A Project Report

on

BUS TICKET BOOKING APPLICATION

Submitted in partial fulfillment of the
requirement for the award of the degree of

Bachelor of Technology in Computer Science and Engineering

Under The Supervision of
Himanshu Sharma
Designation: Assistant
Professor

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SCHOOL OF COMPUTING SCIENCE AND ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
GALGOTIAS UNIVERSITY, GREATER NOIDA
INDIA
MONTH, YEAR

SCHOOL OF COMPUTING SCIENCE AND ENGINEERING
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CANDIDATE'S DECLARATION

I/We hereby certify that the work which is being presented in the project, entitled **" Bus Ticket Booking Application "**submitted in the **School of Computing Science and Engineering** of Galgotias University, GreaterNoida, is an original work carried out during the period of **JULY-2021 to DECEMBER-2021**, under the supervision of **Mr. Himanshu Sharma, Assistant Professor**, **Department of Computer Science and Engineering** of School of Computing Science and Engineering , Galgotias University, Greater Noida

The matter presented in the project has not been submitted by me/us for the award of any other degree of this or any other places.

<div align="right">

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19SCSE1010356 – GAURAV RAJ SINGH

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This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

<div align="center">

Supervisor

(Mr. Himanshu Sharma, Assistant Professor)

</div>

CERTIFICATE

The Final Thesis/Project/ Dissertation Viva-Voce examination of **19SCSE1120015 – VISHAL AGGARWAL, 19SCSE1010356 – GAURAV RAJ SINGH** has been held on _____and his/her work.

Signature of Examiner(s)   Signature of Supervisor(s)

Abstract

Travel industry is evolving day to day. As the industry evolves the need to digitalize all the transactions becomes the need of the hour. Previously, the type of system being used at the counter is an internal system which is manually used in selling the bus tickets. The problems facing customers is that they have to go to the counter to buy bus tickets or ask for bus schedule. Customers have to queue up for a long time in order to secure a bus ticket.

Bus ticket booking application is an application which is based on Iot and proposed to reduce human intervention, waiting time, and energy. In this application, we can book buses online by entering the destination location. Available or unavailable slots will be shown in the application and you can book as per your requirements. The booking will not be provided for the present date but for the upcoming dates. If by any chance, you were not able to reach the departure time for the bus then your booking will be cancelled automatically and your payment will be refunded through the application.

This system is built for reserving seats, cancellation of seats and different types of route enquiries. It manages database, ticket booking, tracking bus etc. It maintains all customer details, bus details and reservation details. Php language is used for front end and MySql is used for backend.

This system will be developed using a waterfall methodology for research and design purposes, Php as the programming language because of its server-side processing capabilities that makes data process less on the client personal computer, an implementation strategy as well as testing and maintenance strategies suitable for deployment of the system.

Here all the information about customer that made reservation can be gotten just by clicking a button with this system. It will reduce the workload of the staff, reduce the time used for making reservation at the bus terminal and also increases efficiency.

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Introduction

1.1 Introduction

This System is an application that aids bus customers to reserve a seat in a certain bus company anytime and anywhere and variety of buses that satisfy the customers needs. The project used software like Adobe Photoshop CS4 for the creation of the images, Adobe Dreamweaver CS4 and Notepad++ as a development tool, MySQL for the database, and PayPal Sandbox for the payment. For the main effects, it used jQuery.
The main purpose of this application is to automate the manual procedures of reserving a bus ticket for any journey made through this application. This system is said to be an automatic system and customers can select seats by themselves.

This System is associate application that aids bus customers to order a seat in a very sure utility anytime and anyplace and kind of buses that satisfy the shoppers wants. The project used computer code like Adobe Photoshop CS4 for the creation of the photographs, Adobe Dreamweaver CS4 and Notepad++ as a development tool, MySQL for the info, and PayPal Sandbox for the payment. For the most effects, it used jQuery.

The main purpose of this application is to automatise the manual procedures of reserving a ticket for any journey created through this application. this technique is claimed to be associate automatic system and customers will choose seats by themselves.

Specifically, objectives of this project will consist of:
i) Providing a bus ticket reservation function where a customer can buy bus ticket through the online system without a need to queue up at the counter to purchase a bus ticket.
ii) Enabling customers to check the availability and types of busses online. Customer can check the time departure for every bus through the system.
iii) Easing bus ticket payment by obtaining a bank pin after payments is made to the various designated banks.
iv) Ability of customers to cancel their reservation.
v) Admin user privileges in updating and cancelling payment, route and vehicle records.

Introduction

1.2 Formulation of Problem

Previously, staff at the bus ticket counter is using an internal system to sell tickets at the counter and customers who are unable to buy bus ticket online at this moment would have to go to the counter to a buy bus ticket. Sometimes customers need to queue up a long queue to buy bus ticket and ask for information and this brings a lot of inconveniences to customers. However, Bus ticket booking application enables the customers to buy bus tickets, make payments and ask for information online easily. Furthermore, staff can sell bus ticket using bus ticket booking application after checking the bus ticket availability for the customer and print the ticket to the customer.

Previously, employees at the ticket counter are victimization an inside system to sell tickets at the counter and customers WHO area unit unable get to shop for ticket on-line at this moment would ought to visit the counter to a buy ticket. In general, customers have to be compelled to line up a protracted queue to shop for ticket and raise info and this brings plenty of inconveniences to customers. However, ticket booking application allows the purchasers to shop for bus tickets, build payments and raise info on-line simply. what is more, employees will sell price ticket| victimization ticket booking application once checking the ticket convenience for the client and print the ticket to the client.

1.2.1 Tool and Technology used

This system is built for reserving seats, cancellation of seats and different types of route enquiries. It manages database, ticket booking, tracking bus etc. It maintains all customer details, bus details and reservation details. Php language is used for front end and MySql is used for backend. The software achieved is capable of improving the customer hand and relationship management in buses operations. It is recommended that despite the present functionality of the designed software, an additional functionality such as the use of E-mail to send tickets and notifications to the customer and an online payment using credit cards/debit cards should be implemented into the system. Furthermore, other operations carried by buses such as the courier services should also be integrated in order to enhance the system.

Introduction

This system is made for reserving seats, cancellation of seats and differing types of route enquiries. It manages info, price tag booking, chase bus etc. It maintains all client details, bus details and reservation details. Php language is employed for side and MySql is employed for backend. The code achieved is capable of up the client hand and relationship management in buses operations. it's counseled that despite the current practicality of the designed code, an extra practicality like the utilization of E-mail to send tickets and notifications to the client and a web payment victimization credit cards/debit cards ought to be enforced into the system. what is more, alternative operations carried by buses like the messenger services ought to even be integrated so as to boost the system.
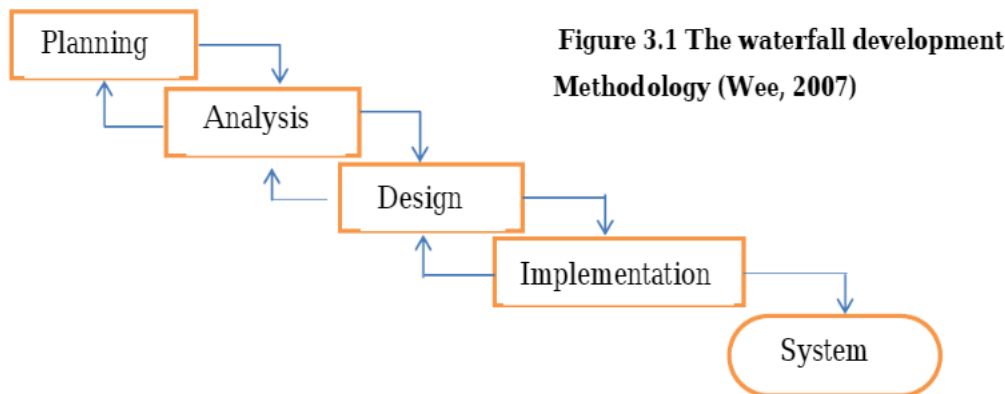
Literature Survey

It is already emphasized that the Bus Ticket Booking Application which was already developed and it was to make sure that users could make their online booking or reservations to their desired transport companies with facilities provided by the new system. They pointed out that the methodology and technology being used in this new transport system could be applied to other areas of activities. The user who wants to use the transport must make an application to book the transport before boarding. Similarly, after considering the type of system which they adopted, this project will be designed with the same aim of presenting the customers of Transport Company with the opportunity of making reservations at the comfort of their homes or offices without being faced with the challenges of queuing at counters before embarking on any journey. This project will also enlighten prospective customers and users of the system on the need to patronize the system as it displays more advantages over the old system by providing an easy to use Graphic User interface (GUI) interaction, checking availability of routes before boarding etc. The input design is the link between the information system and the user. It comprises of the developing specification and procedures for data preparation and those steps are necessary to put transaction data into a usable form for processing data entry while an output design is a process that involves designing necessary outputs in the form of reports that should be given to the users according to the requirements.

