APPENDIX 1

OFFICE AUTOMATION

A Project Report of Capstone Project-2

Submitted by

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in

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Galgotias University

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APPENDIX 2

SCHOOL OF COMPUTING AND SCIENCE ENGINEERING

BONAFIDE CERTIFICATE

Certified that this project report "**BUS PASS SYSTEM**"
Is the bonafide work of "**Mayank Singh Chauhan**" who carried out the
project work under my supervision.

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Abstract

With the ever increasing dire needs of the new modern generation with the unraveling of newer and faster and more reliable modes of transportation from where India has moved from better railway connectivity to better roadways connectivity with the intervention of government projects like Bharatmala the need of the hour is better transport facilities intra and interstate which can be achieved by the betterment of buses and the facilities provided by them with the private sector even playing a vital role in the modern day transport. People nowadays prefer to use the bus service due to easier and faster availability of tickets and lesser waiting period. So to make this sector further rise there needs to be a level of customer satisfaction that needs to be achieved and this can be achieved by the addition of new facilities in the bus services sector which are being demanded as per the growing need of time and increasing level of by the modern user.

1. INTRODUCTION

1.1 Overview of the project

1.1.1 Electronic Bus Ticketing

The ticket machines would end the use of the hefty 1.5-kg ticket racks carried by conductors. It would also end the practice of tearing out tickets and marking fare stages. The Conductor would just have to key in the details about the fare stage and the ticket machine would print out the ticket. The machine weighs only 800 grams and is convenient to carry. The parameters are almost like that of a railway ticket, the only difference being that the machine is portable. The machine can print out 2,300 tickets, including the journey report in order to facilitate inspection by the corporation's checking inspectors. The ticket machines would help prevent loss on account of malpractice. It would also help in providing adequate data to the corporation, particularly with regard to the boarding of passengers from fare stages and important points. This would help the corporation prepare and organize its schedules more efficiently on the basis of traffic demand. Besides, it would provide data on concessions given to various sections. Another additional feature is that the data in the ticket machine could be fed into the computer. More over the depots of the corporation would be fully computerized so we want to add some other modules in our domain for depot's verification.

This project is modularized as the following:

a) Management of Route

b) Trip Details

c) Bus Details

d) Bus Stops

e) Bus Ticketing

1.1.2 Management of Routes

This module include information about how we can Manage the routes for a particular bus services so In the case of Route management module we must know the details about route number, number of stops ,fare stages and running time of the particular bus more over we want to manipulate and stored these information successfully.

1.1.3 Trip Information

Each journey is identified as a trip. Each ticket must contain the trip no so that calculation of passenger can be done easily. Here in this section we want to know start time and route no of the bus this information can be manipulate and stored successfully.

1.1.4 Bus Detail

In this module all bus details are stored and manipulated, in bus detail module contains minimum charge, type, depot, fare increment, bus number, and passenger's states (child or adult) are manipulate and stored.

1.1.5 **Bus Stops**

Bus Stops module includes information about what are the main bus stops of a particular bus. This module connected to the route of the bus and it is used to store stop number, stop name and fare stages and Route number

1.1.6 Bus Ticketing

Ticketing is the most important module in this Project which uses all the tables together and calculates fare for the passengers. Venting the tickets is done using the route number, bus

type, beginning stop, end stop, ticket number, persons(Adult/child)rate, date and time also we want to print the all these information. In order to do the calculation data has to be pulled out from stops, bus, trip and route. Number of passengers & the states are entered by the Venter and to produce the tickets.

2. SYSTEM STUDY AND ANALYSIS

2.1   INTRODUCTION

 System analysis is a process of gathering and interpreting facts, diagnosing problems and the information to recommend improvements on the system. It is a problem solving activity that requires intensive communication between the system users and system developers. System analysis or study is an important phase of any system development process. The system is studied to the minutest detail and analyzed. The system analyst plays the role of the interrogator and dwells deep into the working of the present system. The system is viewed as a whole and the input to the system are identified. The outputs from the organizations are traced to the various processes. System analysis is concerned with becoming aware of the problem, identifying the relevant and decisional variables, analyzing and synthesizing the various factors and determining an optimal or at least a satisfactory solution or program of action.

 A detailed study of the process must be made by various techniques like interviews, questionnaires etc. The data collected by these sources must be scrutinized to arrive to a conclusion. The conclusion is an understanding of how the system functions. This system is called the existing system. Now the existing system is subjected to close study and problem areas are identified. The designer now functions as a problem solver and tries to sort out the difficulties that the enterprise faces. The solutions are given as proposals. The proposal is then weighed with the existing system analytically

and the best one is selected. The proposal is presented to the user for an endorsement by the user. The proposal is reviewed on user request and suitable changes are made. This is loop that ends as soon as the user is satisfied with proposal.

Preliminary study is the process of gathering and interpreting facts, using the information for further studies on the system. Preliminary study is problem solving activity that requires intensive communication between the system users and system developers. It does various feasibility studies. In these studies a rough figure of the system activities can be obtained, from which the decision about the strategies to be followed for effective system study and analysis can be taken. Here in the project E-Ticketing, a detailed study of existing system is carried along with all the steps in system analysis. An idea for creating a better project was carried and the next steps were followed.

2.2   FEASIBILITY STUDY

An important outcome of the preliminary investigation is the determination that the system requested is feasible. Feasibility study is carried out to select the best system that meets the performance requirements.

Feasibility study is both necessary and prudent to evaluate the feasibility of the project at the earliest possible time. It involves preliminary investigation of the project and examines whether the designed system will be useful to the organization. Months or years of effort, thousand for millions of money and untold professional embarrassment can be averted if an in-conceived system is recognized early in the definition phase.

The different types of feasibility are: Technical feasibility, Operational feasibility,

Economical feasibility.

2.2.1 Technical feasibility

Technical Feasibility deals with the hardware as well as software requirements. Technology is not a constraint to type system development. We have to find out whether the necessary technology, the proposed equipment's have the capacity to hold the data, which is used in the project, should be checked to carry out this technical feasibility.

The technical feasibility issues usually raised during the feasibility stage of investigation includes these

- This software is running in windows 2000 Operating System, which can be easily installed.

- The hardware required is Pentium based server.

- The system can be expanded.

2.2.2 Behavioral Feasibility

This feasibility test asks if the system will work when it is developed and installed. Operational feasibility in this project:

- The proposed system offers greater level of user-friendliness.

- The proposed system produces best results and gives high performance. It can be implemented easily .So this project is operationally feasible.

2.2.3 Economical Feasibility

Economical Feasibility deals about the economic impact faced by the organization to implement a new system. Financial benefits must equal or exceed the costs. The cost of conducting a full system, including software and hardware cost for the class of application being considered should be evaluated. Economic Feasibility in this

project:

- The cost to conduct a full system investigation is possible.

- There is no additional manpower requirement.

- There is no additional cost involved in maintaining the proposed system.

2.3 SYSTEM SPECIFICATION

2.3.1 Hardware Specification

Processor   : Intel Pentium IV 2.4 GHZ or above

Clock speed   : 500 MHZ

System bus   : 32 bits

RAM   : 256MB of RAM

HDD   : 40 GB or higher

Monitor   : SVGA COLOR

Keyboard   : 108 keys

Mouse   : 2 button mouse

2.3.2 Software Specification

OS   :   MS WINDOWS XP/2000/07/08/10/Mac/Unix

Front End   :   HTML, CSS, Php

Back End   :   MySQL

2.4   Existing System

Existing system refers to the system that is being followed till now. The existing system requires more computational time, more manual calculations, and the complexity involved in Selection of features is high. The other disadvantages are lack of security of data, Deficiency of Data accuracy, Time consuming etc. To avoid all these limitations and make the working more accurately the system needs to be computerized. Here in the Electronic bus ticketing, a detailed study of existing system is carried along with all the steps in system analysis.

2.4.1   Draw backs of existing system.

Here in the Electronic bus ticketing, a detailed study of existing system is carried along with all the steps in system analysis. An idea for creating a better project was carried and the next steps were followed.

a) Lack of security of data.

b) More man power.

c) Time consuming.

d) Consumes large volume of pare work.

e) Needs manual calculations.

f) No direct role for the higher officials.

g) Damage of machines due to lack of attention.

h) No need of specific app.

i) Don't depend on any system windows/mac.

To avoid all these limitations and make the working more accurately the system needs to be online and hazel free.

2.5   PROPOSED SYSTEM

The aim of proposed system is to develop a system of improved facilities. The proposed system can overcome all the limitations of the existing system. The system provides proper security and reduces the work required by developer and manual. The existing system has several disadvantages and many more difficulties to work well. The proposed system tries to eliminate or reduce these difficulties up to some extent. The proposed system will help the user to reduce the workload and mental conflict. The proposed system helps the user to work user friendly and he can easily do his jobs without time lagging.

2.5.1 Advantages of Proposed System

The system is very simple in design and to implement. The system requires very low system resources and the system will work in almost all configurations. It has got following features

a) Ensure data accuracy.

b) Minimize manual data entry.

c) Minimum time needed for the various processing

d) Greater efficiency

e) Better Service

f) Minimum time required

g) The ticket machines would help prevent loss on account of malpractice

h) It would also help in providing adequate data to the corporation, particularly with regard to boarding of passengers from fare stages and important points

i) This would help the corporation prepare and organize its schedules more efficiently on the basis of traffic demand.

j) It would provide data on concessions given to various sections.

3. SYSTEM DESIGN

3.1 Introduction

System Design is the most creative and challenging phase in the system life cycle. Design is the first step into the development phase for any engineered product or system. Design is a creative process. A good design is the key to effective system. System design is a solution how to approach the creation of a new system. System design transforms a logic representation of what is required to do into the physical specification. The specification is converted into physical reality during development.

3.2 Logical Design

The logical flow of a system and define the boundaries of a system. It includes the following steps:

1. Reviews the current physical system – its data flows, file content, volumes, frequencies etc.

2. Prepares output specifications – that is, determines the format, content and Frequency of reports.

3. Prepares input specifications – format, content and most of the input functions.

4. Prepares edit, security and control specifications.

5. Specifies the implementation plan.

6. Prepares a logical design walk through of the information flow, output, input, controls and implementation plan.

7. Reviews benefits, costs, target dates and system constraints.

3.3 Physical design

Physical system produces the working systems by define the design specifications that tell the programmers exactly what the candidate system must do. It includes the following steps.

- Design the physical system.

- Specify input and output media.

- Design the database and specify backup procedures.

- Design physical information flow through the system and a physical design Walk through.

- Plan system implementation.

- Prepare a conversion schedule and target date.

- Determine training procedures, courses and timetable.

- Devise a test and implementation plan and specify any new hardware/software.

- Update benefits , costs , conversion date and system constraints

3.3.1 Design/Specification activities

- Concept formulation.

- Problem understanding.

- High level requirements proposals.

- Feasibility study.

- Requirements engineering.

- Architectural design.

