

CHAPTER 1

INTRODUCTION

1.1 Background

With the emerging technology and the greater facilities for people to travel, the cashless ticket travel system provides much more congestion free travel to the bus passengers. With the advent of new technologies and world coping up with these developments this system provides faster transaction and easy travel.

1.2 Problem Definition

The aim of this project is to make the system avail the benefits of cashless ticket travel to the bus passengers. The system also stores the detailed information of all the passengers.

1.3 Proposed Method

The passenger has to first press the button at the respective bus stop. The card which is provided to every passenger is swiped onto the machine. The RFID reader detects the card and at the destination the passenger has to again swipe the card. The appropriate cash which is calculated and stored into database is used and appropriate cash is deducted.

The cashless ticket travel facility provides a better cashless system. The authentication is provided to every single user, the card is read by the RFID card reader and the 8-digit identification number serves as unique ID for every passenger. The personal details of every passenger like name, age, sex, contact number, address etc will be stored into the database along with his/her latest arrival and departure times. If the balance is not sufficient for the travel or if the balance in the card maintained is zero then appropriate messages would be displayed.

Once the cash is deducted from the passenger's card, rather than generating tickets the name of passenger, balance, fare and IN/OUT status would be displayed onto the machine. This would act like a paperless ticketing system. Hence this would save paper and hence save trees. Before using this cashless ticket facility, the passenger has to register himself at the bus corporation where he has to fill the form containing his personal details. Then he will be issued with a card bearing unique ID and he has to maintain certain amount of balance in the card.

This cashless ticket travel facility allows the passengers to avoid tussles with the conductor to have coins as change. It allows to find the defunct passengers if any, in case of missing cases it is possible to extract the information from the database of that particular passenger. It is also useful for the bus conductor by not carrying any hard cash and thus avoid theft cases! More importantly corruption and curb the black money menace!

1.4 Organisation of the Report

In Chapter 1 we are introducing about the project cashless ticket travels. The explanation about the background, problem definition and the proposed method and brief description about the working of the system is given.

Chapter 2 introduces to the literature survey where the short description is provided about the following

Secure Travel System Using Aadhaar Card, Matatu E-Ticketing System, Next Generation E-ticketing System, and Factors Influencing Online Bus Ticket Booking.

Chapter 3 explains about the design and implementation of this system and mention about the software and hardware requirements

Chapter 4 gives an insight about the LPC2148 development board and its features

Chapter 5 explains about the RFID reader and its working

Chapter 6 explains about the LCD Display unit

Chapter 7 explains about the GSM Module

Chapter 8 gives a brief description about the java language and as a platform

Chapter 9 explains about MySQL and its advantages

Chapter 10 gives a brief description Apache Tomcat and its components

Lastly Chapter 11 gives description about Hercules and its useful parts