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BUS RESERVATION SYSTEM

Dhruv Mehra*[1], Jay Gangadia*[2], Jeevan Ghag*[3], Aayush Gupta*[4]

*[1,2,3,4]Student, Computer Engineering Thakur Polytechnic, Mumbai, Maharashtra, India.

ABSTRACT

Online Bus Ticket Reservation System is a web-based application that works within a file. one network. This project introduces an update to the software program "Online Bus Ticket Reservation System "as it should be used in the bus system, the area used reserved seats, booking cancellations and various types of route inquiries used for security quick booking. OBTRS is designed to manage and compile a traditional database, ticket booking and bus tracking and departure made. Maintains all customer details, bus details, booking details. In order to achieve the design, Imo Transport Company (ITC) was selected as case study because of its importance in Imo State strategies. Systematic Analysis once Design Methodology (SSADM) was approved. In addition, PHP Hypertext Preprocessor (PHP) language was used for software terminals while the back end was designed for use MySQL. Achieved software is able to improve customer support and relationships ITC performance management. It is recommended that in addition to the current operation of the file customized software, additional functionality such as using email to send tickets again customer notifications and online payments using credit / bank cards should be the same installed in the system. In addition, other functions performed by ITC such as courier services must also be integrated to improve the system.

Keywords: OBTRS, Electronic Ticketing, ITC, Reservation, Transportation.

I. INTRODUCTION

Background of study

A common view in various circles of the world is that man now lives in the growth of years of data collection, processing and distribution, is very popular years of knowledge called. For this reason, managers and other data users especially in the transportation industry are looking for more types of management and operational support details. So they have to answer there is a growing need for information and data management. Electronic tickets, or e-tickets, provide proof that their owners have permission to enter the amusement park, use a travel item, or have it access to other Internet services. The design of this online program will be is profitable for the company because it has never existed before. Therefore, Imo Transport Company, Owerri, is a viable investment managed by the government of the country has its main objectives: to distribute comfort and hospitality for passengers who do not live in their homes, in order to make a profit, they will definitely inform a a system that can make its handicrafts work in place of a bus ticket reservations to meet customers rising demand during peak and high prices seasons. Great expectations to encourage a possible targeted study provide appropriate guidance and awareness to any potential investors, especially those in the bus industry, considering using Imo transport, e.g. a gateway to the fertile soil of endless opportunities in southeastern Nigeria. Currently, employees at the bus ticket counter use an internal system to sell tickets counter and customers can buy a bus ticket online at this time you will need to go to the counter to buy a bus ticket. Sometimes, customer needs line up a long line to buy a bus ticket and ask for details and this brings many distractions for customers.

Statement of Problem

Currently, the type of system used in the counter is the internal system used manually to sell bus tickets. The company's problems are that customers have to go to the counter to buy a bus ticket or ask for a bus system, customers will also have to wait in line for longer to get a bus ticket and will also have to pay cash when they buy a bus ticket.

Objectives of study

The main purpose of this study is to implement flexible procedures for booking a bus ticket for any trip made by Imo Transport Company (ITC). The system is said to be the default system and customers can choose their own seats. Specifically, the objectives of this project will be to:

i) Provide a web-based bus booking service where a customer can Buy a bus ticket online without the need to line up counter to buy a bus ticket.

ii) Empowering customers to check availability and types of buses online. The customer can check the timing of the entire ITC bus by using system.
iii) Facilitating the payment of bus tickets by obtaining a bank pin after payment various designated banks.
iv) The ability of customers to cancel their booking.
v) User management rights in renewal and cancellation of payment, route and vehicle Records

Research Gaps

According to Kevin (2012) Web-based Bus Reservation and Ticketing System a standard web portal system that assists bus customers to reserve a seat at a particular bus company at anytime and anywhere and there are a variety of buses that meet customer needs. This project, on the part of the bus company, serves as a marketing strategy and facilitates the proper processing and delivery of travel receipts. The project used software such as Adobe Photoshop CS4 for image editing, Adobe Dreamweaver CS4 and Notepad ++ as a development tool, MySQL database, Apache as a web server, mpdf for PDF making and PayPal Sandbox for payment. For advanced results, it used jQuery, but softwares were adopted for this project, and in recent times have been improved. So, Adobe Dreamweaver CS6, Adobe Photoshop CS6, MySQL v.5 are will be used for this project.

