**Project Report on Courier Management System** 

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**Project Title:** ParcelTrack

Objective

The ParcelTrack Courier Management Project aims to create a streamlined, user-friendly system for

parcel dispatch, tracking, and management. Its objectives include simplifying the dispatch process,

enabling real-time tracking for transparency, automating cost calculations based on parcel specifics,

and providing efficient management tools for administrators to oversee parcel status and updates,

ultimately enhancing the courier service experience for both users and staff.

Functionalities and Explanations

User Registration and Login

• Objective: Allow users to create accounts, securely access their information, and interact with

parcel services.

**Process:** 

Users register by providing their first name, last name, email, password, and profile

picture, with data validated and saved in the database.

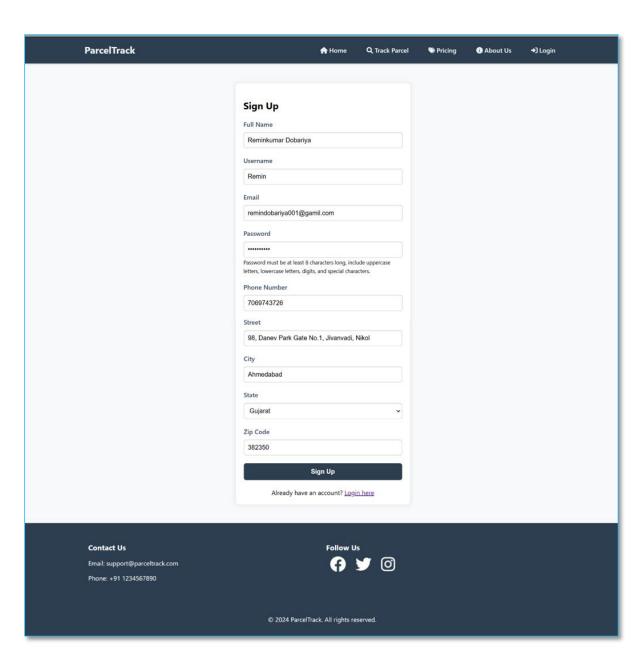
o Registered users can log in with their email and password, with sessions securely

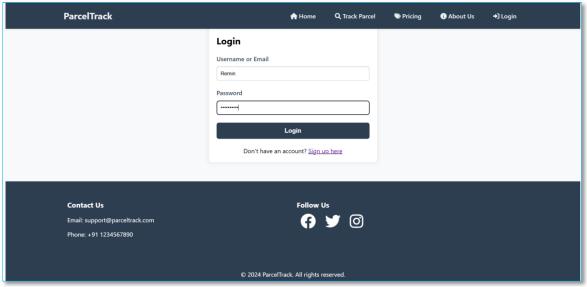
managed to maintain login status.

Unauthorized users are redirected to the login page to ensure protected access to

parcel management functionalities.

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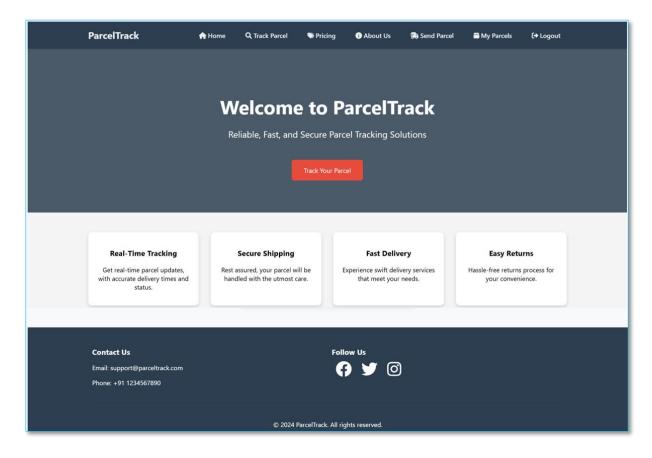


## User Dashboard

• Objective: Provide users with a personalized view to manage and track their parcels.

### Process:

- o Upon login, users access a dashboard that lists their current and past shipments.
- Users can track parcel statuses, view details, and initiate new parcel dispatches from this dashboard.