It is already stressed that the ticket Booking Application that was already developed and it absolutely was build to form to create certain that users might make their on-line booking or reservations to their desired transport firms with facilities provided by the new system. They got wind that the methodology and technology being employed during this new transport system might be applied to different areas of activities. The user World Health Organization needs to use the transport should build Associate in Nursing application to book the transport before boarding. Similarly, once considering the sort of system that they adopted, this project is designed with identical aim of presenting the purchasers of Transport Company with the chance of creating reservations at the comfort of their homes or offices while not being two-faced with the challenges of queuing at counters before embarking on any journey. This project also will enlighten prospective customers and users of the

system on the requirement to patronize the system because it displays a lot of benefits over the previous system by providing a simple to use Graphic computer program (GUI) interaction, checking accessibility of routes before boarding etc. The input style is that the link between the knowledge system and therefore the user. It contains of the developing specification Associate in Nursing procedures for knowledge preparation and people steps area unit necessary to place dealings knowledge into a usable kind for process knowledge entry whereas an output style may be a method that involves planning necessary outputs within the sort of reports that ought to incline to the users in line with the wants.
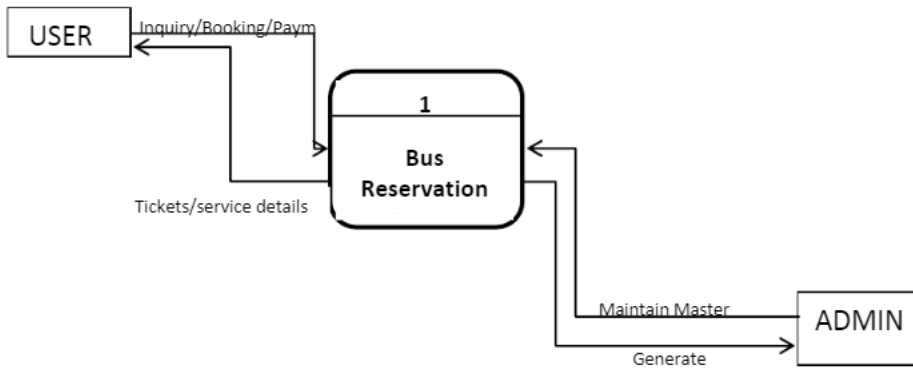
Design

For any project to be completed, it has to go through stages called Development Life Cycles. System Development Life Cycle (SDLC) is the process of understanding how an Information System (IS) can support business needs, designing the system, building it and delivering it to users. The SDLC composes of four phases: Planning, Analysis, Design and Implementation. In order for this project to be developed, the methodology that will be used is the System Structured Analysis and Design Methodology. With Waterfall Development, analyst and users proceed
sequentially from one phase to the next and each phase can be mapped out and evaluated   on the waterfall methodology.