Study on Electronic Ticketing in Public Transport

The European Metropolitan Transport Authority (EMTA) co-ordinator, Mohamed Mezghani (2008) said EMTA has established a working group that will work on the issue of electronic ticketing. The group is mandated to generate information, exchange information and learn from the experience of its members in the field of electronic ticketing. In its framework, EMTA presented research on electronic public transport tickets under the auspices of the working group and devised specific concepts such as public transport prices, public transport tickets and electric tickets for public transport. On the contrary, his research on the subject of electronic ticketing was one of the most intriguing articles on the subject of customer reservation and travel on a chosen date. However, this project will be built to integrate the aforementioned locations and to display specific screenshots of the customer booking system.

Online Transport Booking System

Badariah, (2007) emphasized that the Online Transport Booking System established at Politeknik Kota Kuala Terengganu (PKKT) would ensure that users could book online or book their desired travel companies with the services offered by the new system. He pointed out that the method and technology used in the new transport system could also be applied to other workplaces. A user who wants to use transport must apply for a booking of transport before boarding. Similarly, after considering the type of plan adopted by Badariah, the project will be built with the same purpose of introducing customers to Imo Transport Company and the opportunity to make reservations in their homes or offices without having to face the challenges of the calculation line before taking any trip. This project will also enlighten potential buyers and users of the system with the need to protect the system as it shows many advantages over the old system by providing easy-to-use Graphic User interface (GUI), pre-board access, etc.

II. METHODOLOGY

Research Methodology

The research project data collection system is known as the research method. Data can be collected or conducted a theoretical or practical study for example management research can be considered strategies and methodology for the implementation and management of change. The information used in this study was done orally.

Choice of methodology

For any project to be completed, it must go through stages called Development Life Cycles. System Development Life Cycle (SDLC) is a process of understanding how the Information System (IS) can support business needs, design a system, build and deliver it to users. The SDLC identifies four phases: Planning, Analysis, Construction and Implementation In order to develop this project, the approach will be used by the System Structured Analysis and Design Methodology. SSADM is classified as Waterfall Development. With Waterfall Development, the analyst and users progressively move from one phase to another and each phase can be drawn and explored (Hevner, 2004). Below, in Figure 3.1 a diagram of the waterfall path.

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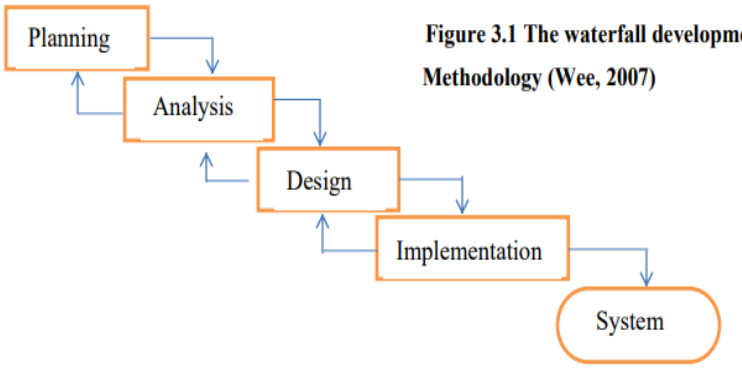

Figure 3.1 The waterfall development Methodology (Wee, 2007)

