

A Project Report
ON
Bus Ticket Booking System



Academic Year

2022-2023

Developed By

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&

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Under the Guidance of

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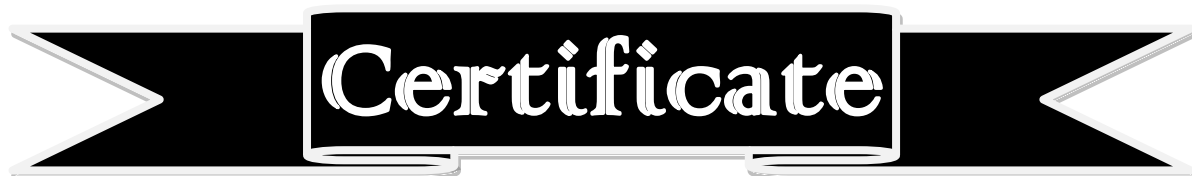
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(College Code : 73001)

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This is to certify that Mr. / Ms.

Sojitra Dhaval Haribhai

And

Vasoya Jimit Ashokbhai

has satisfactorily completed their academic Project work on

Bus Ticket Booking System

*as a part of the BCA Semester –6 Project work prescribed by the
Saurashtra University for the academic year 2022-23.*

Project ID :- _____

Exam Seat No. :- _____ & _____

Class :- BCA Sem – 6

Enrollment No. :- 003203202992&003203203006

Project guide

Principal

ACKNOWLEDGEMENT

We take this opportunity to express our gratitude to our guide, Sojitra Bharat Sir a computer department, Project Guide for their valuable guidance and continual encourage us throughout the project. We are heartily thankful to him for his time-to-time suggestion and clarifying the concepts of the topic the helped us a lot during the development of the project, for his help getting a better understanding of the project domain, solving problems encountered during project implementation as well as project testing, and for his precious suggestion for the project, through his experience in project development.

We special thanks to our family members for the moral support given throughout our study, above all we offered. We heartiest regards to "GOD" for given us strength work inspiration.

Thank You....

ABSTRACT

Travel industry is evolving day to day. As the industry evolves the need to digitalize all the transactions becomes need of the hour. This project which is implemented on Andriod platform helps to manage bus scheduling and bookings. This Bus Booking System is a easily deployable, integrated end-to-end system starting from searching bus routes to book them.

It is a Digital Bus Management System for Bus Transportation services. People who are traveling through a Bus Transportation System or have their own Bus Travel Agency or State/National Government Bus Transport Service can use this system. The key features of the system are Manage Bus, Manage Route, Manage Fares, Manage Bookings, Entire Bus Transport System.Book Online Seats and much more. This system was made keeping in mind a Real-World BusTransport Management Problems, Risk and Digital solutions to it.

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Project Profile

| | | |
|----------------------------|---|--|
| ❖ Project Title | : | Bus Ticket Booking System |
| ❖ Organization | : | J D Tour & Travels |
| ❖ Front End Tool | : | Kotlin and Android Studio 2021 |
| ❖ Back End Tool | : | SQLite Database |
| ❖ Operating System | : | API 16 : Android 4.1 (Jelly Bean) |
| ❖ Project Term Size | : | Two |
| ❖ Developed By | : | Sojitra Dhaval H. & Vasoya Jimit A. |
| ❖ Project Guide | : | Sojitra Bharat Sir |
| ❖ Project duration | : | 2 month |
| ❖ Hardware User | : | Intel(R) i3 10 th Processor 4-GB OF RAM |
| ❖ Submitted to | : | Shree Saurashtra college of Mgt. & comp. science, Atkot |

1. Introduction

1.1 Introduction of our Website

We are making An Application which title is “J D Tour & Travel”. We made this for the “J D Tour & Travel Management System”

This Application is developed by: “Sojitra Dhaval H. & Jimit Vasoya A.,” in this Application We make forms like ,Add bus,Add Route,Booking From,Cancelation,Track Ticket etc....

With the problem above, instead of contacting booking a ticket, we can apply the technology to solve this problem for those who want to discard their chance of missing the bus in case it is full of people.

1.2 Purpose

We are making this Website to save the stationary and rapid work of searching any kind of data about the Student. Using these Website users can save the stationary, paperwork and time also. User has no tension to remember the paper and other documents because all kind of documents are stored in the website.

Using this website can also solve the problem of searching data. If any person wants to get information about any Student, the user can input the name and all kind of information about that Student records are show in the table format in the data grid view.

1.3 Project Scope

The reservation system has three modules. First module helps the customer to enquire the availability of seats in a particular bus at particular date, the second module helps him to reserve a ticket and with the third module he can cancel a reserved ticket. The current bus booking system relies on buying tickets from the conductor for commuting to and from a location through public transportation..

2. System Analysis

2.1 Analysis of current system

First of all we take a visit of the Agency. And visit the Manager of the J D Tour & Travel. He gave the information about the Management and different Types of work that has been doing in

- ❖ In that time mostly all the persons show all the things in Website.
- ❖ Because in that modern time all the things are available in Website so no need to purchase it from market.

3. System Requirement Analysis

3.1 User Characteristic

- ❖ User must have knowledge of Android system.
- ❖ He must be able to remember his username and password.
- ❖ He must have knowledge of this system and its functionalities.
- ❖ He must have to know how to access Android.

3.2 Hardware, Software requirement

During this phase of SDLC, one has to enlist the configuration of hardware and support software essential to execute the specified application

Hardware Requirements:-

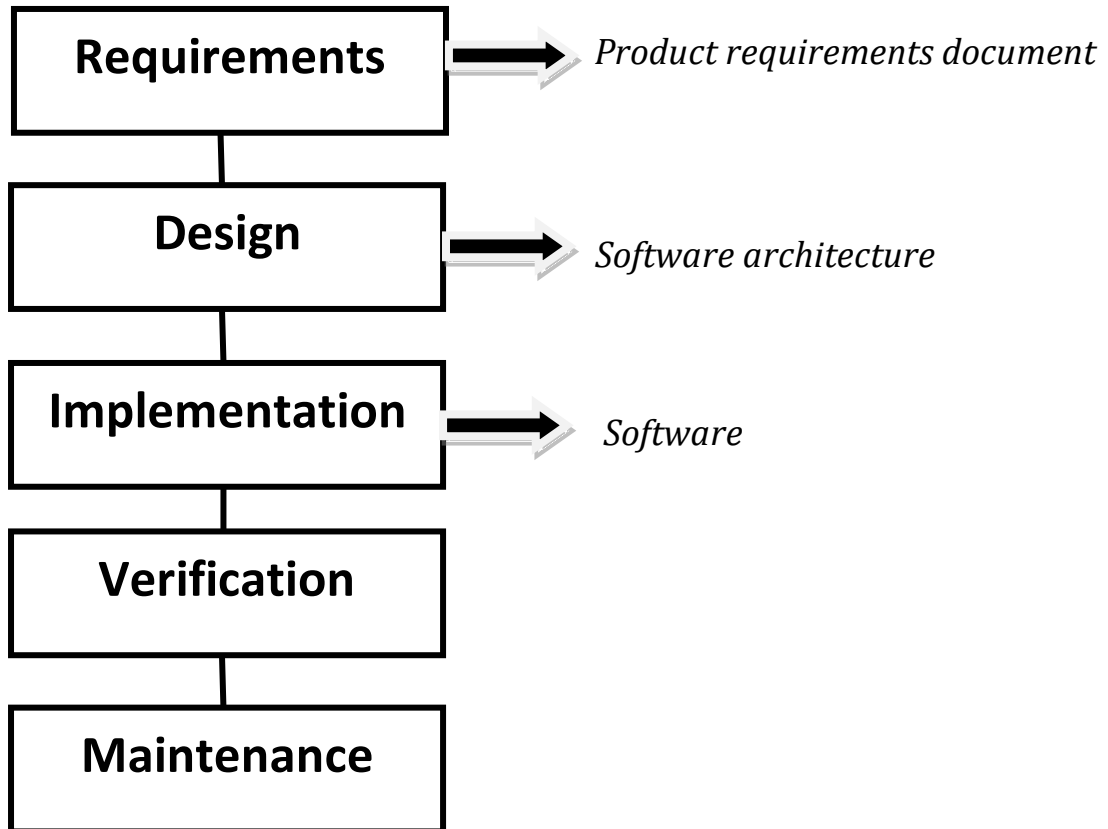
| Category | Hardware |
|-----------------|--|
| Processor | Intel Core i3 10 th (1.50 GHZ) or Above |
| Hard Disk Drive | 128 GB |
| RAM | 4 GB(Minimum) |

Software Requirements:-

| No. | Software Used |
|-----|---------------------------------|
| 1 | Operating System : Windows |
| 2 | Front Design : Android Studio |
| 3 | Front-End Language : Kotlin,xml |
| 4 | Back-End : SQLite |

4. Project Management

4.1 Project Model



5. Feasibility Analysis

Feasibility of the project determines whether it is possible to develop the project or not. There are 3 main factors, which determine the feasibility of the project. They are discussed as follow:-

- ❖ *Technical Feasibility*
- ❖ *Economical Feasibility*
- ❖ *Operational Feasibility*

5.1 Technical Feasibility :-

The technical feasibility takes into consideration the technical requirement and their availability in the market. It determines whether it is possible to develop the proposed system with the present technology or not. The technical possibilities of present system are as follows:-

- *The hardware is currently being used by the company.*
- *Proposed system doesn't require any technical details.*
- *It needs low configuration computer system.*
- *The technical specification is easy available in the market.*

5.2 Economical Feasibility :-

| No. | Software | Requirement | Max | Price |
|-----|----------------|------------------------|-----------|-------|
| 1 | OS | Windows10 | Windows10 | 10580 |
| 2 | Hard disk | Free space up to 20 GB | 150 GB | 1490 |
| 3 | Andriod Studio | 1 GB | 1.5 GB | - |

5.3 Operational Feasibility :-

The operational feasibility deals with the matter whether the proposed system fulfils the requirement of the firm. This feasibility determines whether the proposed system covers all the aspect of the current system. The possibility of the operational feasibility is as follows:-

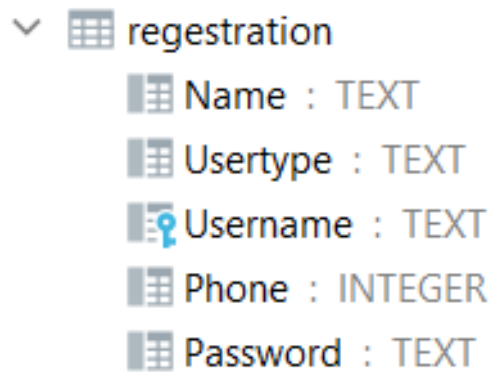
- *The proposed system will fulfill the firms' requirement.*
- *The proposed system covers all the aspect of the working system.*
- *The expected users of the proposed system are honestly eager for the new system.*
- *The changes made in this system are quite beneficially*

6. System and Database Design







6.1 Database Design :-

The Following are the designs of the tables that shall be used to store the data in the system.

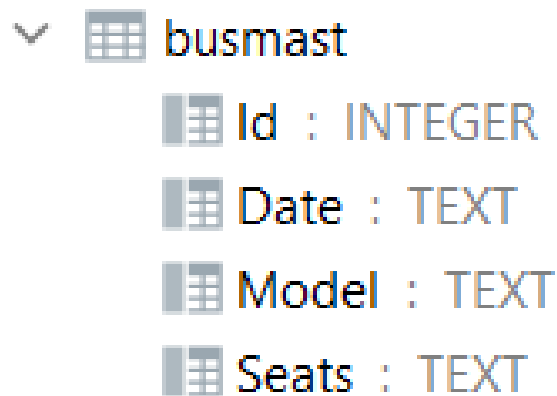
Registration








A screenshot of a database design tool showing the 'registration' table. The table is expanded, showing its fields: Name (TEXT), Usertype (TEXT), Username (TEXT with a key icon), Phone (INTEGER), and Password (TEXT). Each field is preceded by a small table icon.

| | | |
|---|---|-----------------|
| ▼ |  | registration |
| |  | Name : TEXT |
| |  | Usertype : TEXT |
| |  | Username : TEXT |
| |  | Phone : INTEGER |
| |  | Password : TEXT |









Bus Master












A screenshot of a database design tool showing the 'busmast' table. The table is expanded, showing its fields: Id (INTEGER), Date (TEXT), Model (TEXT), and Seats (TEXT). Each field is preceded by a small table icon.

| | | |
|---|---|--------------|
| ▼ |  | busmast |
| |  | Id : INTEGER |
| |  | Date : TEXT |
| |  | Model : TEXT |
| |  | Seats : TEXT |

Route Master

| | | |
|---|---|-------------------|
| ▼ |  | routemast |
| |  | Routeid : INTEGER |
| |  | Busid : INTEGER |
| |  | Frompalce : TEXT |
| |  | Toplace : TEXT |
| |  | Date : TEXT |
| |  | Time : TEXT |
| |  | Price : TEXT |

Booking Registration

| | | |
|---|---|-------------------|
| ▼ |  | bookingmast |
| |  | Id : INTEGER |
| |  | Name : TEXT |
| |  | Routeid : INTEGER |
| |  | Fromplace : TEXT |
| |  | Toplace : TEXT |
| |  | Date : TEXT |
| |  | Seatno : INTEGER |
| |  | Phone : INTEGER |

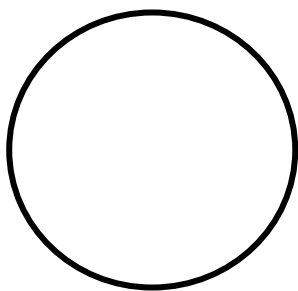
About DFD (Data Flow Diagram)



Represent data flow

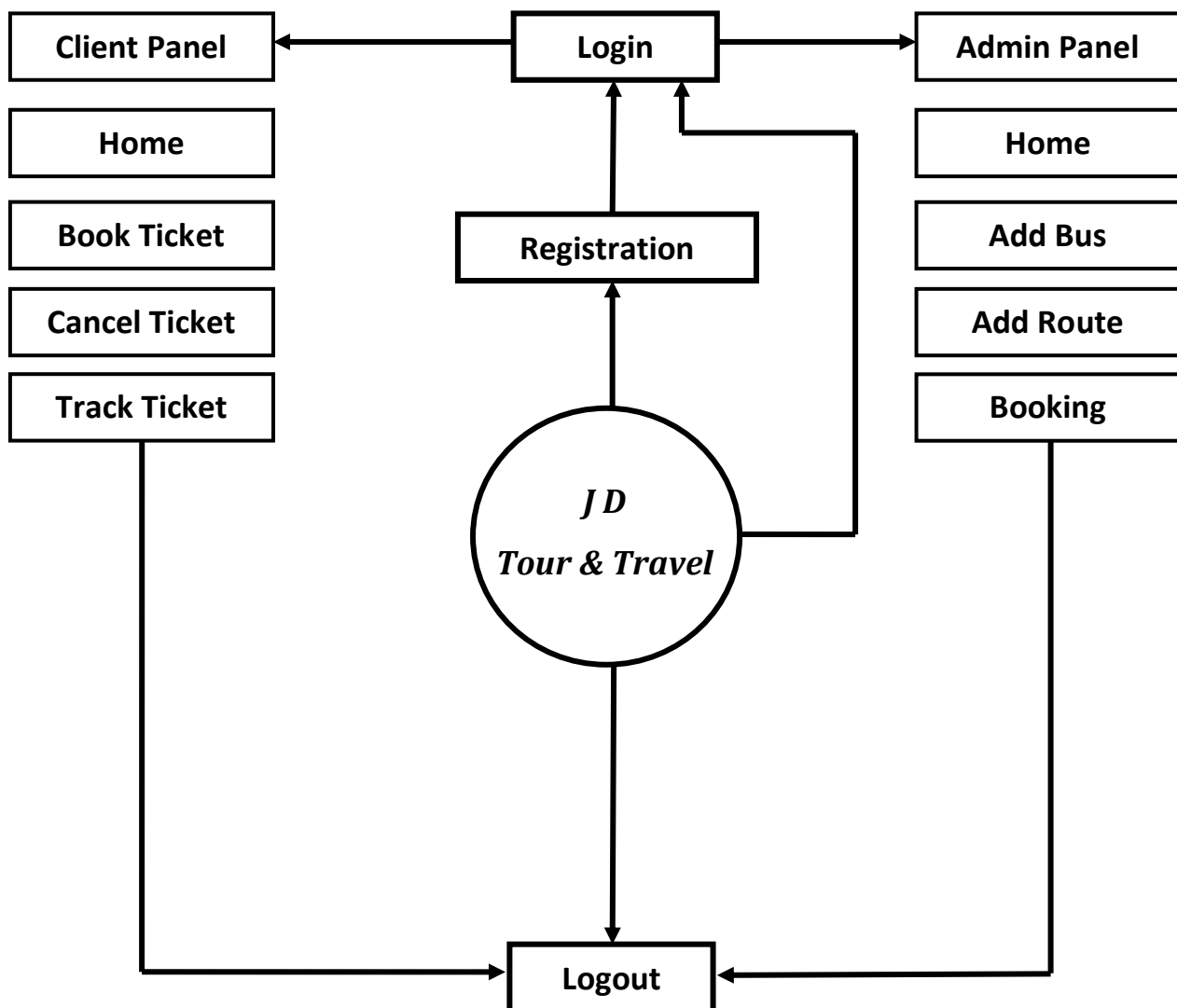


Represent a Form



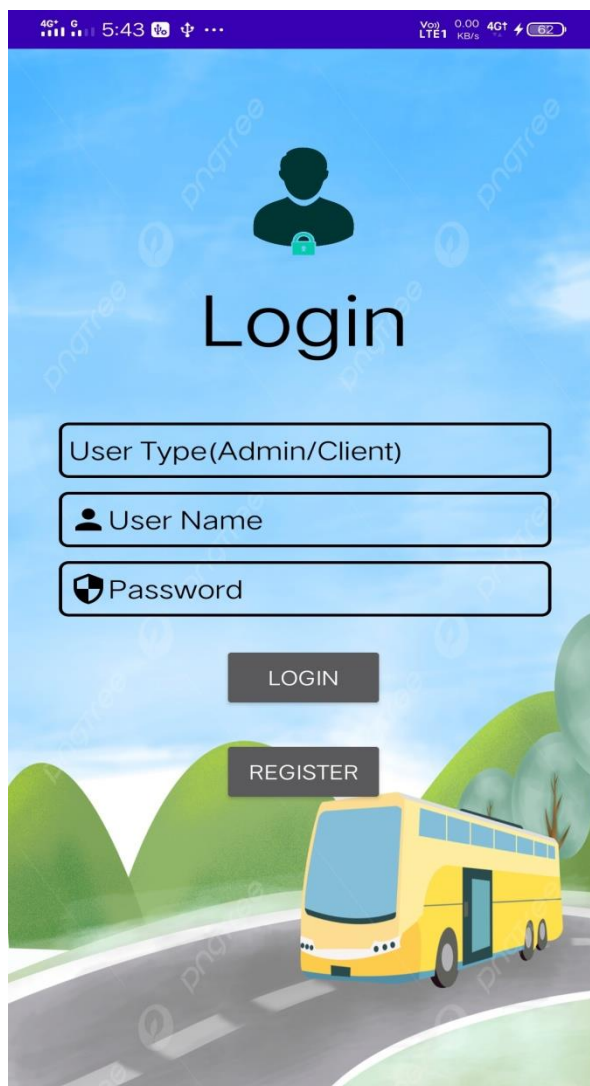
Represent a Processing

6.3 Data Flow Diagram

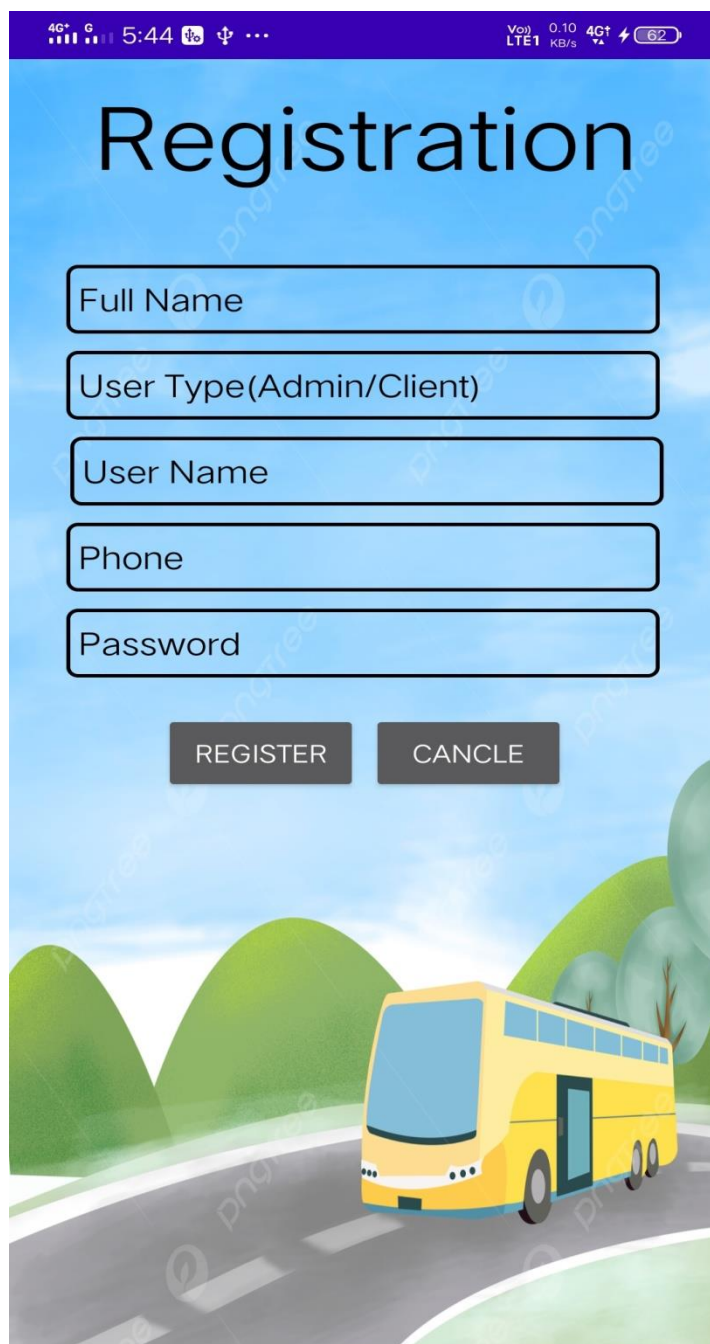


7. Screenshot

Login



Registration



4G+ 5:44 4G+ 0.10 KB/s 62%

Registration

Full Name

User Type(Admin/Client)