3.4 Input Design

Input Design deals with what data should be given as input, how the data should be arranged or code, the dialog to guide the operating personnel in providing input, methods for preparing input validations and steps to follow when error occur. Input Design is the process of converting a user-oriented description of the input into a computer-based system. This design is important to avoid errors in the data input process and show the correct direction to the management for getting correct information from the computerized system. It is achieved by creating user-friendly screens for the data entry to handle large volume of data. The goal of designing input is to make data entry easier and to be free from errors. The data entry screen is designed in such a way that all the data manipulates can be performed. It also provides record viewing facilities.

When the data is entered it will check for its validity. Data can be entered with the help of screens. Appropriate messages are provided as when needed so that the user will not be in maize of instant. Thus the objective of input design is to create an input layout that is easy to follow.

In this project, the input design consists of a log in screen, source and destination browsing button, a menu list for selecting the algorithm.
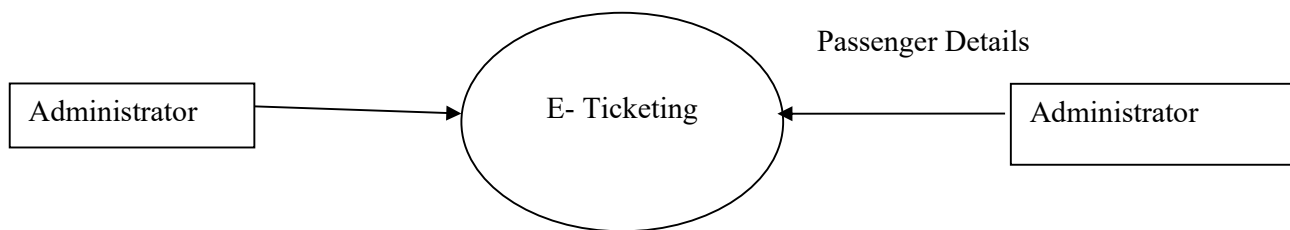
3.5 Output Design

 A quality output is one, which meets the requirements of the end user and presents the information clearly. The objective of output design is to convey information about past activities, current status or projections of the future, signal important events,
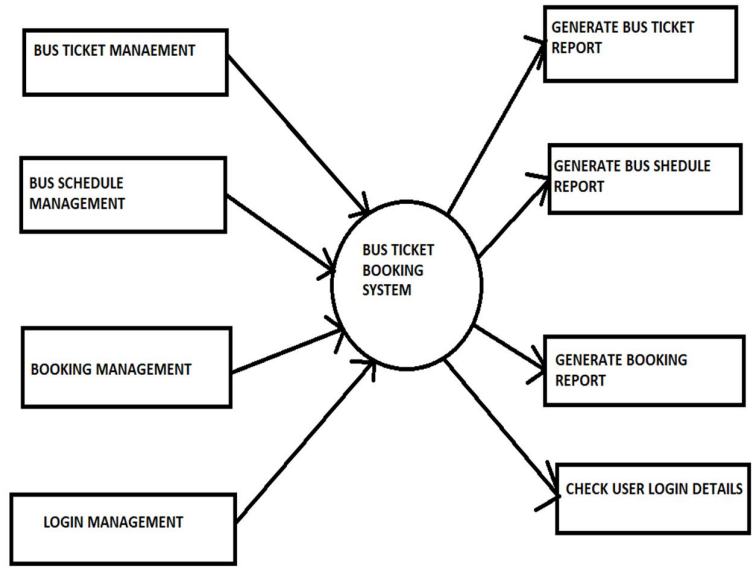
opportunities, problems, or warnings, trigger an action, confirm an action etc. Efficient, intelligible output design should improve the system's relationship with the user and helps in decisions making. In output design the emphasis is on displaying the output on a screen in a predefined format. The primary consideration in design of output is the information requirement and objectives of the end users. The major formation of the output is to convey the information and so its layout and design need a careful consideration.

3.6   Data flow diagram

Data flow oriented techniques advocate that the major data items handled by a system must be first identified and then the processing required on these data items to produce the desired outputs should be determined.
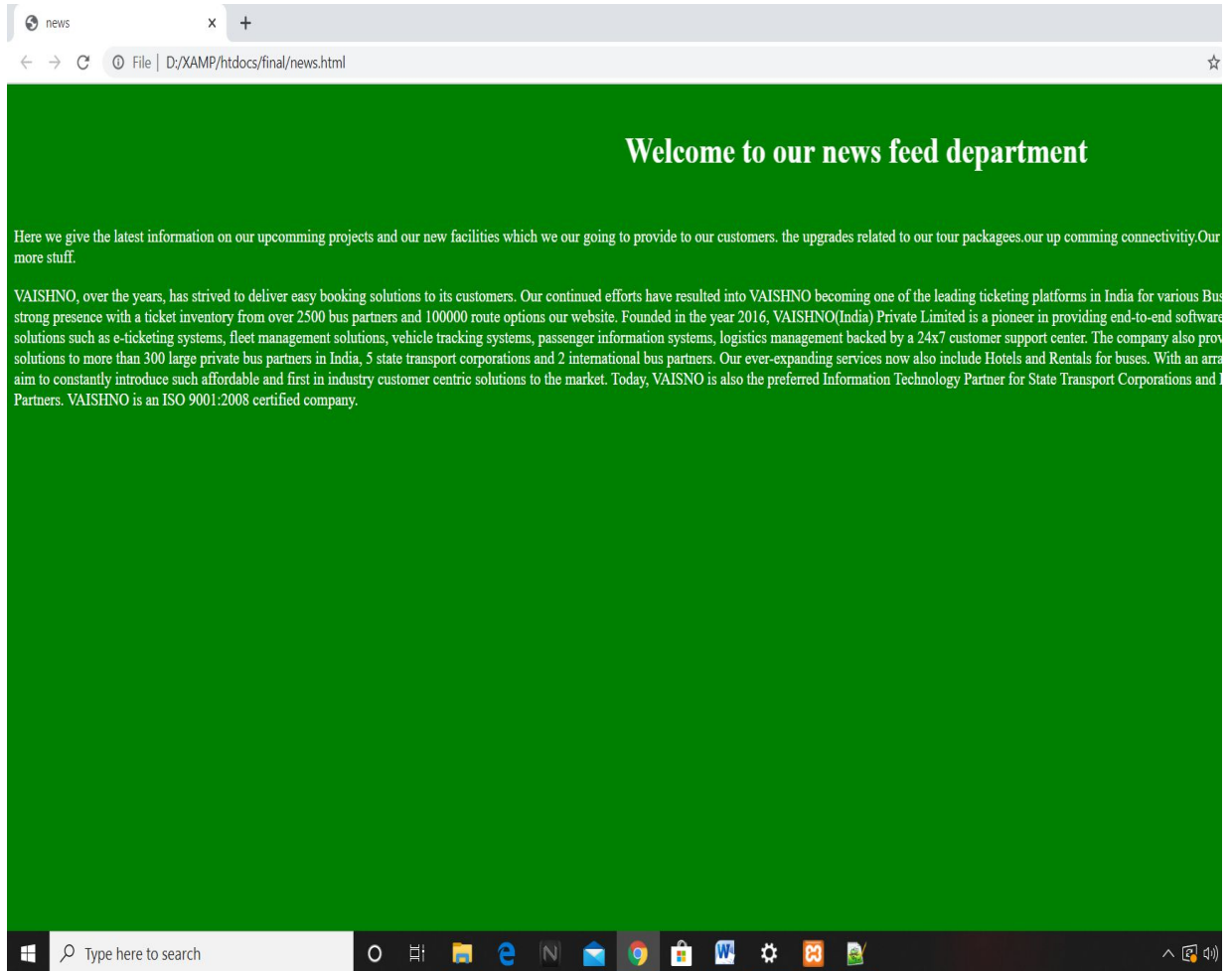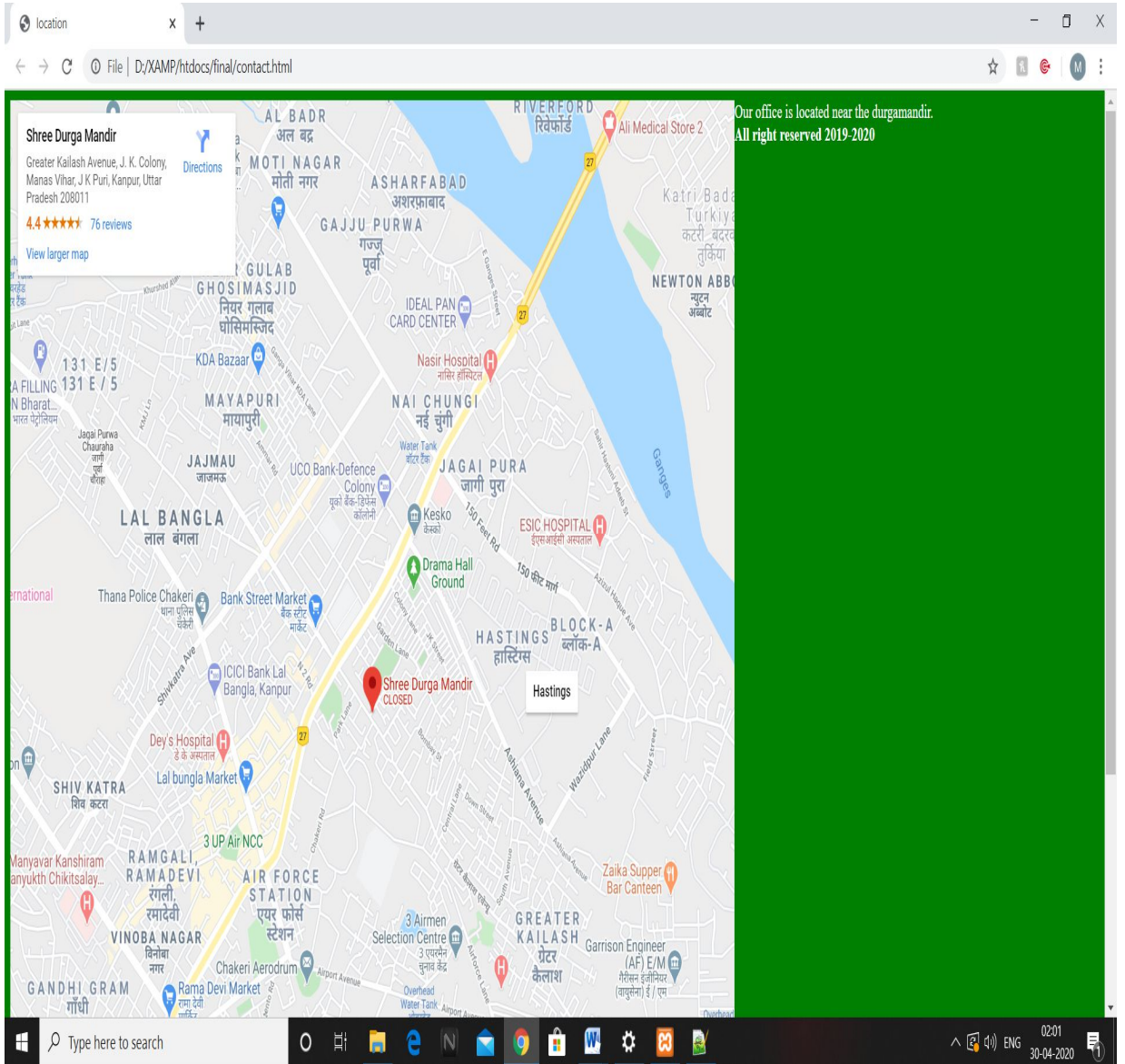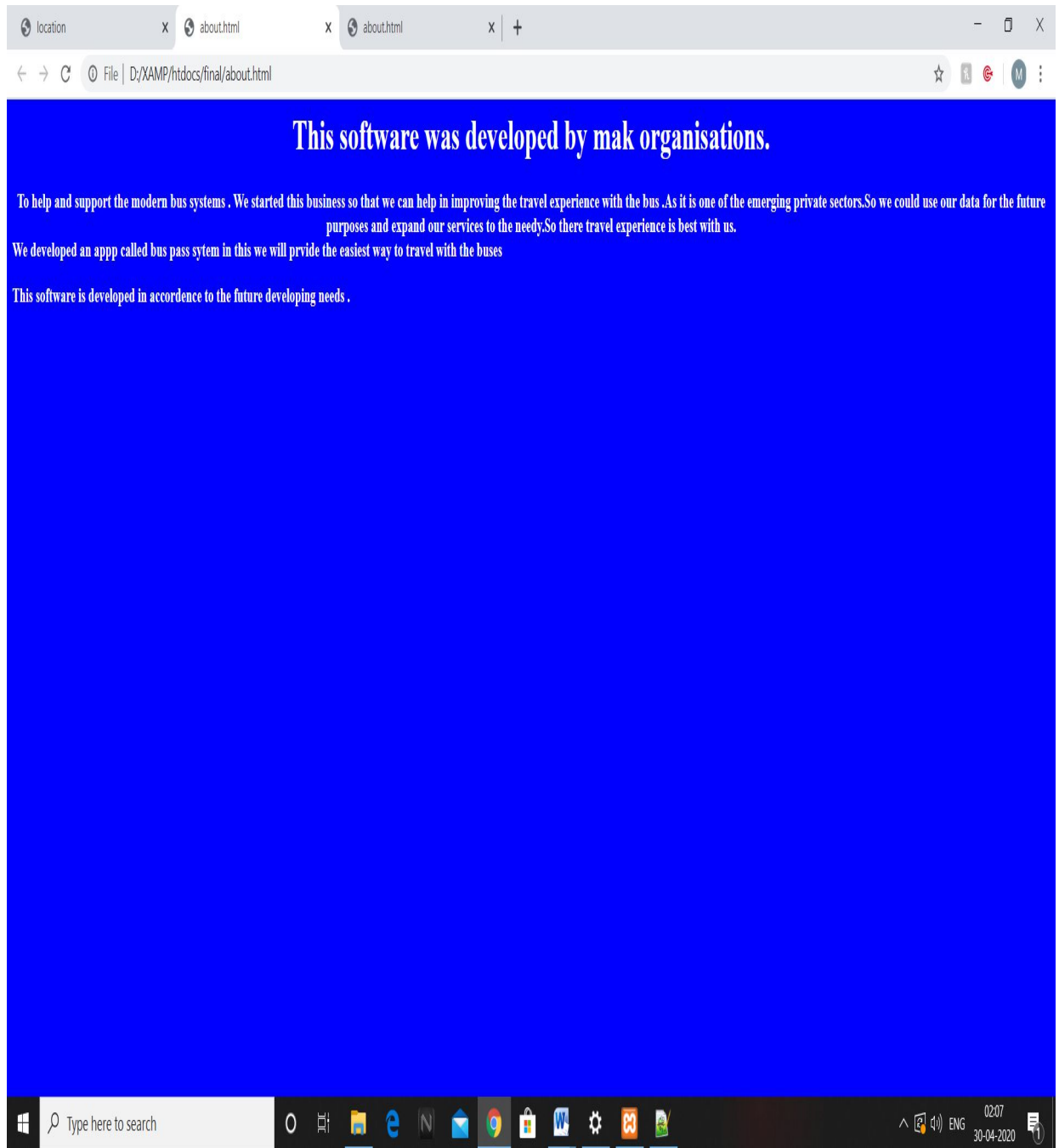