Data Flow diagram

The data flow diagram (DFD) is represented by a graphic "flow" of data through the information system, modeling its process processes. DFD indicates what type of information will be entered and exited from the system, where the data will go in and out, and where the data will be stored. Deal development of DFD'S is done at several levels. Each process in low-level drawings may be reduced to a detailed DFD to the next level. High-quality painting is often referred to as contextual drawing. It contains a single process, which plays a key role in studying the current system. The process in graphic content level exploded into another process at the first level of DFD. Figures 3.1 to 3.3 show a diagram of the flow of data about the system

Level 0

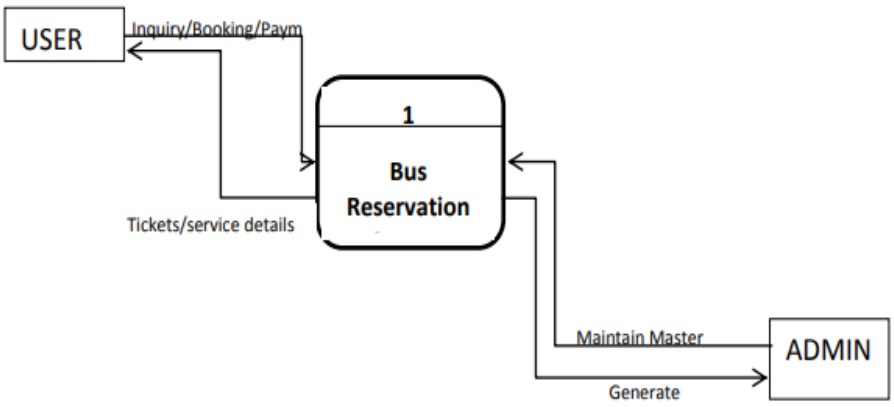

Figure 3.2 Context View of Online Bus Ticket Reservation System

LEVEL 1

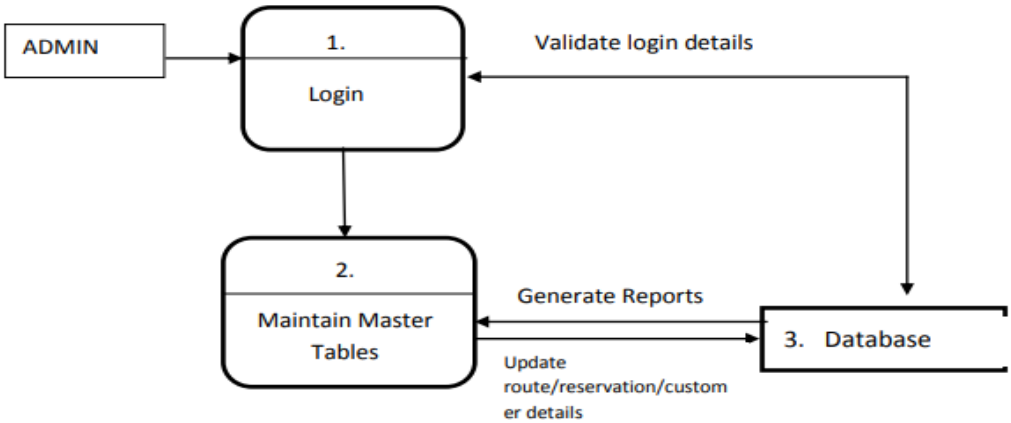

Figure 3.3 User view of Online Bus Ticket Reservation System

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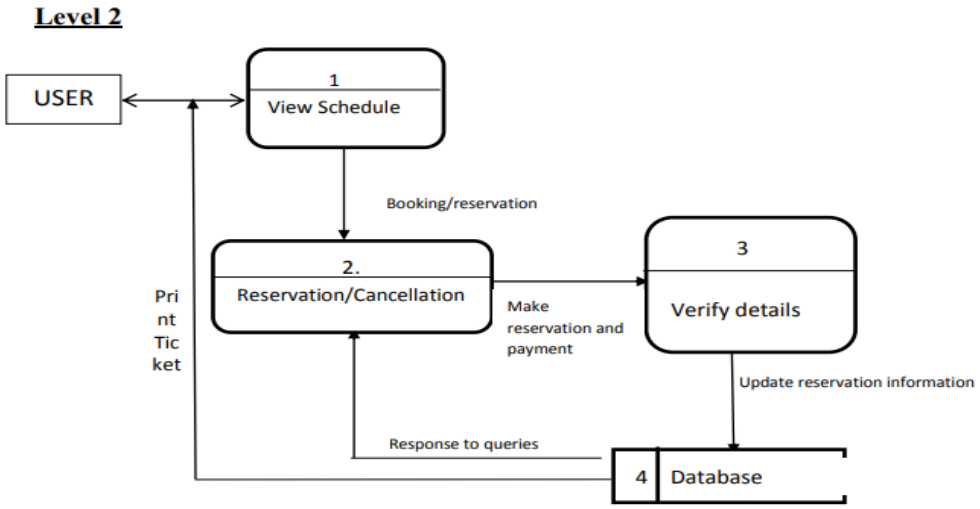

Figure 3.4 Admin view of Online Bus Ticket Reservation System

Use case diagram for Users and Admin

A usage case is a description of the behavior of a program as it responds to a request from outside that program (user). In Figure 3.4, you are shown the case of use of functions in the bus transport system.

In other words the use case refers to "who" can do "what" with the system in question. The use case procedure is used to capture the ethical requirements of a program by defining the threads driven by the situation by operational requirements.

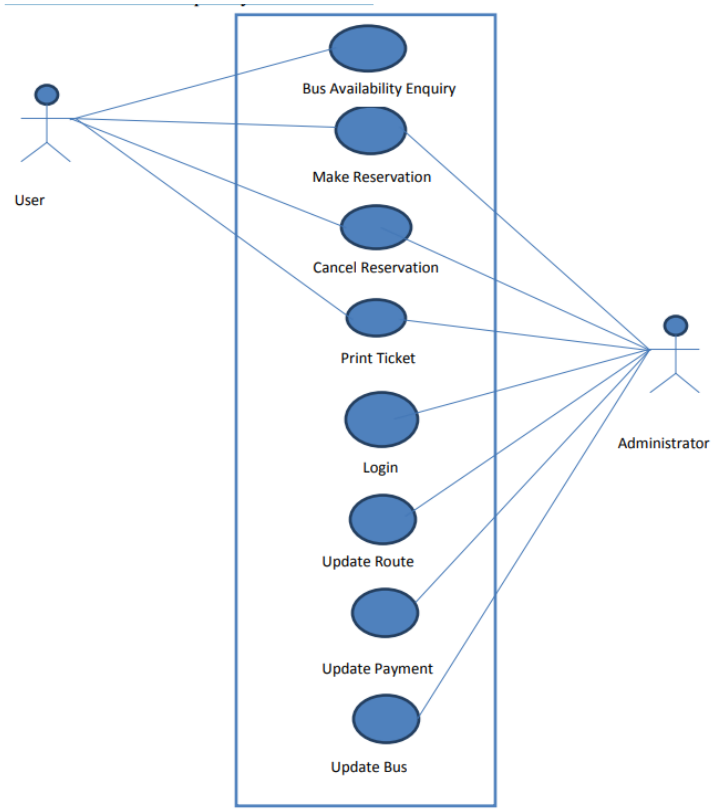

Figure 3.5 Use case diagram for users and admin

III. MODELING AND ANALYSIS

Inputs & Output Designs

Design to insert a link between the information system and the user. It contains advanced specifications and data processing procedures and those steps are required to incorporate transaction data into a usable data processing form while designing the process involves designing the required results in the form of reports to be

