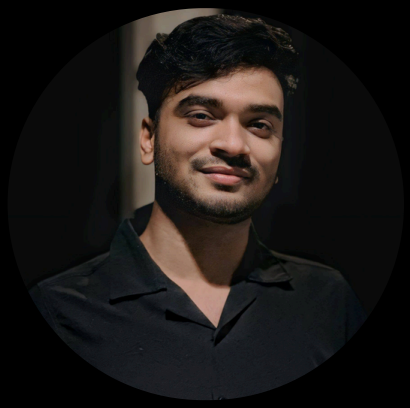
BusEasy

PROJECT II

PROPOSAL



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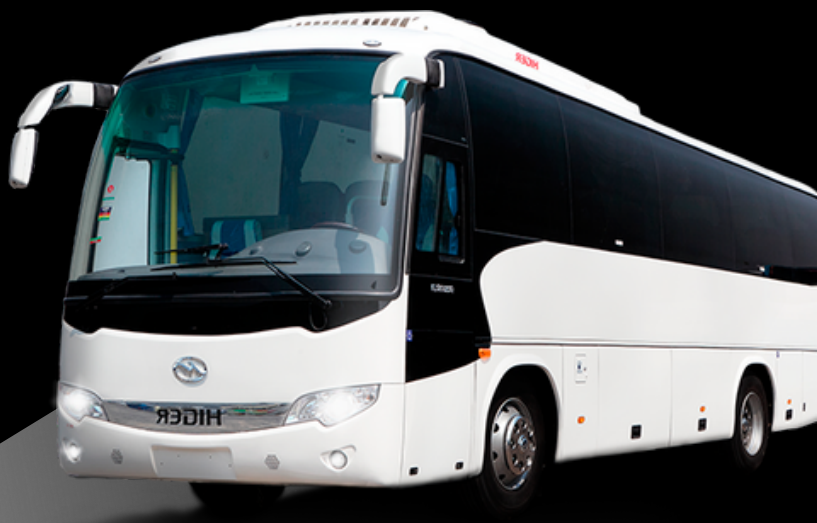
ABOUT MY PROJECT

The Online Bus Ticket Booking System BusEasy is a web-based platform that enables users to view available buses for a selected route, date, and time. Users can book tickets using their name, email, and phone number without the need for account registration. Additionally, users can update, refund, or reschedule their tickets. The system will generate an online ticket copy containing all booking details.

The Admin Panel will allow administrators to manage buses, schedules, and sold tickets. Admins will need to log in to access the system.



TECHNOLOGIES USED:

HTML

JAVASCRIPT

CSS

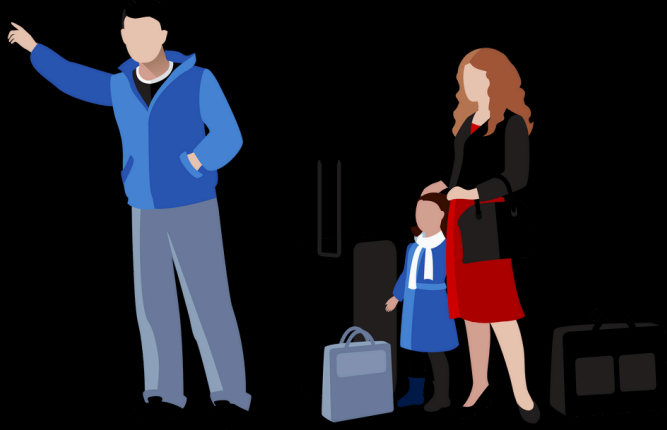
PHP

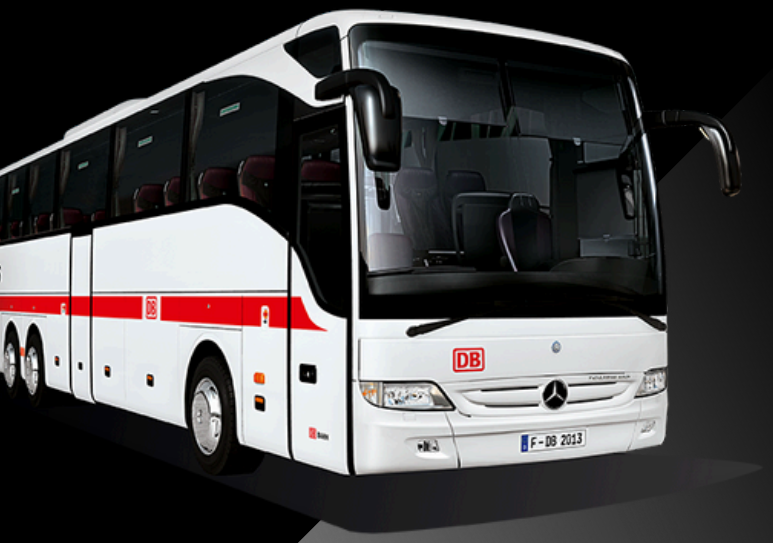
- Frontend (HTML, CSS, JavaScript): HTML structures the web pages, CSS styles them for a visually appealing look, and JavaScript adds interactivity, making the website dynamic.
- Backend (PHP): PHP handles server-side logic, processes user requests, and connects the frontend with the database for seamless data flow.
- Database (MySQL): MySQL stores and manages all ticket bookings, user inputs, and bus schedules efficiently.
- Together, these technologies create a functional, interactive, and database-driven online bus ticket booking system.

KEY FEATURES

User Features:

- View available buses for a selected route, date, and time.
- Check bus prices and schedules.
- Book tickets (using name, email, and phone number).
- Receive an online ticket copy with all details
- Update, refund, or reschedule their tickets





ADMIN FEATURES:

- LOGIN SYSTEM FOR SECURE ACCESS.
- VIEW ALL BOOKINGS, BUSES, AND USER TRANSACTIONS.
- ADD, REMOVE, OR UPDATE BUS SCHEDULES AND PRICES.
- MANAGE TICKET RESCHEDULING AND REFUNDS.

DETAILS OF KEY FEATURES

User Features:

1. View Available Buses for a Selected Route, Date, and Time

Users can search for available buses based on their preferred source, destination, travel date, and time. The system will fetch all buses that operate on the selected route within the given timeframe.

Database Integration:

- A buses table stores bus details, including bus ID, operator name, route, departure time, arrival time, and seat availability.
- A routes table maintains all available routes with corresponding bus IDs.
- A SQL query filters and retrieves buses from the buses table based on the selected route and date.

2. Check Bus Prices and Schedules

Users can check the fare of different buses for a selected route and compare schedules before making a booking decision.

Database Integration:

- The buses table includes price and schedule columns.
- The system fetches the relevant details and displays them to the user.

3. Book Tickets (Using Name, Email, and Phone Number)

Users can book a bus ticket by providing their personal details. Once a booking is confirmed, the system assigns a seat and generates a unique ticket ID.

Database Integration:

- A bookings table stores booking details with fields: ticket_id, user_name, email, phone_number, bus_id, seat_number, status (confirmed/pending).
- Seat availability is updated in the buses table.
- A query inserts new booking records and updates seat count.

4. Receive an Online Ticket Copy with All Details

After successful booking, users receive an online ticket copy with their journey details, including seat number, bus information, and a unique ticket ID.

Database Integration:

- The bookings table is queried to generate a ticket with relevant details.
- The system generates a e-ticket

5. Update, Reschedule Their Tickets

Users can modify their booking details, request refunds, or change travel dates based on availability and policies.

Database Integration:

- The bookings table stores modifications in the status field (updated, rescheduled).

- If a ticket is refunded, the seat count in the buses table is updated.
- If rescheduled, a new booking is created with a reference to the old ticket ID.

Admin Interface

1. Login System for Secure Access

Admins must log in using a secure authentication system to access the dashboard. Only authorized users (admins) can manage buses, bookings, and transactions.

Database Integration:

- A admin table stores admin credentials (admin_id, username, password, role).
- Passwords are stored securely using hashing.
- The system verifies credentials before granting access.

2. View All Bookings, Buses;

Admins can see all bookings, available buses, and completed/canceled transactions for monitoring and reporting.

Database Integration:

- A bookings table stores ticket details (ticket_id, user_name, bus_id, status).
- A transactions table records payments (transaction_id, ticket_id, amount, payment_status).
- A buses table provides bus schedules and availability.

3. Add, Remove, or Update Bus Schedules and Prices

Admins can add new buses, modify existing schedules, update ticket prices, or remove buses from service.

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Database Integration:

- The buses table stores bus_id, route_id, departure_time, arrival_time, and price.
- Admins can insert, update, or delete bus records

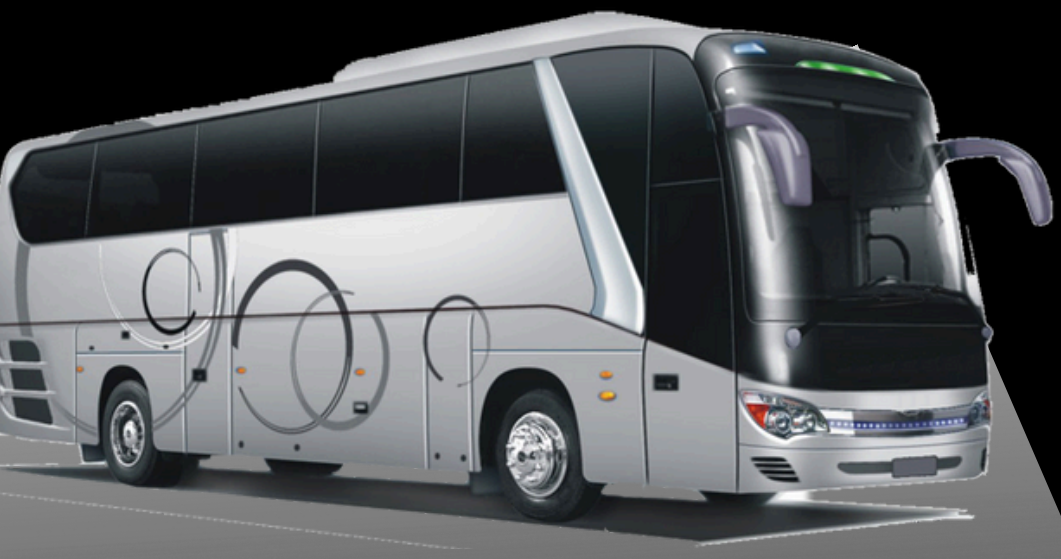
4. Manage Ticket Rescheduling

Description:

Admins can approve or deny reschedule/refund requests. If approved, the system updates the booking status and seat availability.

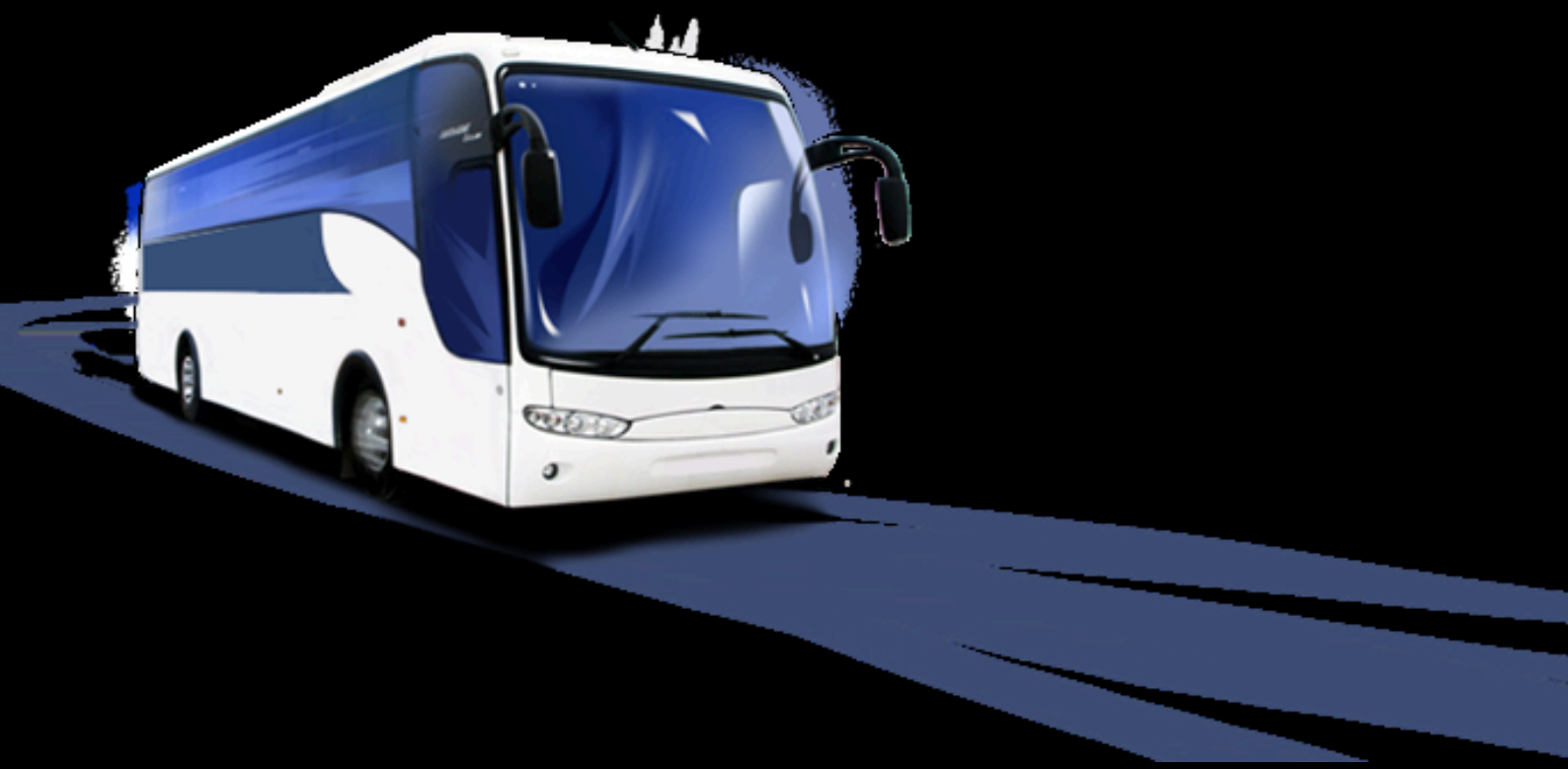
Database Integration:

- The bookings table stores the status (confirmed, rescheduled).
- Rescheduling assigns a new date and seat while canceling the old ticket.



EXPECTED OUTCOME

This system will provide a simple and efficient way for users to book bus tickets online without account registration. The admin panel will enable smooth management of schedules and transactions.



CONCLUSION

The BusEasy will simplify the process of booking tickets while ensuring that admins can efficiently manage bus schedules and ticket sales. Using PHP and MySQL, this project will be a secure and scalable solution for online ticket booking.