1. DFD LEVEL 0

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┌──────────────────────┐                              ┌──────────────────────┐
│ BUS TICKET MANAEMENT │────┐                    ┌───▶│ GENERATE BUS TICKET  │
└──────────────────────┘    │                    │    │ REPORT               │
                            │                    │    └──────────────────────┘
┌──────────────────────┐    │                    │
│ BUS SCHEDULE         │────┤                    │    ┌──────────────────────┐
│ MANAGEMENT           │    │   ╭──────────╮     ├───▶│ GENERATE BUS SHEDULE │
└──────────────────────┘    ├──▶│BUS TICKET│─────┤    │ REPORT               │
                            │   │ BOOKING  │     │    └──────────────────────┘
┌──────────────────────┐    │   │ SYSTEM   │     │
│ BOOKING MANAGEMENT   │────┤   ╰──────────╯     ├───▶┌──────────────────────┐
└──────────────────────┘    │                    │    │ GENERATE BOOKING     │
                            │                    │    │ REPORT               │
┌──────────────────────┐    │                    │    └──────────────────────┘
│ LOGIN MANAGEMENT     │────┘                    └───▶┌──────────────────────┐
└──────────────────────┘                             │ CHECK USER LOGIN     │
                                                     │ DETAILS              │
                                                     └──────────────────────┘
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II. LEVEL 2 DFD