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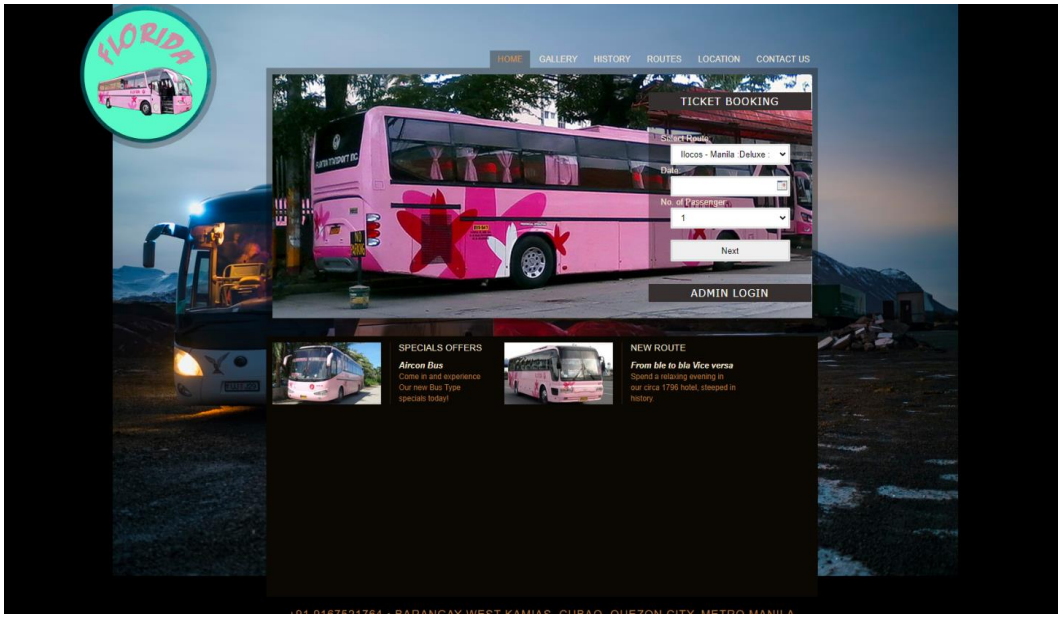
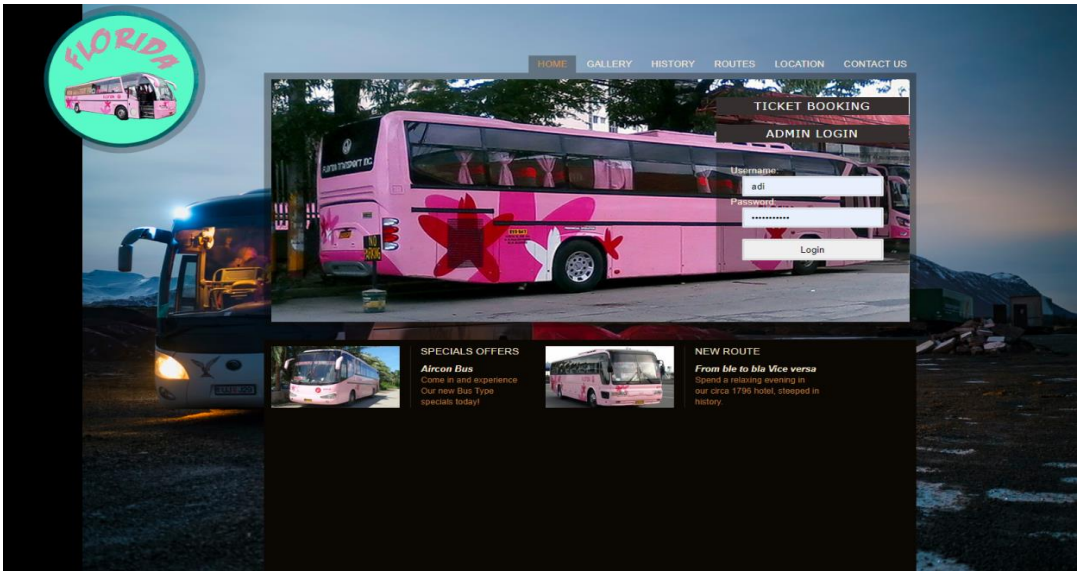
provided to users according to needs. Below are some screenshots with the input and output designs of the proposed system..

