

ONLINE BUS RESERVATION SYSTEM

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Abstract— An Online Bus Management System (OBMS) is a mobile application that facilitates travel and online ticket purchase. A reservation system is an application that is utilized in a bus transportation system for reservation of seats, cancelling a seat reservation and querying client and bus information, as well as previous reservations. about several types of routes for an immediate reservation. This software is designed for an online ticketing system that uses data from its database, ticket booking and bus tracking, and obtaining the best price for clients based on their ratings. It keeps track of

The software was developed using HTML and CSS for the front end, and Apache MySQL, and Xampp for the back end. Our application was built with the goal of enhancing consumer convenience and comfort. We have ensured that, despite the software's performance, an addition from our end is the use of e-mail to send tickets to customers after booking and online payment, which eliminates the need for cash.

I. INTRODUCTION

The Online Bus Ticket Reservation System is a web-based programme that allows customers to check bus ticket availability, purchase bus tickets, and pay for bus tickets all in one place. This method was created with busy customers in mind and makes travelling simple for them.

Nonetheless, it is practical and simple to use for everyone. According to a source, Online Bus Ticketing System enables bus transportation, the ability to reserve seats, seat cancellation, and many forms of customer queries for those who require an immediate reservation.

This service is available to customers and travellers 24 hours a day, seven days a week, and can be used to make online reservations for commercial purposes. Users can access this programme directly from the website and download it to their phone.

II. EASE OF USE

The use of an online bus ticketing system is becoming increasingly popular around the world. In addition, the bus reservation system is responsible for keeping track of each passenger who has ever reserved a seat for a voyage. When there are numerous bus service collaborators, an online system also provides possibilities from other sites. Customers may also choose from a variety of options and see seat availability for the desired time and day, as well as make reservations based on customer ratings and reviews. With the entire globe moving online, an online reservation system is convenient and accessible at any time and from any location.

We all know that a manual system requires a lot of work to operate, which they must do manually. It takes a long time and can result in several blunders. As a result, there are

occasionally a lot of issues, and offline services have a lot of client complaints. To address the aforementioned issue, as well as maintain records of seats, client seat availability, price per seat, bill generation, and other items, our system proposes the use of our online reservation system. Three modules make up our reservation system. The first module allows customers to inquire about the availability of seats on a specific bus on a specific date, the second allows them to examine the bus service and read customer ratings, and the third allows them to rate the bus service after they have travelled.

Looking at these benefits, it's evident that both the online firm and the clients are happy with a system that is more efficient in terms of updating information and handling reservations, as well as being simple to use. E-tickets are lightweight and portable, making them ideal for on-the-go travel. The Online Bus Ticket Reservation System allows customers to purchase bus tickets, make payments, and request information all online, eliminating the risk of losing their tickets.

Customers no longer have to wait in large lines to process tickets or make reservations.

An online bus ticket purchaser can purchase a bus ticket at any time of day, on any day of the week, and the bus ticket cannot be lost, stolen, or left at home because it is always available as a soft copy on our mobile device. Customers can check the availability of bus tickets at any time using the online system. Also customers need not pay in cash to buy the ticket but any online payment platform can make things easier, customers can pay for the ticket by using online payment methods that are not at all time consuming. There is no time limit for the reservation availability as the site is operable 24/7 and reservations can be made at any time of the day. Also during the time of a worldwide pandemic that we are going through, physical booths are less operational and standing in long queues at this time is dangerous for all. It is therefore the right opportunity for customers to switch to an online reservation system mode as it is much safer and more efficient, protects health risk and performs well. Also the digital payment structure further curtails the spread of virus with all payments being made online which turns safer for the company as well as the travellers and makes travelling a comfortable experience for all. Customers need not think twice and therefore the presence of online reservation system is growing continuously with leaps and bounds as customers are greatly satisfied with traveller experience and the service rendered by the bus service company.

III. WHY ONLINE BUS MANAGEMENT SYSTEM

- ***Working all time round***

An online bus reservation system works all the time unlike the manual system.

This gives free hand to customers to book A ticket anytime they want.

It doesn't limit the sale of tickets because the site is not limited to working hours. A lot of people make end time reservations at night.

- ***Free Management of Bookings***

Staff members' efficacy is increased by using online bus reservation systems. For query-related concerns, customer service is accessible.

- ***Changing time*** : The world is shifting towards technology at an unprecedented rate, and our app uses the same technology. Other significant advantages of an online bus ticketing and reservation system are its ease of creation, access, and use by customers, as well as the ability to make payments online.

- ***The Number of people not appearing after making bookings decreases***

People show up after making an online reservation since they can book tickets at any time and from any location. They also receive a notification through email and smartphone prior to the bus' departure time, along with instructions, for arriving at the specified time.

- ***Payments are Easier and much Faster***

An online booking platform also makes payments simple. Customers can pay when they book, which benefits the bus business even more, and they also benefit from discounts. Furthermore, at

the time of covid, this platform is the most advanced, with booking and transaction taking place entirely online for client convenience and to minimise the transmission of infection.

- **Workload decreased**

The online ticketing method minimises bus staff workload and improves customer service. Online systems can ensure that as soon as reservations are made, the server is updated, bookings are synced, and seat availability is updated with each reservation.

- **New Booking System**

In today's world, everyone is connected to the internet. Customers, meanwhile, use the Internet to learn about everything and everything. If a company does not have an internet presence, it is certainly missing out on a huge potential. As a result, if a company takes advantage of the online booking technique, it will reap significant benefits.

