

ONLINE BUS TICKET RESERVATION SYSTEM

Description:

By using this web application, we can reserve tickets from any part of the country, through telephone lines, via internet. Customer can check availability of bus and reserve selective seats. The project provides and checks all sorts of constraints so that user does give only useful data and thus validation is done in an effective way.

This system needs to be developed in PHP and MySQL as the backend and HTML as the frontend.

Objective:

The main objective of the proposed system is to eliminate the manual reservation system, thereby making the reservations fast and hassle-free for the passenger as well as the service provider. This system also intends to help with quick searches and connectivity between different destinations. The new system needs to develop that can handle lots of records and reports efficiently. Searching information about reservation date etc. will present only on one click.

Background:

Currently reservations for Buses are done manually by the reservation clerk, which takes a lot of time. Apart from this it is not possible all the time to know of any promotions or discounts available for the date of travel. There are expenses of stationery, storage space for archival or records besides the time required by the officers to perform all these activities regularly.

The drawbacks and limitations of the existing system

- The system is very time consuming, expensive and requires a lot of man power
- The system is more prone to errors and sometimes the approach to various problems is unstructured.
- It is not very user-friendly

Benefits of the proposed system:

- Accuracy of data
- Reduce Redundancy of data
- Safe preservation of data
- Quick retrieval of data
- Reduced transaction time whether in reservation / cancellation
- Easy for Management to perform analytics on the data and use them for better business

Expected outcomes of the proposed system

This system project is useful for the ticket booking customers, and the project company. The Employee can add bus Ticket details, availability of Tickets. The following steps that give the detailed information of the ticket booking need of proposed system are:

- *Performance*: During past several decades, the records are supposed to be manually handled for all activities. The project manual handling of the record is time consuming and highly prone to error. To improve the performance of the bus Ticket Booking, the computerized system is to be undertaken. This project system is fully computerized and user friendly even that any of the customers can see the report and status of the Tickets.
- *Efficiency*: The basic need of this application system is efficiency. The ticket booking application should be efficient so that whenever a new user submits his/her details the project database is updated automatically. This system record will be useful for other users instantly.
- *Control*: The complete control of the project is under the ticket booking hands of authorized person who has the password to access this project and illegal access is not supposed to deal with. All the ticket booking control is under the project administrator and the other members have the project rights to just see the records not to change any transaction or entry.
- *Security*: Security is the main system criteria for the proposed system. Since illegal access may corrupt the project database. So security has to be given in this project.
- *Online payment gateway*: **PayPal lets** you send and receive money securely, using just a mobile phone number or using website.

Functional Requirement:

The Customer and the Bus Company are the two parties which interact with the database, who have different 'view level schemas' to the database information.

Customer Services

- *Create an account by register*: Here customer can register in the system by filling up registration form .
- *Seat allocation*: The customers are provided to choose their preferred seats rather than being randomly allocated seats.
- *View , modify or cancel past reservations*: User can view their reservation, modify it for seats or different timings /bus or cancel their reservation
- *Offers and discounts*. Customers can view offers and discount at any time.

Administrator Services

- Administration can add new buses and also update existing buses information.
- Admin can modify stations, timings, tariffs, bus details, etc.
- Access and modify customer accounts or customer reservations
- Create / modify promotional information

Non-Functional Requirements:

- **Portability:** The bus reservation software shall run in any Web and Mobile environment.
- **Robustness:** Strength of the system to handle system functions accurately and maintain the database without facing to any failure.
- **Scalability** - The system can be scalable from small to a large traveling agencies area etc.
- **Maintainability** –what design coding standard must be adhered to exclusions created.
- **Performance** – the system will provide high performance ability to retrieve, search all information in a second of time.
- **Usability** – How easily a person can be taken the benefit of the system and the user friendliness.
- **Security requirement** - The system should take care of all required security of data and intellectual property of the organization etc
- **Flexibility:** Ability to add new features to the system and handle them conveniently.
- Better component design to get better performance at peak time