4.OUTPUT

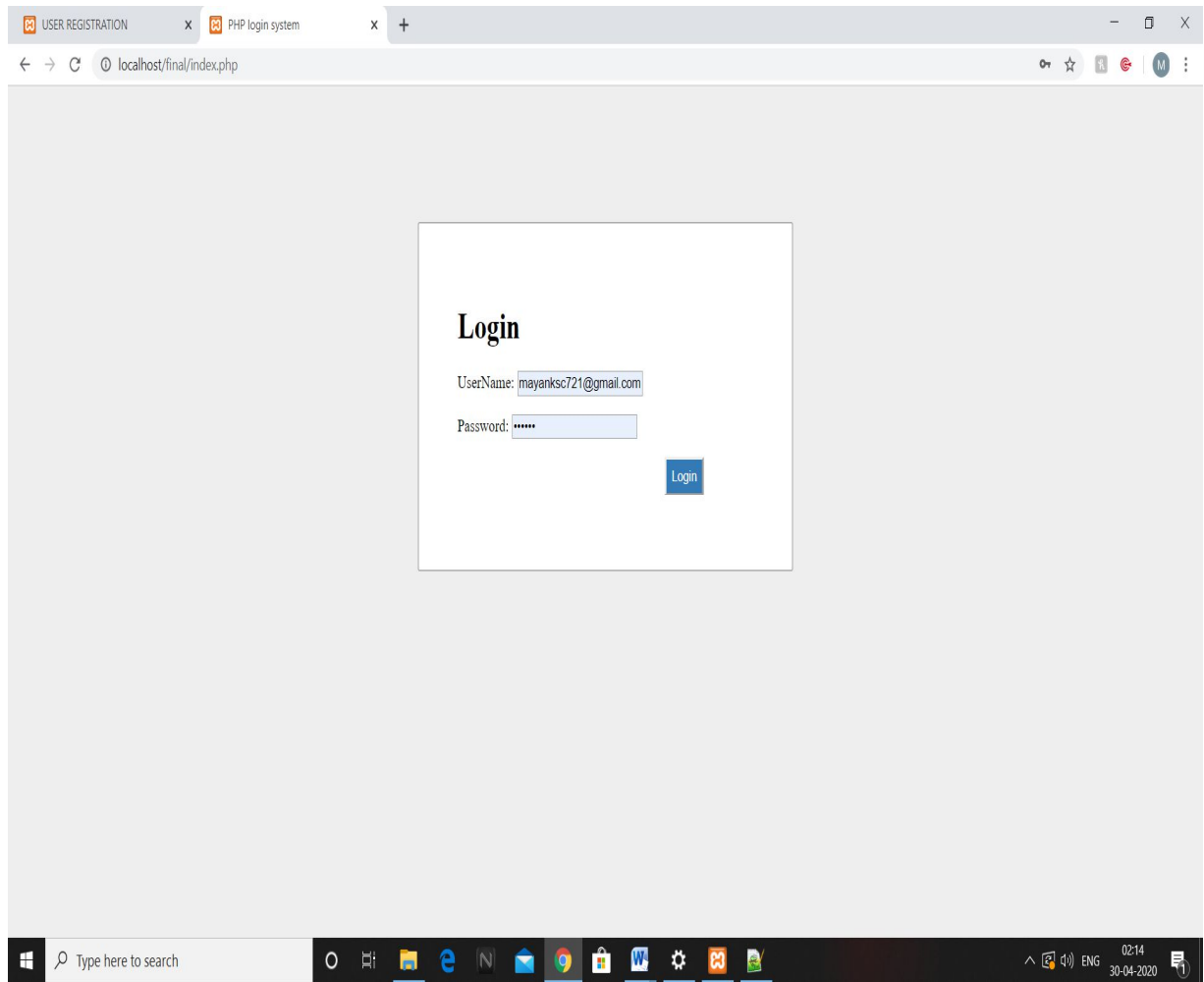## i. This is our news feed page

ii. This is our contact page

This software was developed by mak organisations.

To help and support the modern bus systems . We started this business so that we can help in improving the travel experience with the bus .As it is one of the emerging private sectors.So we could use our data for the future purposes and expand our services to the needy.So there travel experience is best with us.
We developed an appp called bus pass sytem in this we will prvide the easiest way to travel with the buses

This software is developed in accordence to the future developing needs .