IV.FEATURES OF BUS MANAGEMENT SYSTEM

1. SAVING TIME
- COUPONS AND OFFERS TO SAVE CUSTOMER MONEY
2. EASE
4. REFERING SITE OFFERING BEST PRICE
5. ONLINE PAYMENT OPTIONS
6. FEEDBACK FROM FELLOW TRAVELLERS
7. FEEDBACK AND RATINGS

V.BRIEF OVERVIEW OF TECHNOLOGY USED

A. *Front end:*

HTML (Hyper Text Markup Language): is a front-end development language.

Cascading Style Sheets (CSS): make pages more appealing and interactive for users, which helps to attract more customers and improve user experience.

- **JavaScript:** Javascript is a programming language that may be used on both the client and server sides.
- **Netbeans IDE :** is a JavaScript coding environment.

Back end:

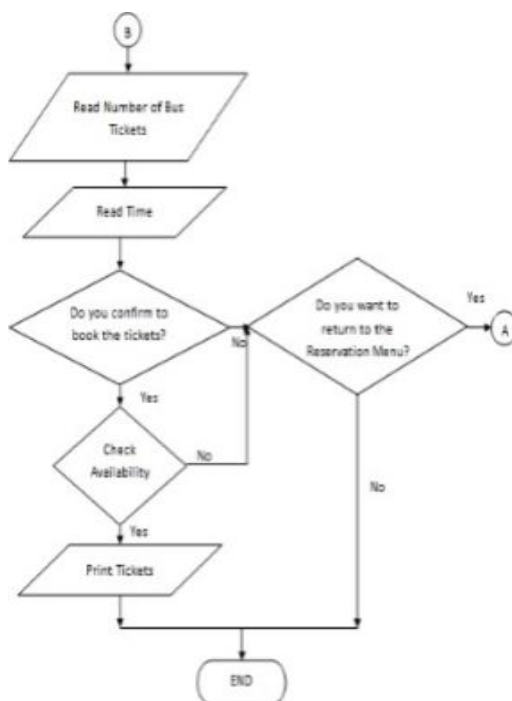
MySQL and Apache Server: MySQL and Apache server are used in back end along with Xampp.

Hibernate Framework : Coding environment for netbeans

V.FLOWCHART OF THE PROCESS



DATA FLOW DIAGRAM



VI.ADVANTAGES OF ONLINE BUS MANAGEMENT SYSTEM

Comfort:

The comfort of travelling remains the same and there is also comfort in making payments.

- **Time-saving:**

Online booking saves customer time which can be utilised anywhere else.

- **Multiple options:**

Bookings can be made at any time of the year and day

- **Ease of comparing:**

Comparing prices offered by various companies and choosing the best price

- **Coupons and deals:**

Discounts for customers makes them happier.

B. *DISADVANTAGES*

C. **Security and Privacy:**

- **Customer should make sure that the site IS trustworthy and certified before completing a transaction.**
 - **Be on the lookout for cyber-attacks and create a strong password.**
2. **CONSUMER DISHONESTY**

Sometimes clients make a reservation but do not show up, necessitating online payment. According to the terms and conditions of the online booking service, the customer's money may be repaid afterwards.

VII.RESULTS

The advantages of using an online booking system for a business and its consumers are numerous. The most crucial feature is that customers have access to the site 24 hours a day, seven days a week to book appointments, and that booking alerts are sent to their mobile phone and email address automatically.

Our app also helps our clients reduce their workloads, improve their customer experience and feedback system, which increases our value in the eyes of the consumer, and accept digital payments, which is very useful in these difficult times.

Our Indian economy and Make in India plan benefit from an online reservation system built by Indians. As individuals quickly transition to online mode, online service has had a lot of benefits for businesses around the country. With the advancement of technology, we must adapt our working styles and create user-friendly and customer-approved services. We must continue to update policies, introduce new offers, listen to consumer input, make improvements in service quality. based on client preferences, and maintains customer service active to rapidly resolve concerns.

Features that attract more customers for online booking systems are :-Such features include:

- **Availability 24/7:** eliminating uselessly standing in line in long queues instead, clients can have immediate ,24 by 7 access to make appointments worldwide.
- **Customer Care Support:** Provides quick resolving issues and queries of customers related to bookings,delays,change in time
- **Safety:** Safety is another important parameter which makes online booking a lot easier.
- **Online Calendar:** calendars helps in making bookings easy and give early notification and reminder of the booking made through SMS and emails.

VIII.CONCLUSION

The availability of an online reservation system is a huge plus. It is gaining customers and establishing itself as a new trend. It's another technique to improve the time-consuming and laborious manual ticketing system. It completely transforms the traditional method of booking tickets. As a result, travelling has become a fantastic consumer experience. To make a reservation, the traveller does not need to wait in line. Client service improves customer satisfaction while also improving communication. The online ticketing system is gaining popularity and attracting customers due to the high grade comfort it gives. To summarise, Internet ticketing has altered the game and made travel more comfortable than it has ever been. There is no time limit on reservation availability because the site is available 24 hours a day, 7 days a week, and reservations can be made at any time.

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<http://annalsofrscb.ro>

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REFERENCES

- [1] Pranjal Ingle, Harshada Kanade, Arti Lanke, Manasi Choche, “Voice Based email system” ,
https://www.academia.edu/24351605/Voice_based_E_Mail_System
- [2] Rijwan Khan, Pawan Kumar Sharma, Sumit Raj, Sushil Kr. Verma, Sparsh Katiyar, “Voice Based E-Mail System using Artificial Intelligence”,
https://www.researchgate.net/publication/339874400_Voice_Based_E-Mail_System_using_Artificial_Intelligence
- [3] Pronab Mukherjee, Harsh Agarwal, “ Voice Based Email for Visually Challenged”,
<https://www.geeksforgeeks.org/project-idea-voice-based-email-visually-challenged/>