Planning

Analysis

Design

Implementation

System

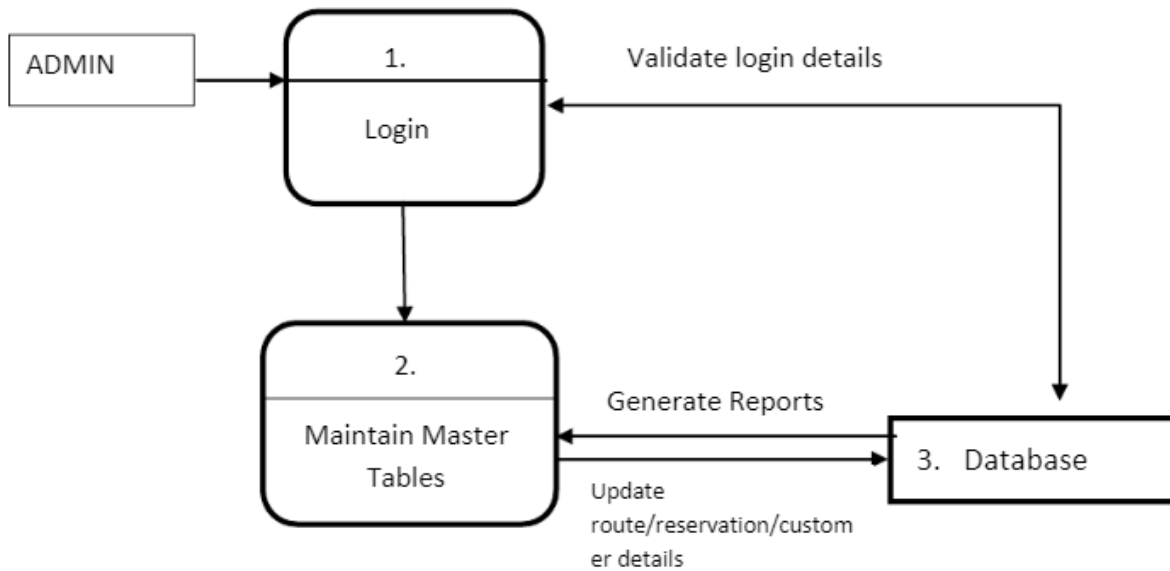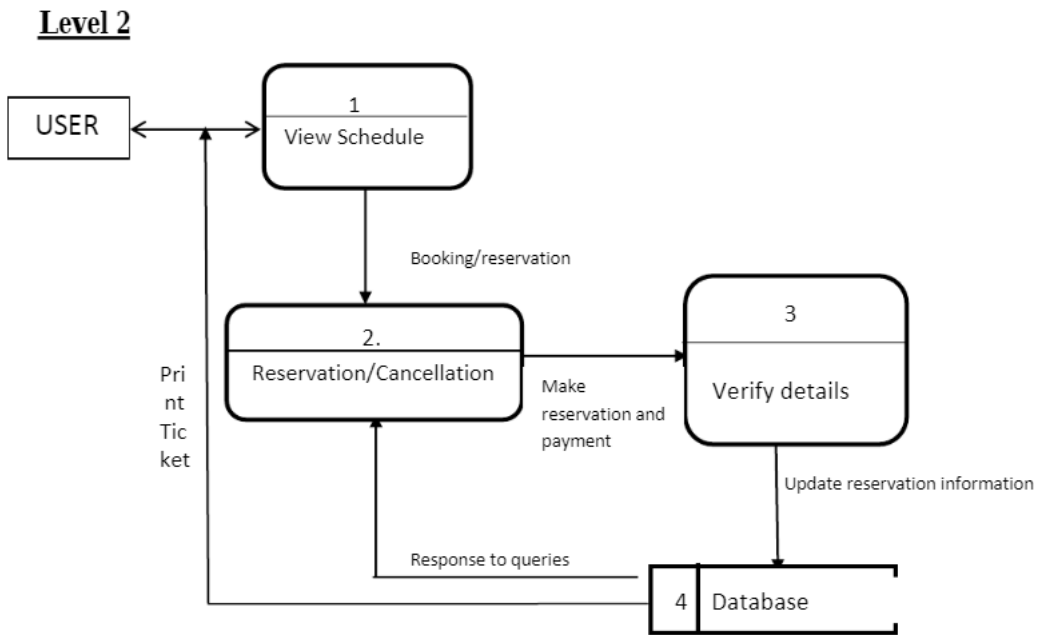Figure 3.1 The waterfall development
Methodology (Wee, 2007)

