
Cargo Management System

Overview

The "Cargo Management System" is a comprehensive solution designed for the efficient management of shipping goods from the sender to the receiver. It streamlines the process by incorporating three key modules:

1. Customer Module

- Registration-Free Access: Customers can use the system without the need for registration.
- Two Options for Sending Goods:
 1. Drop-off at Shipping Center: Customers can choose to drop off their goods at a designated shipping center.
 2. Home Pickup: If customers opt for home pickup, they need to provide the following details through the system:
 1. Destination address
 2. Package weight
 3. Pickup address
- Shipping Confirmation: Once the details are submitted, the cargo agent checks the availability of shipping in the destination area. If available, the agent collects the goods at the sender's home.
- Tracking Code: Customers receive a tracking code for real-time tracking of their shipment.
- There must be an option for inquiries or raising issues related to the shipment.

2. Cargo Team Module

- Facility Availability Check: Allows the cargo team to search and confirm the availability of the delivery facility in a specific area.
- Goods Entry: Enables the entry of goods/package details into the system.
- QR Code and Tracking Code Generation: Generates QR codes and tracking codes for efficient tracking and management of shipments.

3. Executive Module

- Real-time Status Updates: Executives are responsible for updating the shipping status of packages, ensuring customers receive real-time updates on the location and status of their goods.

Work Flow

1. Customer Initiates Shipping Request:

The customer has two options:

Option 1: Drop the package at the nearest shipping center.

Option 2: Opt for home pickup.

If home pickup is chosen, the customer provides:

- