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# **Online Bus Booking Management System**

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**Abstract**: Online bus reservation system is a project which presents a portal for bus ticket reservation. This application lets in users to book bus tickets from somewhere and anytime. The consumer can without difficulty e book their tickets and cancel tickets. The person can view all the small print of the website, bus, and drive. The user can additionally view the details of the journey and the important points of the ride.

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

# I. INTRODUCTION

Online Bus Booking System cloud based totally online software. This system would help clients to book a seat for their journey, book bus. This device would also assist the owner to manipulate the coaches, employees, clients, services etc.

The centre of attention of the challenge is to computerize traveling organisation to manipulate data, so that all the transactions become quickly and there must no longer be any error in transaction like calculation mistake, consignment era and other things. It replaces all the paper work. It keeps documents of all bills also, giving to make sure 100% successful implementation of the computerized Bus reservation system. Bus Reservation System will make bigger the booking method faster, convenient, and comfortable. Customers can e book their preferred seats. They can check the availability of posts on a particular date. The client can check availability, book ticket, or cancel ticket 24X7. The on-line gadget is accessible to use anytime.



# **II. OBJECT OF PROJECT**

• Providing a web-based bus ticket reservation function where a client can buy bus ticket through the online system where no need to queue up at the counter to purchase a bus ticket.

• Enabling clients to test the availability and kinds of busses online. Customer can take a look at the time departure for each ITC bus thru the system.

• Easing bus ticket charge via obtaining a financial institution pin after payments is made to the quite a number specified-bank.

- Ability of clients to cancel their reservation.
- Admin consumer privileges in updating and cancelling payment, route and bus records.
- Providing a user-friendly system.

# III. METHODOLOGY

# A. Modules:

# User Modules:

**Customer Profile:** The customer is the end user of our system. The consumer can see bus details, take a look at availability, book the ticket, make an enquiry, and make payment to confirmation of a seat. At any point of time before boarding of bus client has all right to cancel tickets.

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**Availability:** This module would assist to search the bus and locate availability of seats. The client can check bus availability anytime. Desired available seats can be booked by the client using this system.

**Enquiry:** Any query can be made using e mail id or filling internet site form. Customer care representatives will reach you with solutions. Any query about bus timing, the system can do seat availability with human interaction.

**Booking:** If client finds the favoured bus and available seats. The client can book the seats the use of this module. The booking procedure is completely computerized. Real time seat availability. Once a seat has been locked it can't be available for booking.

**Payment:** Payment can be made the usage of a credit card, debit card, net banking, online upi platform like Paytm, Phone pay, Google pay etc. Payment portal is highly invulnerable and trusted.

**Cancel:** At any time before boarding of bus client has all right to cancel tickets. The money will be credited to a customer account as per financial institution coverage and timing.

# Admin Modules:

Admin Profile: Admin is super person of our system. Admin can view all records in the system. Admin have to log in to the system then there is authentication process. Admin view bus details confirmed the bus details, check the user data and update necessary data and manage account.

Schedule: All bus can schedule with the help of this module.

Booked list: All user details who booked bus can be access, modify and approved by admin using it.

**Maintenance:** This module would help to add new bus details. Bus details include Bus Number, Model Number, Numbers of seats, Type of bus, bus location and fee.

#### **B. Data Flow Diagram (DFD):**

The development of DFD'S is done in various levels. Each procedure in lower-level diagrams can be break down into a extra specified DFD in the next level. The Top-level layout is frequently called context diagram. It consist a single process bit, which plays important role in analysing the present system. The process in the context level layout is exploded into different process at the first degree DFD.

# Level0





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#### customer details



Level2



Fig.3 User View

# C. User Activities:

- The user can search for the seat.
- The customer can check for route, bus and available seat.
- The customer can also pay for the seat on the proposed system.
- The customer can print receipt on the system as proof of payment.
- The customer can cancel ticket before traveling.

#### **D.** Admin Activities:

- The admin will verify all the registered user, and allow them to login to the system.
- The admin give acknowledge to any payment consumer made on the system.
- The admin can add bus, update or edit bus details, driver and generate report as properly.

# **E. Software Designing:**

**HTML:** The Hyper Text Markup Language is the popular markup language for documents designed to be displayed in a web browser.

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**CSS:** Cascading Style Sheets is a computer language for laying out and structuring web pages.

**Java Script:** JavaScript (JS) is a lightweight, interpreted, object-oriented language with first-rate functions and it is also known as the scripting language for Web pages. JS is a text-based programming language used both on the client-side and server-side that help you to make web pages interactive

**PHP:** PHP is a server-side scripting language that is embedded in HTML. It is used to manipulate dynamic content, databases, session tracking, even construct complete e-commerce sites.

**F. Database:** MySQL database is used. MySQL is an open-source Oracle backed Relational Database Management System (RDBMS). SQL (Structured Query Language) is used to manage data inside the Database, which is query language.

= Server: 127.0.0.1 » Database: bus_booking													7			
k	Structure	📄 S	QL 🔍 S	Bearch 🗐	Query 📑	Export	🖶 Import	: <i>🎤</i> (	Operations	I P	rivileges	🖓 Rou	tines	۲	Events	
F	ilters															
Со	ntaining the wo	ord:														
	Table 🔺	Actio	on						Rows 😡	Туре	Collation		Size		Overhead	
	booked	*	Browse	M Structure	e 👒 Search	📑 Insert	🚍 Empty	Drop	5	InnoDB	utf8mb4_g	general_ci	16.0	KiB	-	
	bus	*	Browse	M Structure	e 👒 Search	📑 Insert	层 Empty	Drop	2	InnoDB	utf8mb4_g	general_ci	16.0	KiB	-	
	location	*	Browse	M Structure	e 👒 Search	👫 Insert	🚍 Empty	Orop	4	InnoDB	utf8mb4_g	general_ci	16.0	KiB	-	
	schedule_list	t 🏫	Browse	M Structure	e 👒 Search	📑 Insert	扁 Empty	Drop	2	InnoDB	utf8mb4_g	general_ci	16.0	KiB	-	
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Fig.4 MySQL Database Of Online Bus Booking Management System

# **IV. RESULT AND DISCUSSION**

Online Bus Booking Management System includes of admin and user, the admin can manipulate the booking from the consumer like manage booking, add bus info, assign location and the user is represent as a customer to create account is non-essential just fill information and save the generate code after booking, the admin can contact the customer who booked with help of this code.



Fig.5 User Interface

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Administrato



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Home

Schedule

Booked List

Maintenance ~

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# **Bus Booking Management System**



Fig.6 Admin Interface

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-	<i>z                                    </i>	Ori						Add Net
wor	10 👻 entries					Sei	arch:	
# ^	Date 👳	Bus	Location	Departure	ETA	Availability	Price	Action
1	Sep 12, 2020	1234   DELUX	india gate Terminal, new delhi , Delhi - NIT, RAIPUR, RAIPUR (CG)	02:45 AM	05:00 AM	40	210	Edit Delete
2	Sep 11, 2021	1478   RAAJDHANI	Govt. Engineering College, Bilaspur, Chhttidgsrh - NIT,	04:00 PM	Sep 12,2021 02:00 AM	50	180	Edit

# Fig.7 Bus Schedule

v 10 v entries Search:							
#	A Ref. No. 🔅	Name 🍦	Qty 0	Amount 🕴	Status 🕴	Action	
1	202009091727	Smith	1	180	Paid	Edit	
2	202009091626	rahul	2	360	Unpaid	Edit	
3	202009099953	daas	27	4860	Paid	Edit	
4	202105287618	DEVID	1	210	Unpaid	Edit	
5	202105289514	name1	0	0	Unpaid	Edit	

Fig.8 Customer Details

# V. FUTURE ENHANCEMENT

• We can implement SMS based alerts and email notifications for bookings.

• The wallet can be developed to deal with reductions charge on the factor basis. It can also be used to provide referral code concept for referring friends and get coupon.

- Chat feature can be involved in the application to chat with customer care.
- We can come with a feature that will allow the client to keep save or mark favourite routes and provide discounts for same.
- Location tracker features can be implemented in this system.

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# **VI.** CONCLUSION

The issues related with the current system will be addressed with the new proposed system. The entire layout of the proposed system is a clear automation of the modern system at Modern coast bus ticket booking system and consequently the troubles related with the guide system are well addressed by using this design.

Our project online bus reservation system offers a convenient way for reserving the bus tickets. Our project has succeeded in managing the information and providing the fantastic service to the users. This will decrease needless prices and time consumption.

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