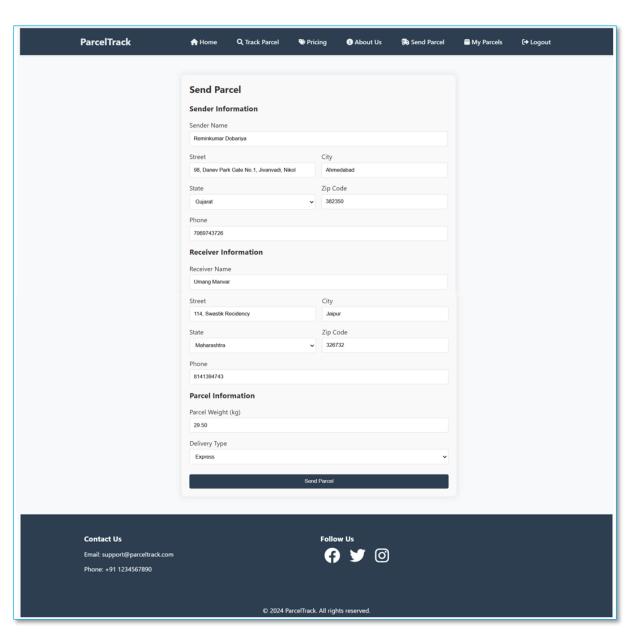
### Send Parcel

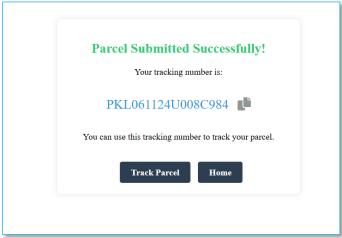
• **Objective:** Facilitate easy parcel dispatch by allowing users to input essential sender and receiver details.

## Process:

- Users fill in the sender's and receiver's information, including name, street, city, state,
  zip code, phone, parcel weight, and delivery type (e.g., Standard, Express).
- o Data validation ensures all required fields are filled in and properly formatted.

 Once submitted, parcel details are stored in the database, generating a unique tracking number for each parcel.



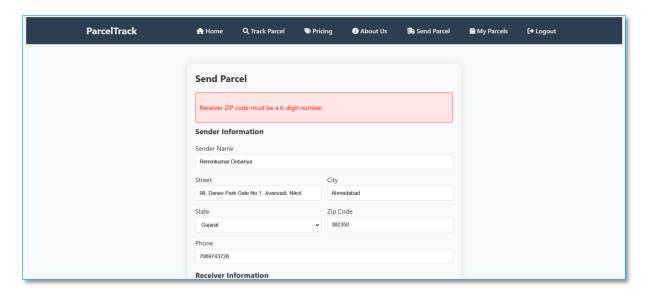


## Error Handling and Validation

• **Objective**: Ensure data integrity and prevent incorrect entries.

### Process:

- The system validates inputs such as zip codes, phone numbers, and parcel weight on form submission.
- Errors are displayed in real-time to guide users to correct any invalid fields, ensuring consistent and accurate data entry.

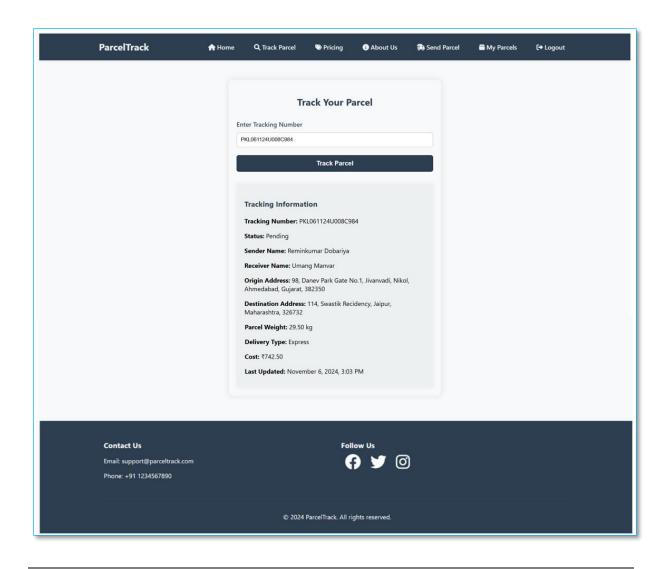


## Tracking System

• **Objective:** Allow users to track their parcels in real time to stay informed about delivery status.

