CACHE BUS – Online Bus Ticket Booking System

A MINI PROJECT REPORT

SUBMITTED BY

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Bus Ticket Booking System – CACHE BUS

Introduction:

The **Bus Ticket Booking System** is a web-based application that simplifies booking bus tickets. Developed using PHP and MySQL, the system enables users to search for buses, filter results, book tickets, view previous bookings, and cancel tickets. With no payment gateway integration, the system directly confirms bookings, ensuring a streamlined experience.

This platform caters to travellers who need a quick and easy solution for reserving bus seats while allowing flexibility in ticket management.

Abstract:

The **Bus Ticket Booking System** is designed to manage the entire ticket booking lifecycle efficiently. Users can create accounts to log in, search for buses based on specific criteria (such as destination, date, and preferences like AC/non-AC), and easily book tickets. Bookings are automatically saved in the database and can be managed through a user-friendly interface. The system eliminates the need for manual interventions, enhancing accessibility and convenience for users.

The backend, powered by MySQL, ensures secure and efficient data handling. With its robust functionality, this project aims to provide a comprehensive ticket booking and management solution.

Features:

1. **User Authentication:**
    - **Login/Signup:** Users can register or log in to access the system.
    - **How it Works:**
        - Registration form collects basic details (e.g., username, password).
        - Securely stores data in MySQL for future access.
    - **Benefit:** Ensures that user-specific data is securely managed.
2. **Search for Buses:**
    - **Description:** Users can search for available buses by entering their destination, date, and other preferences.
    - **How it Works:**
        - Search query fetches relevant bus data from the database.

- **Benefit:** Provides tailored results for travellers, reducing search time.

3. **Filters:**
    - **Description:** Advanced filters help users narrow results by date, bus type, price range, and amenities (e.g., AC/non-AC).
    - **How it Works:**
        - Applies SQL queries dynamically based on user selections.
    - **Benefit:** Enables quick decision-making through precise filtering.
4. **Ticket Booking:**
    - **Description:** Users can book tickets instantly.
    - **How it Works:**
        - Upon selecting a bus and seats, a "Book" button stores the booking directly in the database.
        - No payment is involved; tickets are confirmed upon booking.
    - **Benefit:** Simplifies the booking process by eliminating the payment step.

5. **View Previous Bookings:**
    - **Description:** Users can view a history of all their bookings.
    - **How it Works:**
        - Queries the database for booking data associated with the logged-in user.
    - **Benefit:** Helps users track their travel plans effortlessly.
6. **Cancel Tickets:**
    - **Description:** Users can cancel previously booked tickets.
    - **How it Works:**
        - Deletes the corresponding record from the database upon user request.
    - **Benefit:** Provides flexibility in travel planning.

System Architecture:

1. **Frontend:**
    - **Technologies:** HTML, CSS, JavaScript, Bootstrap.
    - **Description:** User interface for interacting with the system.
    - **Components:**

- Login/Signup Page.
- Search Page with Filters.
- Booking Confirmation and History Pages.

2. **Backend:**
    - **Technologies:** PHP, MySQL.
    - **Description:** Handles user requests, performs business logic, and interacts with the database.
3. **Database:**
    - **Technology:** MySQL.
    - **Description:** Stores all critical information, including user details, bus schedules, bookings, and ticket statuses.
    - **Schema Design:**
        - **users Table:** Contains user credentials.
        - **buses Table:** Stores bus details such as routes, timings, and amenities.
        - **bookings Table:** Manages booking data linked to users.

Advantages:

- User-friendly and efficient ticket booking system.

- Simplified process with no payment integration required.
- Comprehensive filtering options enhance usability.
- Secure management of user and booking data.

Disadvantages:

- Limited to booking features without payment integration.
- Requires internet connectivity for access.

Conclusion:

The **Bus Ticket Booking System** offers an accessible and reliable platform for managing bus reservations. By eliminating payment complexities and focusing on core functionalities, the system ensures a hassle-free experience for users.