User Name

Phone

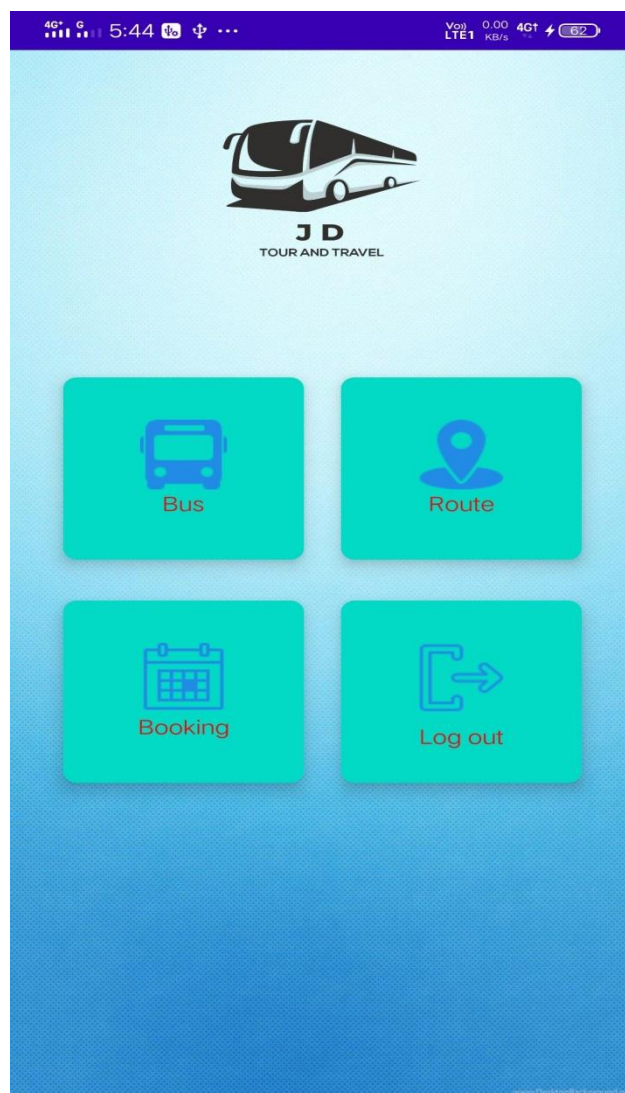
Password

REGISTER CANCEL

Illustration of a yellow bus on a road with green hills in the background.

❖ Admin Panel

Admin Home



Bus Master

The screenshot shows a mobile application interface for managing buses. At the top, there's a status bar with network and battery information. The app title 'Bus Master' is prominently displayed. Below it, there's a form with four input fields: 'Bus ID', 'Date' (with a calendar icon), 'Model', and 'Seats'. An 'ADD' button is positioned below the form. Underneath the button is a search bar with a magnifying glass icon. At the bottom, there's a list of three buses, each displayed in a light blue card with a shadow. The first bus has ID 1, Date 14-02-2023, Model Ashok Leyland, and Seats 40. The second bus has ID 2, Date 07-03-2023, Model Tata, and Seats 40. The third bus has ID 3, Date 14-02-2023, Model Tata, and Seats 30.

4G+ 5:44 VoLTE 0.10 KB/s 4G+ 62

Bus Master

Bus ID

Date

Model

Seats

ADD

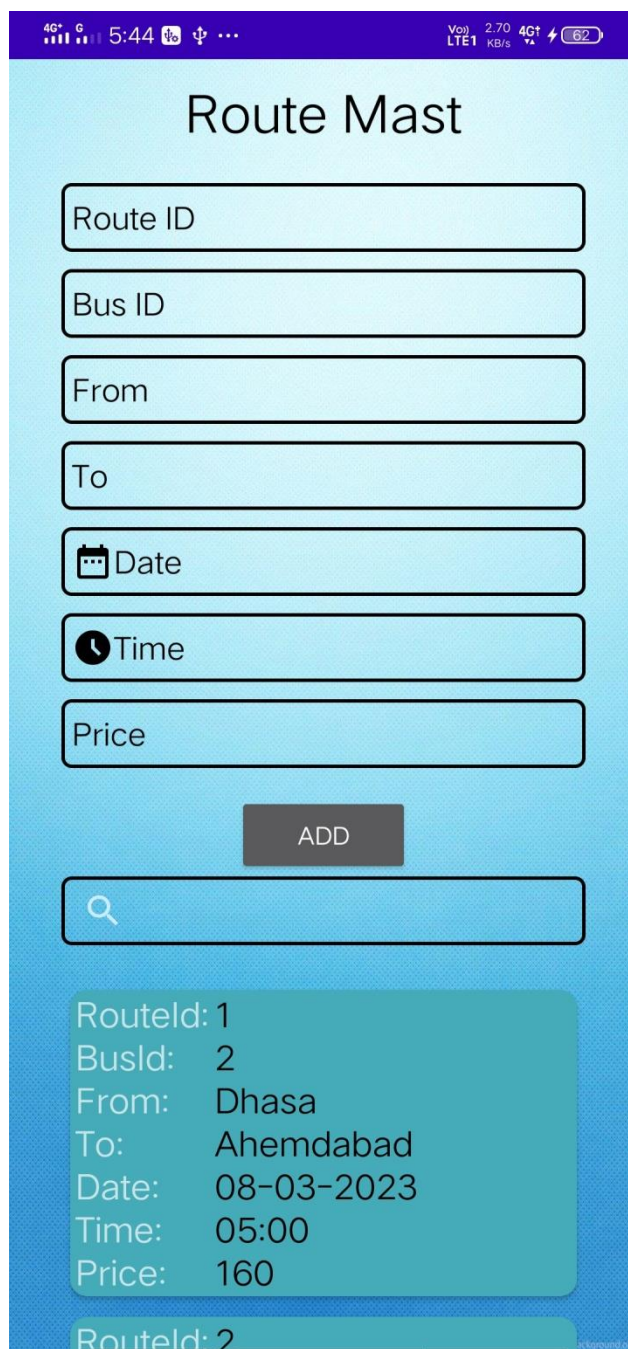
🔍

Id: 1
Date: 14-02-2023
Model: Ashok Leyland
Seats: 40

Id: 2
Date: 07-03-2023
Model: Tata
Seats: 40

Id: 3
Date: 14-02-2023
Model: Tata
Seats: 30

Route Master



Route Mast

Route ID

Bus ID

From

To

Date

Time

Price

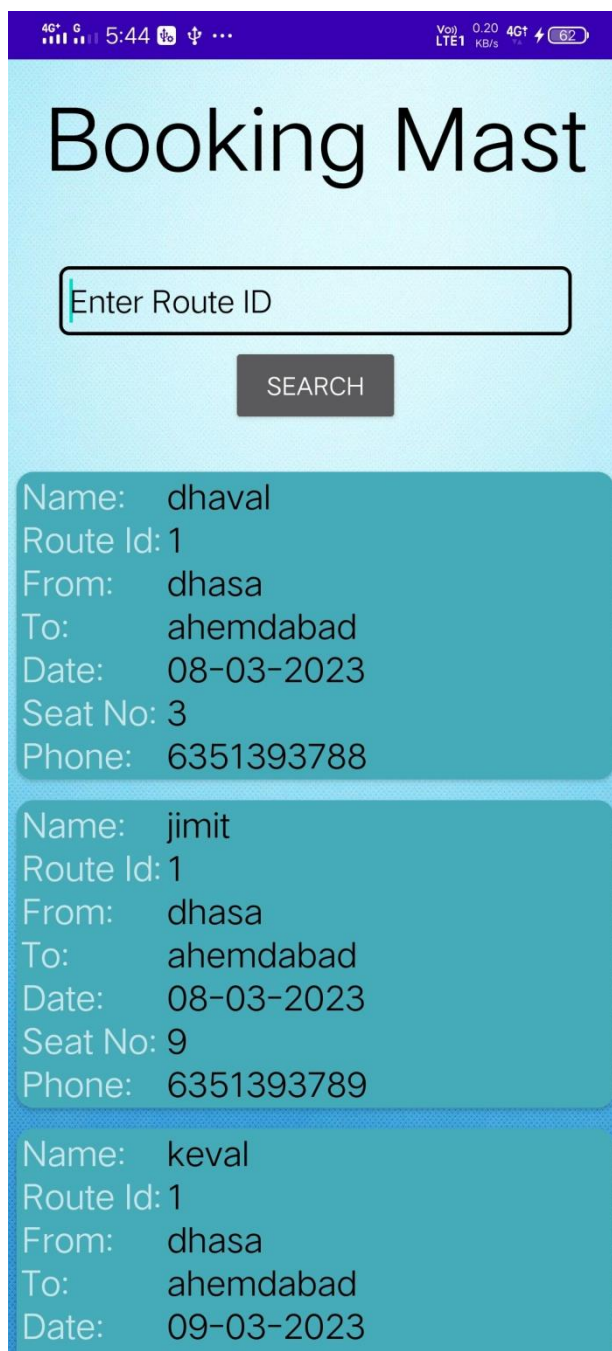
ADD

Search

Routeld: 1
Busld: 2
From: Dhasa
To: Ahemdabad
Date: 08-03-2023
Time: 05:00
Price: 160

Routeld: 2

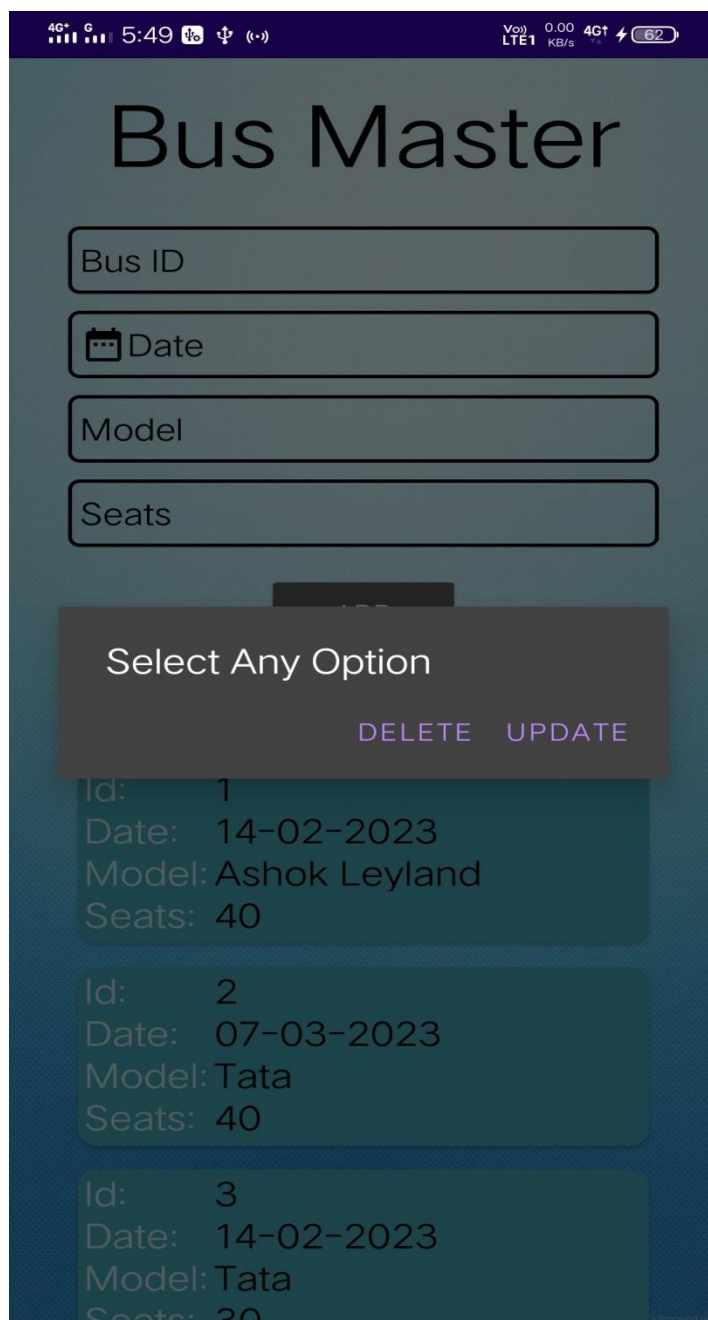
Booking Master



The image shows a mobile application interface for a bus ticket booking system. At the top, there is a status bar with network and battery information. Below this, the title 'Booking Mast' is displayed in a large, bold font. A search bar with the placeholder text 'Enter Route ID' is positioned below the title, followed by a 'SEARCH' button. The main content area displays three booking records, each in a light blue rounded rectangle. Each record contains the following details: Name, Route Id, From, To, Date, Seat No, and Phone.

| Name | Route Id | From | To | Date | Seat No | Phone |
|--------|----------|-------|-----------|------------|---------|------------|
| dhaval | 1 | dhasa | ahemdabad | 08-03-2023 | 3 | 6351393788 |
| jimit | 1 | dhasa | ahemdabad | 08-03-2023 | 9 | 6351393789 |
| keval | 1 | dhasa | ahemdabad | 09-03-2023 | | |

Delete or Update Dialog



Update Bus

4G 5 5:49 LTE1 0.00 KB/s 4G+ 62

Update Bus

UPDATE

www.fivestopbus.com

Update Route

Update Route

1

2

Dhasa

Ahemdabad

08-03-2023

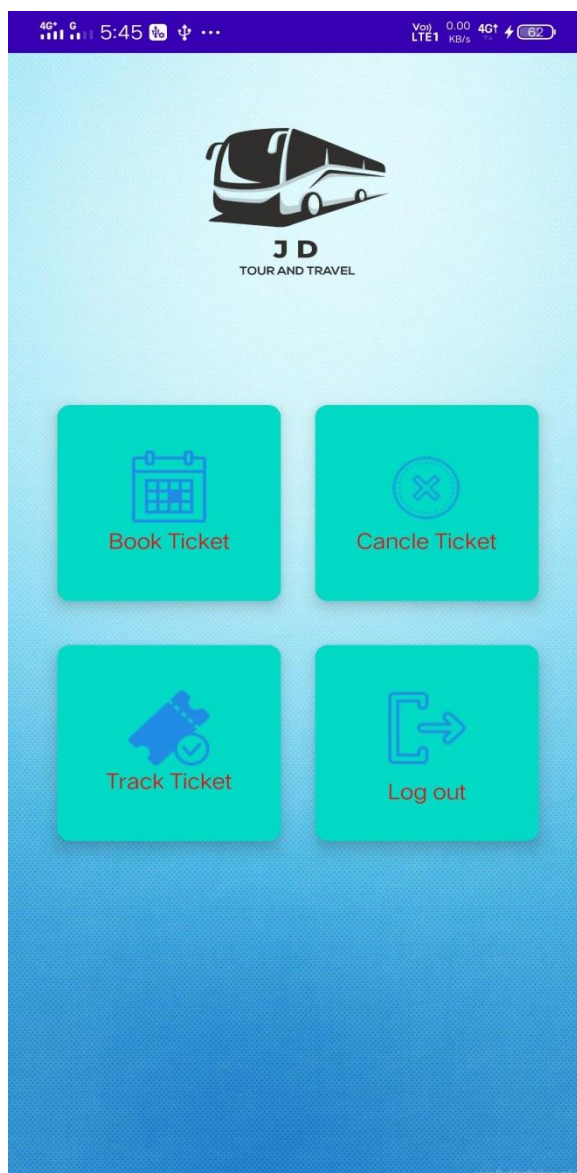
05:00

160

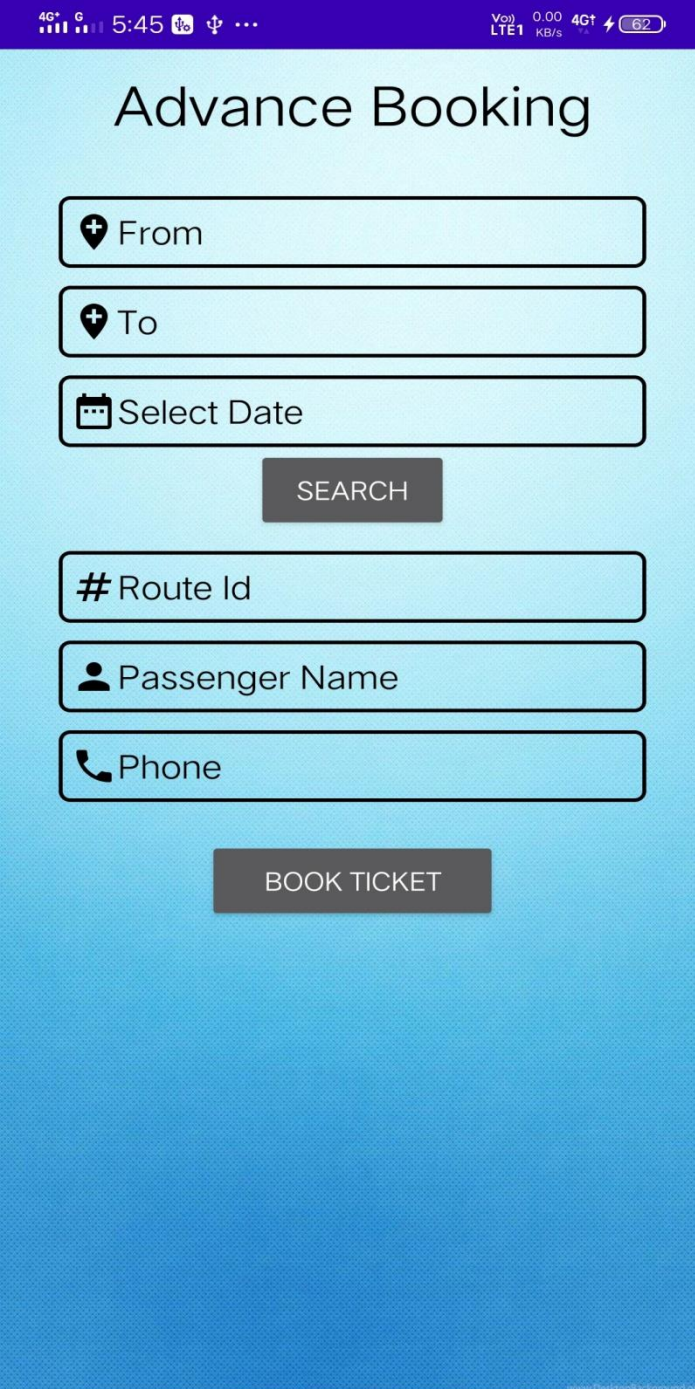
UPDATE

❖ Client Panel

Client HomePage



Ticket Booking



The image shows a mobile application interface for bus ticket booking. At the top, there is a status bar with network and battery information. The main title 'Advance Booking' is centered at the top of the app screen. Below the title, there are three input fields: 'From' with a location pin icon, 'To' with a location pin icon, and 'Select Date' with a calendar icon. A 'SEARCH' button is positioned below these fields. Further down, there are three more input fields: '# Route Id', 'Passenger Name' with a person icon, and 'Phone' with a phone icon. A 'BOOK TICKET' button is located at the bottom of the form area. The background of the app is a light blue gradient.

4G+ 5:45 VoLTE 0.00 KB/s 4G+ 62

Advance Booking

📍 From

📍 To

📅 Select Date

SEARCH

Route Id

👤 Passenger Name

📞 Phone

BOOK TICKET

www.DesktopBackground.org

Seat Selection

Select Seat

| | | | | | | | | | |
|---|---|----|----|----|-----------------------------|-----------------------------|----|----|----|
| 1 | 5 | 9 | 13 | 17 | 21 <input type="checkbox"/> | 25 <input type="checkbox"/> | 29 | 33 | 37 |
| 2 | 6 | 10 | 14 | 18 | 22 <input type="checkbox"/> | 26 | 30 | 34 | 38 |
| | | | | | | | | 39 | |
| 3 | 7 | 11 | 15 | 19 | 23 <input type="checkbox"/> | 27 | 31 | 35 | 40 |
| 4 | 8 | 12 | 16 | 20 | 24 <input type="checkbox"/> | 28 | 32 | 36 | 41 |

Seat No.

BOOK

www.busbooking.com

Ticket Cancel

4G+ 5:45 62%

V20 0.00 KB/s 4G+

Cancle Ticket

Mobile Number

Route Id

CANCLE
TICKET

www.BestBgBackground.com

Track Ticket

4G+ 5:45 VoLTE 0.20 KB/s 4G+ 62%

Track Ticket

TRACK
TICKET

Name: dhaval
Route Id: 6
From: dhasa
To: surat
Date: 14-03-2023
Seat No: 11
Phone: 6351393788

Name: dhaval
Route Id: 1
From: dhasa
To: ahemdabad
Date: 08-03-2023
Seat No: 3
Phone: 6351393788

www.busappbook.com

8. Project Limitation & Features

➤ Advantage Of Project

- ❖ Our system can work fast than manual.
- ❖ Our website can provide facility add , update and delete.
- ❖ Our website can maintain & store the Bus & Passenger details.
- ❖ Un-Authorized person can't access website.

➤ Limitation Of Project

- ❖ The Mobile Phone need Android Version.
- ❖ Speed depends on the Mobile RAM or processor.
- ❖ Server can be overloaded.
- ❖ Any client without Registration can't access Client Panel.

9. Testing

Black Box-Testing:-

Black box testing assumes the code to be a black box that resourced to input Stimuli. The testing focuses on the output to various of types of stimuli in The targeted deployment environments. It focuses on validation tests, boundary ,condition, destructive testing , reproducibility tests, performance tests, globalization, And security-related testing.

The following input is required for black box testing:

- Requirements
- Functional specification
- High-level design document
- Application block source code

White Box-Testing:-

White box testing assumes that the tester can take a look at the code for the application block and create test cases that look for any potential failure scenarios. During white box testing, you analyze the code of the application block and prepare test cases for testing the functionality to ensure that the class is behaving in accordance with the specifications and testing for robustness.

10. Conclusion

The new system has been developed with a graphical user interface that is simple for use and is therefore going to simplify the entire booking process. Despite a few challenges in the implementation process, the process was a successful one as I was able to come up with a system that did not only work but also got acceptance from users.

Taking this project all through has been a wonderful experience for me and for the practical knowledge that I acquired, this would not have materialized. This is a very important part of my course and has helped me understand the concepts behind a number of web scripting languages as well as familiarize with the market expectations of the course at large.

11. Reference

A. Website Name:-

1. www.google.com
2. jdtureandtravel@gmail.com

B. Reference :-

- Complete reference (Android Kotlin)
- ANDRIOD KOTLIN PROGRAMMING

**THANK
YOU**