iii. This is about page

16

iv. This is the registration page

v. This is the login page

Login failed. Invalid username or password.
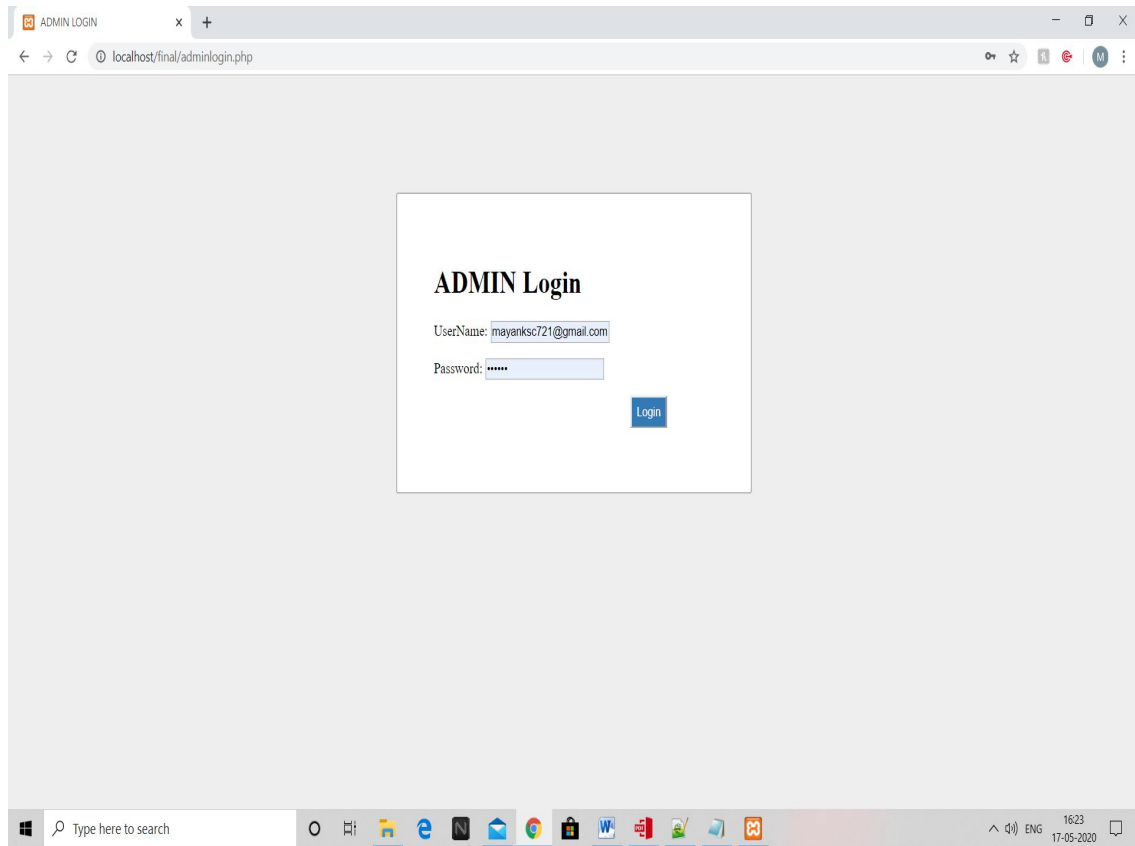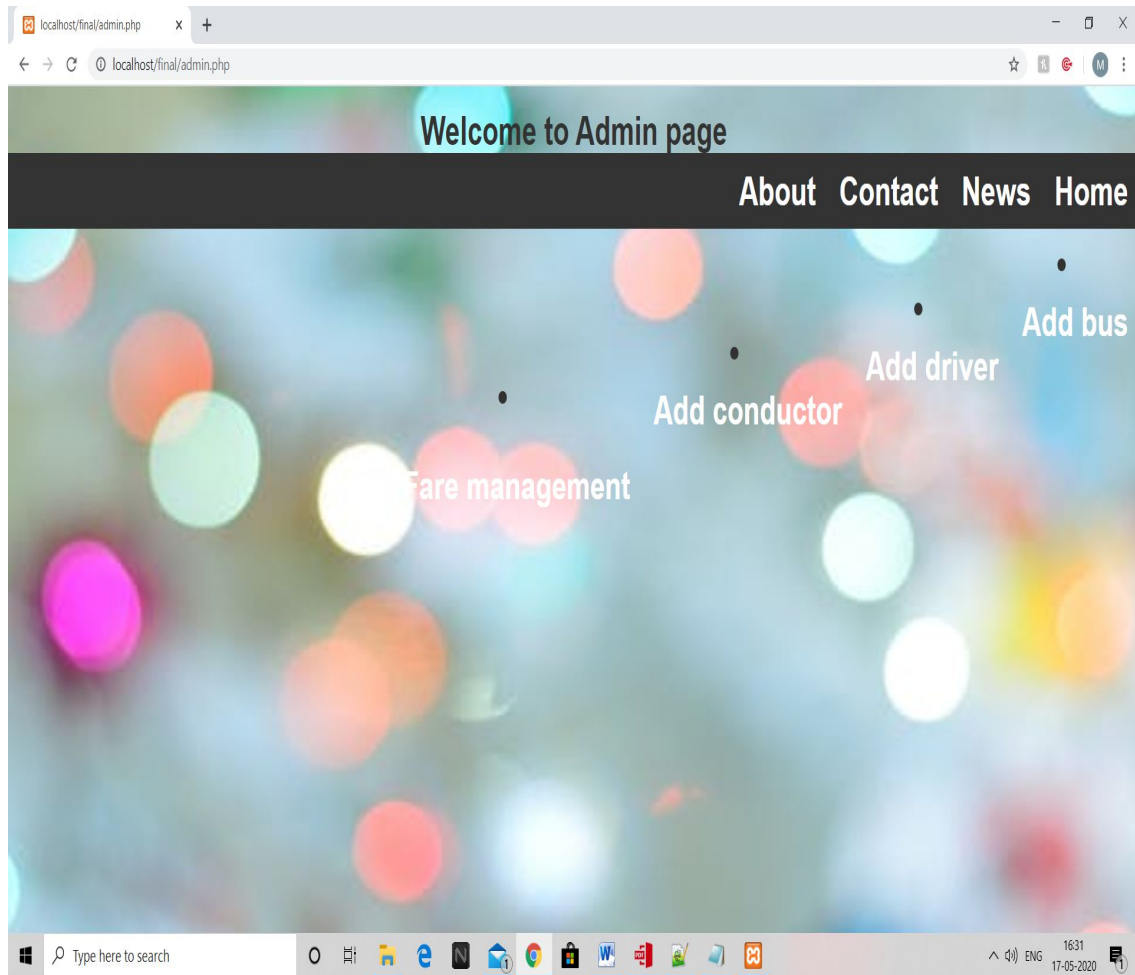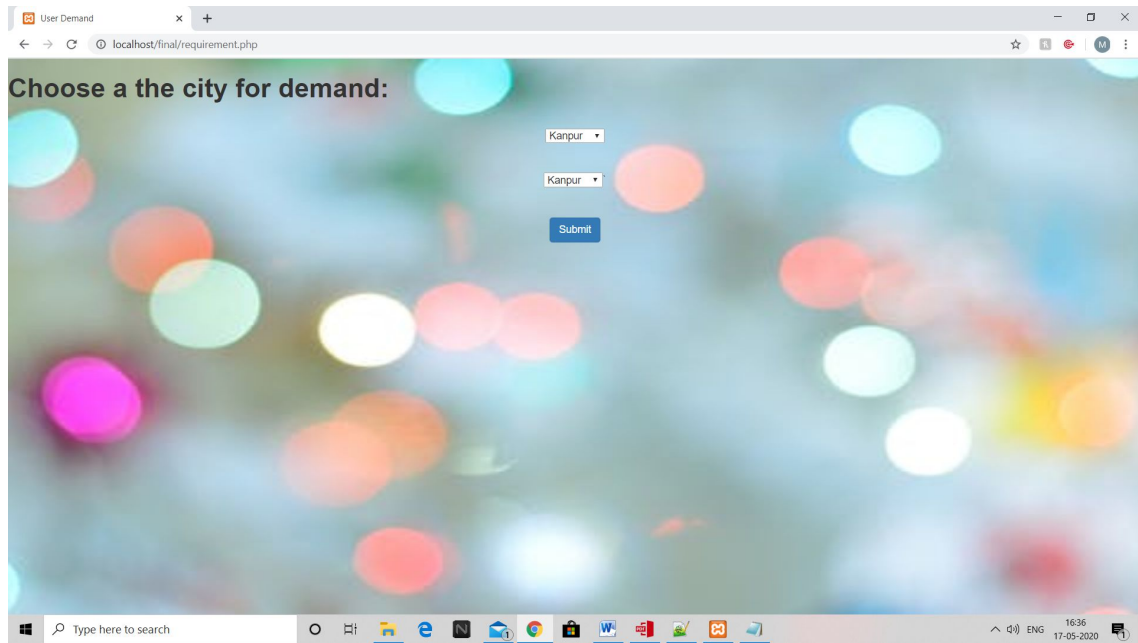
vi. When login details are not valid
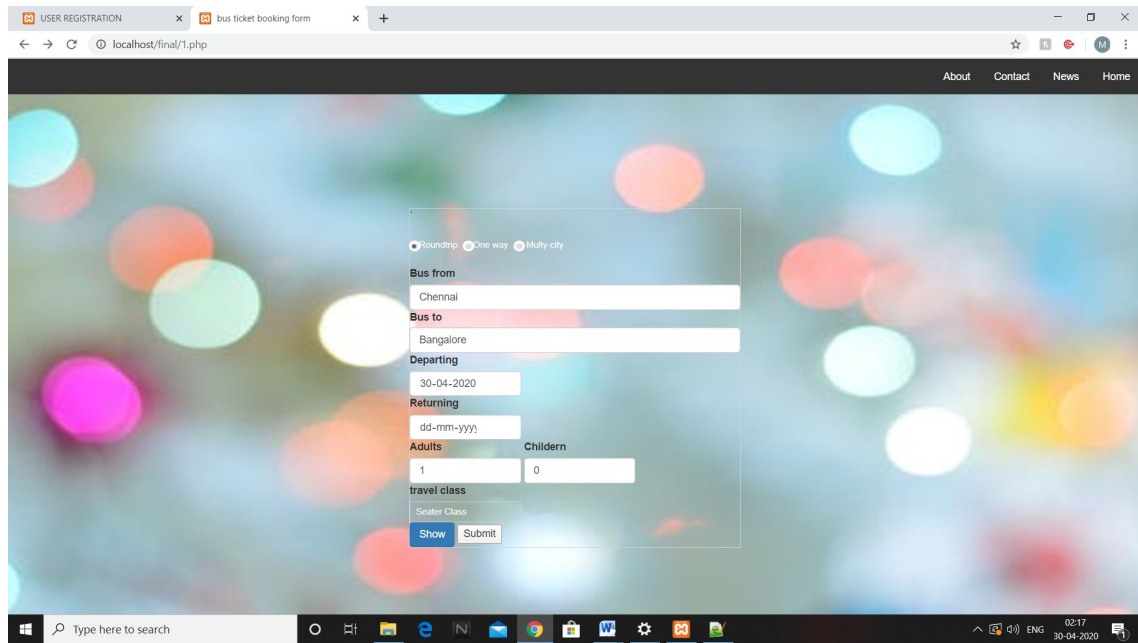
vii. Bus search page

viii. Admin Login

ix. Amin page

x. Bus demand by user

5.References

a) https://www.w3schools.com/howto/howto_css_login_form.asp
b) https://www.researchgate.net/publication/326468848_Online_Bus_Ticket_Reservation_System
c) https://www.visual-paradigm.com/guide/data-flow-diagram/what-is-data-flow-diagram/