### • Process:

- o Each parcel is assigned a unique tracking number upon creation.
- Users can input this tracking number to view the parcel's current status (e.g., Pending, In Transit, Delivered), which updates as it progresses.

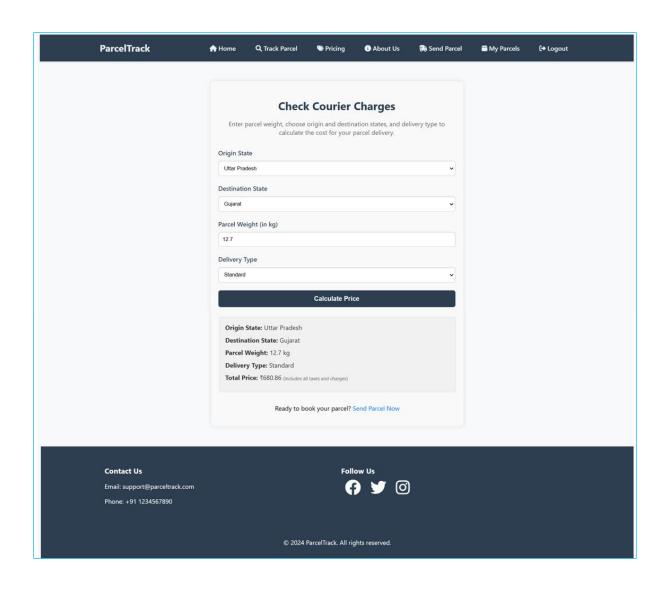


## Pricing

• **Objective:** Provide users with transparent delivery costs based on parcel weight, delivery type, and destination.

### • Process:

- Users enter parcel details (e.g., weight, destination) on the send parcel page. Based on this input, the system calculates delivery charges.
- For deliveries within the same state, a flat rate is applied, while charges increase with distance for out-of-state deliveries.
- The calculated cost is displayed to the user before confirming the parcel booking and is also saved in the database for reference.

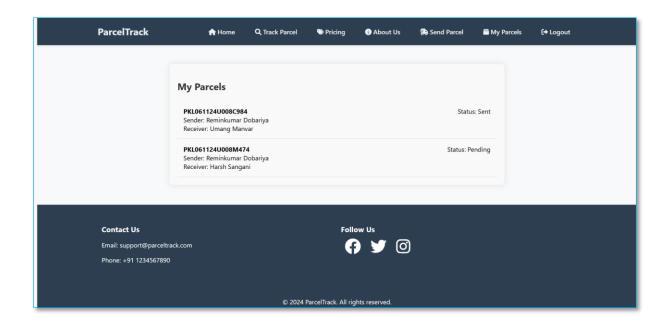


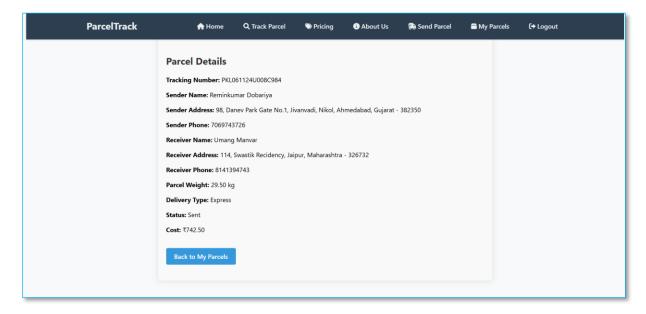
## Parcel History and Details

• **Objective:** Allow users to view detailed history and information on previously shipped parcels.

## Process:

- Users access their shipment history through the dashboard, where they can view detailed parcel information.
- Each record includes sender/receiver details, status updates, and cost, providing a comprehensive record for frequent shippers.



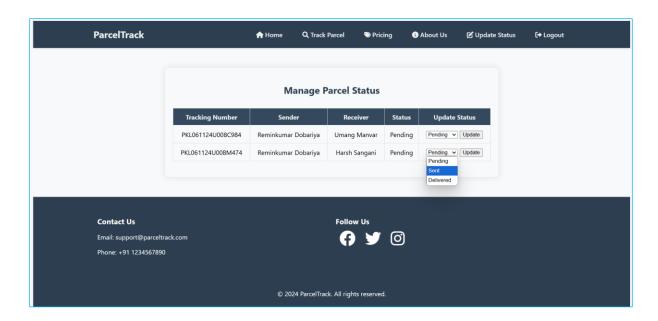


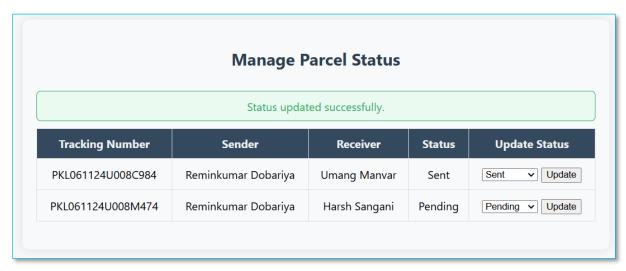
# Parcel Management for Admins

• **Objective:** Enable administrators to monitor and update the status of parcels efficiently.

### • Process:

- Admins access a management interface where they can view all parcels and update their status.
- Status updates are logged and immediately reflected in the tracking system, keeping users informed.





# ❖ About Us

• **Objective:** Inform users about the background, purpose, and mission of ParcelTrack.

### Process:

- This section displays information about the company, its services, and contact information to build trust and engagement with users.
- Located in the main navigation, the About Us page provides insight into ParcelTrack's commitment to reliable and efficient courier services.

## Welcome to ParcelTrack

Imagine a world where every parcel finds its way seamlessly to your door, no matter where it's headed. That's the world we're creating at ParcelTrack. We're not just delivering parcels; we're delivering peace of mind. With unmatched reliability and cutting-edge technology, ParcelTrack brings you the confidence that your delivery is safe, secure, and always on time.

"We don't just move packages; we connect people, places, and possibilities."

#### Our Mission

Our mission is to set a new standard in logistics by making delivery faster, simpler, and more transparent. We're passionate about providing reliable shipping solutions that exceed expectations and empower businesses and individuals to bridge distances and build connections. Every package is more than just cargo; It's part of someone's story, and we make it our goal to deliver that story with excellence.

### **Our Core Values**

ParcelTrack stands for more than just shipping. Our core values are woven into every part of our service, ensuring we deliver trust and integrity with every package:

- . Customer-First Approach: We go the extra mile to tailor our services to the unique needs of each customer, ensuring satisfaction at every step.
- . Innovation: We stay at the forefront of logistics technology, bringing you smart solutions that save time and give you peace of mind.
- . Integrity: Honesty and accountability are at the heart of our operations, building trust one parcel at a time.

### Meet Our Team

Our team is our greatest asset, and every member brings passion and dedication to their role. We are proud to introduce the people driving ParcelTrack forward



### Umang Manyar

CEO & Founder

With a visionary approach and leads PercelTrack to redefine logistics excellence.



### Mia Charlotte

Operations Director

Mile oversees every parcel's journey, ensuring amount, timely, and efficient operations across the board.



### Vasu Mendapra

Technical Lead

Vasu's passion for technology ParcelTrack a leader in tracking and delivery

Email: support@parceltrack.com Phone: +91 1234567890







## Logout

• **Objective**: Allow users to securely log out of the system, ending their session and ensuring their account is protected.

### Process:

- The user clicks on the **Logout** button, which triggers the server to destroy the session.
- All session data, such as the user's authentication status, is cleared to prevent unauthorized access.
- After logging out, the user is redirected to the **Login** page or the home page, ensuring they are no longer logged in.

## Database Structure

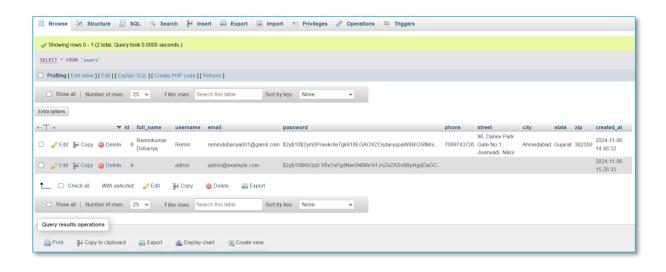
The application uses a MySQL database to manage user data, session details, and chat messages. Key tables in the database include:

## Users Table (user)

## • Columns:

- o id (INT): Primary key, auto-incremented unique identifier for each user.
- o full\_name (VARCHAR): Full name of the user for identification and display purposes.
- o username (VARCHAR): Unique username used for user login and identification.
- o email (VARCHAR): User's email address, used for login and account recovery.
- o password (VARCHAR): Hashed password for secure authentication.
- phone (VARCHAR): User's contact number.
- street (VARCHAR): Street address of the user.
- o city (VARCHAR): City where the user resides.

- o state (VARCHAR): State of the user's residence.
- o zip (VARCHAR): Postal code of the user's address.
- created\_at (TIMESTAMP): Timestamp marking when the user account was created (defaults to current timestamp).
- **Purpose**: Manages and stores essential user details, supporting account creation, login, and address-related functionalities in parcel management.

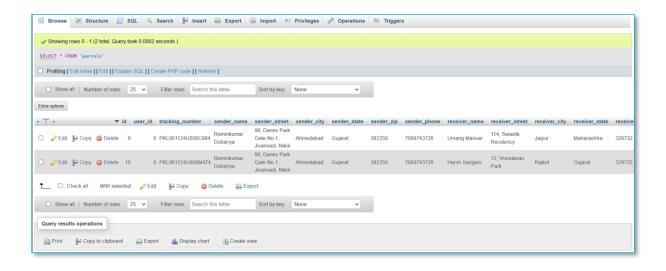


## ❖ Parcels Table (parcels)

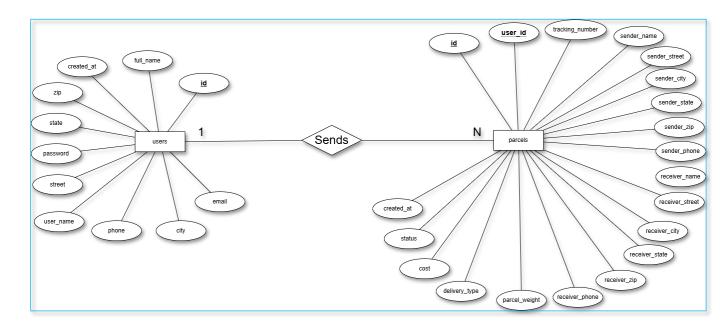
### Columns:

- o id (INT): Primary key, unique identifier for each parcel.
- user\_id (INT): Foreign key referencing the user who created the parcel, linking parcels to users.
- tracking\_number (VARCHAR): Unique tracking code for each parcel.
- sender\_name (VARCHAR): Name of the sender.
- o sender\_street (VARCHAR): Street address of the sender.
- o sender\_city (VARCHAR): City of the sender.
- sender\_state (VARCHAR): State of the sender.
- sender\_zip (VARCHAR): ZIP code of the sender.
- o sender\_phone (VARCHAR): Contact number of the sender.
- o receiver\_name (VARCHAR): Name of the receiver.

- o receiver\_street (VARCHAR): Street address of the receiver.
- o receiver\_city (VARCHAR): City of the receiver.
- o receiver\_state (VARCHAR): State of the receiver.
- o receiver\_zip (VARCHAR): ZIP code of the receiver.
- o receiver\_phone (VARCHAR): Contact number of the receiver.
- o parcel\_weight (DECIMAL): Weight of the parcel in kilograms.
- o delivery\_type (ENUM): Type of delivery selected, either 'Standard' or 'Express'.
- o status (ENUM): Current status of the parcel, e.g., 'Pending', 'Sent', 'Delivered'.
- created\_at (TIMESTAMP): Date and time of parcel creation, defaulting to the current timestamp.
- o cost (DECIMAL): Delivery cost calculated based on weight, type, and distance.
- **Purpose**: Manages details of parcels sent by users. This table is critical for tracking parcels, managing delivery statuses, and calculating delivery charges.



# ER-Diagram



## Conclusion

The **ParcelTrack** courier management project successfully streamlines the end-to-end process of parcel delivery by integrating essential features such as user registration, parcel sending, tracking, and pricing calculations. This system enhances both user experience and operational efficiency by offering transparency in pricing, secure user authentication, and real-time tracking. Additionally, the user-friendly interface simplifies interactions for senders, making parcel booking straightforward and manageable. By addressing each core aspect of the parcel delivery process, **ParcelTrack** not only fulfills the objectives of accuracy and reliability but also builds a scalable foundation for expanding functionalities in the future.