A data flow diagram (DFD) is a graphical representation of the "flow" of data through an information system, modelling its process aspects. A DFD shows what kind of information will be input to and output from the system, where the data will come from and go to, and where the data will be stored.
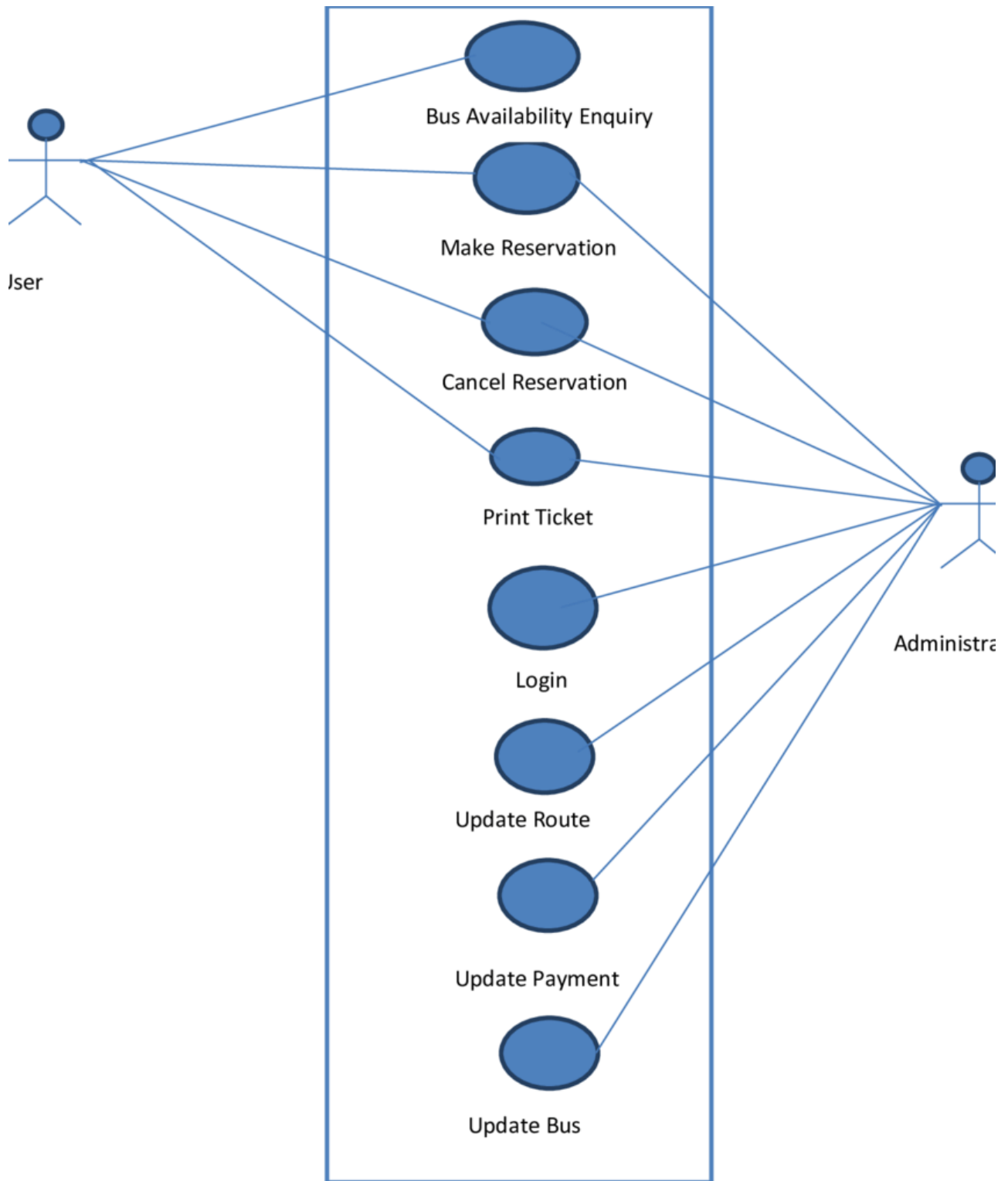
Level 0

USER

Inquiry/Booking/Paym

Tickets/service details

1

Bus Reservation

Maintain Master

Generate

ADMIN

LEVEL 1

ADMIN

1.

Login

Validate login details

2.