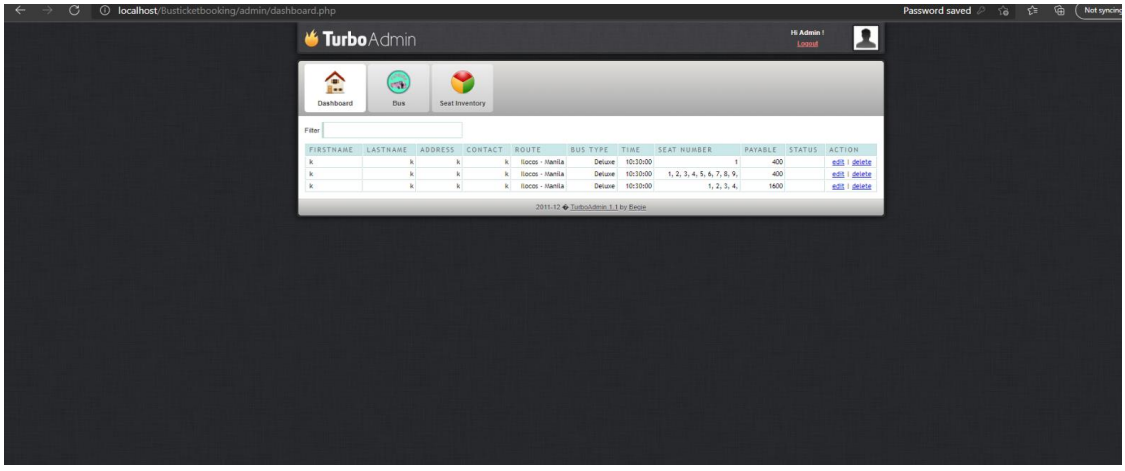
This is the sign-up window for new customers and admin.



Below is how the log in interface is expected to appear.



Below is how the Admin interface is expected to appear.



IV. RESULTS AND DISCUSSION

In 1974, American airline became the first to use an automated booking system, which was almost by hand. Technology has grown, and computer booking has the system was built. In the current era, online booking or booking system improve the performance of various sectors of the country's economy this program. An online bus ticket booking system is a web-based system ensures that the company will be able to change most of the processes carried out log out manually into automatic, error-free and easy-to-use operation organization especially in the area of transport; and it will know produce a report for the purpose of managing the decision. The program will be developed using a waterfall research method as well design objectives, PHP as a programming language due to its server side processing capabilities to make the data process subordinate to the client itself computer, implementation strategy and testing and care strategies suitable for good posting of the program. Research and development are continuous processes; It is similar in computer and software development. However, this work is recommended for Emo Transport Co. Ltd., Owerri, as they are still operated manually and may also be useful for other bus transport industries whose processes are still performed manually. She goes. The system can contribute more on the bus representatives who handle the account if it can produce a report by travel so that they will not go to a certain module to check the reservation and its details. Also, it would be more beneficial for both customers and bus representatives if customers can create an account just like on the airlines websites. With this, the system can record the modifications made. Other functionalities like online payment along with e-mail facility, credit card / debit card etc. for sending the ticket to the passenger can also be integrated into the system to increase user friendliness and interaction.

V. CONCLUSION

It can be seen that computer applications are very important in every field of human endeavor. Here with this new system all the information about the customer making a reservation can be obtained by clicking a button, removing some of the difficulties that come with the manual system. This will reduce the workload of the employees, reduce the time taken to make reservations at the bus terminal and will also increase the efficiency. The application also has the ability to automatically update records in various files thereby relieving the employees of the stress of working with the file security of the data. This project will, overall, give a new path to the bus reservation and ticketing processes. Automation and management of seats and reservations will be done online. However, the project does not limit walk-in passengers who are passengers at the company's counter as it caters for them as well. It also reduces the use of paper like the traditional way of ticketing.

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