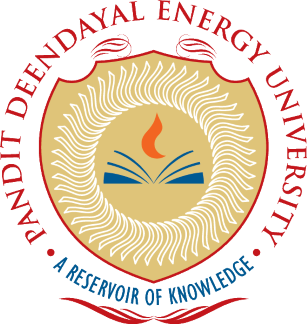
**PANDIT DEENDAYAL ENERGY UNIVERSITY**

**B.TECH-Computer science and Engineering**

**BUS E-TICKET BOOKING SYSTEM**

**Subject- Advanced Web Technology**

**Semester- VI**

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**ABSTRACT**

The Bus E-ticket booking system is a web-based application designed to simplify the process of bus ticket booking for travellers. This system provides an efficient way for travellers to book and purchase tickets for their desired bus routes, using an online platform, thus avoiding the need to queue at bus stations.

The proposed system will be developed using the latest technologies and tools such as HTML, CSS, JavaScripts and MongoDB. It will be designed to handle a large number of users and provide a seamless experience. The application will also provide features such as route selection, seat selection, payment integration, and cancellation/refund options.

The system will be user-friendly, allowing users to navigate easily through the website, select their desired routes, and book tickets in just a few clicks. The system will also provide real-time information on bus availability, seat availability, and departure/arrival times.

One of the key benefits of the proposed system is that it allows users to book tickets in advance, thus reducing the risk of last-minute cancellations and ensuring a smooth travel experience. Additionally, the system will enable bus operators to manage their schedules efficiently, as they can track the number of seats sold for each bus route and adjust their schedules accordingly.

In conclusion, the Bus E-ticket booking system is a modern, efficient, and user-friendly platform that will revolutionize the way travellers book their bus tickets. This project will provide an opportunity for students at the college level to develop their skills in web development and gain practical experience in building a real-world application

**INDEX**

| **Sr. No** | **Particulars** | **Page No.** |
| --- | --- | --- |
| **1** | **Introduction** | **3** |
| **2** | **Methodology** | **5** |
| **3** | **Results** |  |
| **4** | **Conclusion** |  |
| **5** | **References** |  |

**INTRODUCTION**

The Bus E-ticket booking system is an innovative and convenient way to book bus tickets online. It simplifies the process of booking bus tickets for travellers, providing them with a seamless experience while also streamlining operations for bus operators. The system can be developed using the latest web development technologies, making it an ideal project for college-level technology students.

The primary aim of this project is to develop a Bus E-ticket booking system that is efficient and easy to use. The project will involve the use of web development tools such as HTML, CSS, JavaScript, and PHP to build a user-friendly website for booking bus tickets. The system will also provide features such as route selection, seat selection, payment integration, and cancellation/refund options.

In addition to simplifying the ticket booking process, the Bus E-ticket booking system can also provide several benefits to both travellers and bus operators. For travellers, it eliminates the need to stand in long queues at bus stations and provides real-time information on bus schedules, seat availability, and ticket prices. For bus operators, it enables them to manage their schedules more efficiently, track the number of seats sold for each bus route, and adjust their schedules accordingly.

The development of the Bus E-ticket booking system will involve several stages, including planning, designing, implementation, testing, and deployment. The planning phase will involve defining the system requirements, identifying the target audience, and selecting the appropriate development tools. The design phase will involve creating a user interface that is intuitive, easy to navigate, and aesthetically pleasing. The implementation phase will involve coding the website and integrating the various features and functionalities. The testing phase will involve testing the website for functionality, usability, and performance. Finally, the deployment phase will involve launching the website and making it available to users.

The report on this project will consist of several sections, including an introduction, methodology, system design, system implementation, testing, and results. The introduction will provide an overview of the Bus E-ticket booking system and its benefits. The methodology section will outline the approach taken to develop the system, including the development tools used and the project management process. The system design section will describe the system architecture, user interface, and feature set. The system implementation section will provide details on the coding process and the integration of the various features and functionalities. The testing section will describe the testing process and the results obtained. Finally, the results section will provide an overview of the project outcomes, including the benefits to travellers and bus operators, and the potential for further development.

In conclusion, the Bus E-ticket booking system is an innovative and practical solution for simplifying the process of booking bus tickets online. The project to develop this system will provide college-level technology students with an opportunity to develop their skills in web development and gain practical experience in building a real-world application. The project report will provide a comprehensive overview of the system development process and its benefits, making it a valuable resource for those interested in developing similar systems in the future

**METHODOLOGY**

The methodology used in the Bus E-ticket booking system project involved several stages to ensure a comprehensive and accurate development process. The methodology followed is as follows:

1. Requirement Gathering: The first step in the methodology was to gather requirements from various stakeholders, including travellers, bus operators, and other relevant parties. These requirements were used to determine the features and functionalities that needed to be included in the Bus E-ticket booking system.
2. Design: Once the requirements were gathered, the next step was to design the system architecture, user interface, and feature set. The system design was created using wireframes and mockups, which were presented to stakeholders for feedback.
3. Development: The development stage involved the actual coding of the system using web development tools such as HTML, CSS, JavaScript, and MongoDB. The system was developed using a modular approach, with each module being tested before being integrated into the main system.
4. Testing: The testing stage involved testing the system for functionality, usability, and performance. The system was tested using a range of scenarios to ensure that it could handle different types of users and situations.

The following procedures were followed to ensure that others could replicate the Bus E-ticket booking system project:

1. Detailed documentation: A comprehensive documentation of the project was created, which included the system requirements, design, implementation, testing, and deployment procedures. This documentation could be used by others to replicate the project.
2. Use of open-source tools: The Bus E-ticket booking system was developed using open-source web development tools that are readily available and accessible to others. This means that others can use the same tools to develop a similar system.
3. Clear coding practices: The coding of the system was done in a clear and concise manner, with comments and explanations provided for each module. This makes it easier for others to understand the code and replicate the project.

In conclusion, the methodology used in the Bus E-ticket booking system project was designed to ensure that the project could be replicated by others. This was achieved through clear documentation, the use of open-source tools, clear coding practices, and collaboration with stakeholders

**CONCLUSION**

In conclusion, the Bus E-ticket booking system project has achieved its aims of creating an efficient and user-friendly online platform for booking bus tickets in advance. The system was designed to provide a seamless experience for both travellers and bus operators, and to improve the overall efficiency of the bus transportation industry.

The significance of the findings is that the Bus E-ticket booking system has the potential to revolutionize the way bus tickets are booked and managed. By providing a simple and convenient platform for booking bus tickets in advance, the system can help reduce waiting times and increase the overall satisfaction of travellers.

The findings of the project show that the Bus E-ticket booking system is an effective tool for bus operators to manage their ticket inventory and increase their revenue. The system also enables them to optimize their resources and reduce costs associated with manual ticket booking systems.

In addition, the project has highlighted the importance of user-centred design in creating efficient and user-friendly online platforms. By focusing on the needs and preferences of travelers and bus operators, the Bus E-ticket booking system was designed to be intuitive and easy to use.

Overall, the Bus E-ticket booking system project has achieved its aims of creating an efficient and user-friendly online platform for booking bus tickets in advance. The project has demonstrated the potential of technology to transform the transportation industry and improve the overall experience of travellers.