relevant and significant works are reviewed here like Arm-7 Based Finger Print Authentication System, Bike Security System Using Fingerprint GSM & GPS, Design of highly secured automatic teller machine system, RFID & mobile fusion for authenticated ATM, Biometric voting system using aadhar card.

In our proposed system we will use the thumb scanner to capture the data of the user to access aadhar card. Using the character recognition we will get the aadhar card number. Using the aadhar card number we can access the account number of the particular user. The entire database is stored in the memory. Ticket for the particular person traveling from a train is directly given by his universal debit card. We will use the keypad and LCD for the input and output. So that he can just select the required destination station. The cost of the ticket till the destination station will be automatically deducted from the account. After the cost deducted from the account the message will be sent to the GSM module.

IV. BLOCK DIAGRAM OF PROPOSED SYSTEM
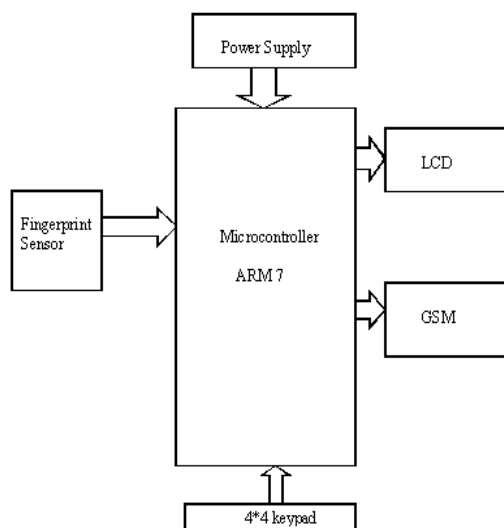
Fig. BLOCK DIAGRAM OF PROPOSED SYSTEM

When the user put a thumb on fingerprint sensor it scans the fingerprint of the user and checks authentication if the user is valid then system show option on welcome message on LCD if the user is not valid then show authentication error on LCD after verification of user system gives multiple options to the user to get the specific application on touchscreen display. By using touch screen display user gives input to system accordance with the amount will be deducted from a bank account and the transaction will complete. The details of the transaction are displayed on LCD, as well as a text message, send to a registered mobile number of the user through GSM module.

CONCLUSION
1. In this system we are successfully tried to the cashless transaction, also this system is a paperless and less human resource.
2. Banking Transaction is more secure due to thumb scanning technology. Due to this system efficiency of transparency is increased.

We designed the system which read the Aadhar card number which will act as a universal debit card. Then we practically saw that using this card automatically it will reduce the ticket charges from your account. So, the passenger doesn't have to wait for a long time in a long queue and not a single passenger travels without tickets.

APPLICATIONS
1. This system basically designed for to the cashless transaction for train ticketing, shopping malls, movie theater. Along with this transfer of money national or international banking.
2. This system proposed on the basis of multiple banking accounts but signal User Identification on Aadhar Card number base.

FUTURE SCOPE

In future, we can use face recognition system for increase the security

In future, we can use IOT system for application of bank transaction

ACKNOWLEDGMENT

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