Maintain Master Tables

Generate Reports

Update route/reservation/customer details
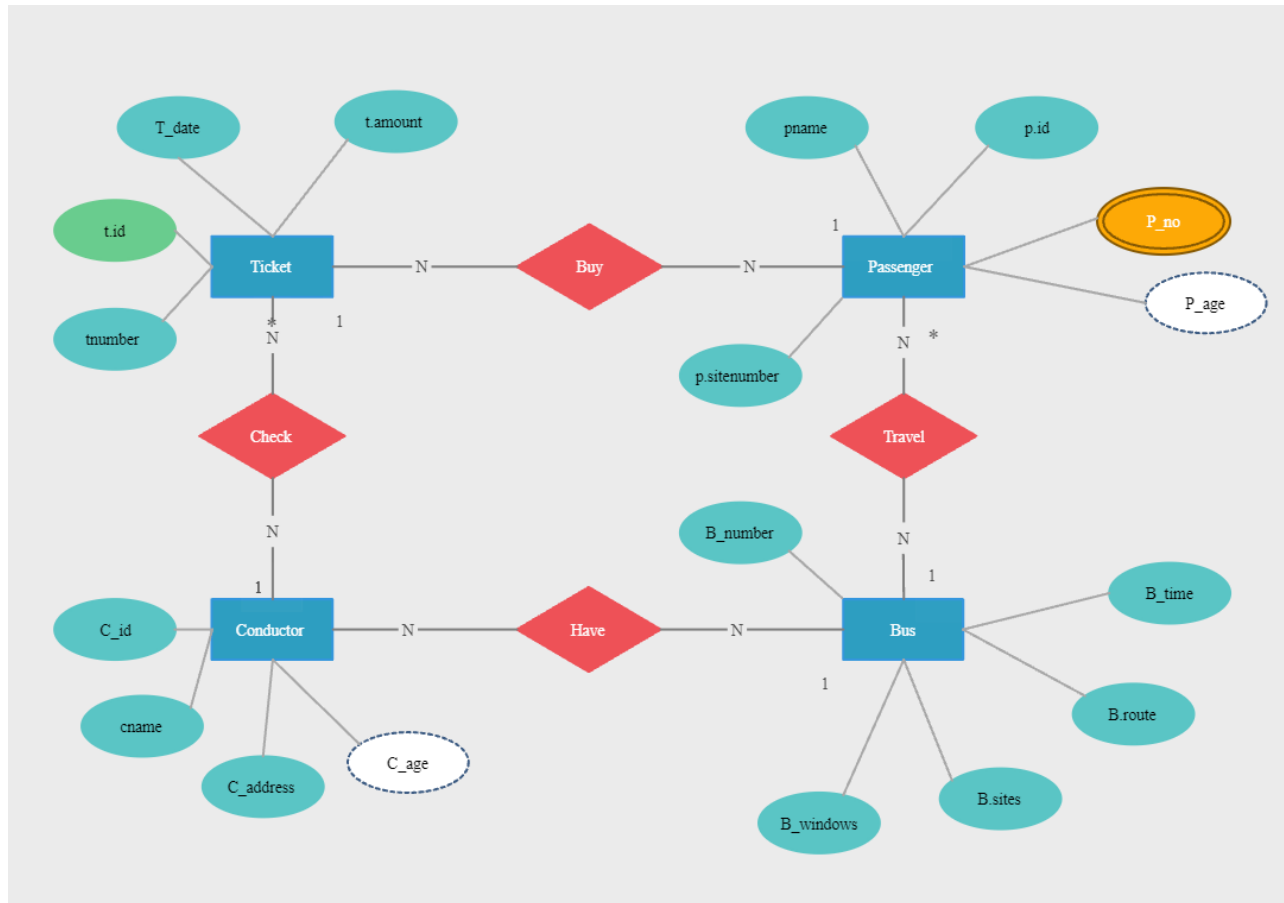
3. Database

Level 2

Use case diagram

A use case is a description of a system's behaviour as it responds to a request that originates from outside of that system (the user). In other words, a user case describes who can do what with the system in question. The use case technique is used to capture a system's behavioural requirements.

User

Bus Availability Enquiry

Make Reservation

Cancel Reservation

Print Ticket

Login

Update Route

Update Payment

Update Bus

Administrator

ER Diagram

Conclusion

It can be observed that computer applications are very important in every field of human endeavour. Here all the information about customer that made reservation can be gotten just by clicking a button with this new system, some of the difficulties encountered with the manual system are overcome. It will also reduce the workload of the staff, reduce the time used for making reservation at the bus terminal and also increase efficiency. The application also has the ability to update records in various files automatically there by relieving the company's staff the stress of working from file security of data. This project, as a whole, will give a new way in bus reservations and ticketing processes. The automation and management of seats and reservations will be done online. However, this project does not limit the walk-in passengers.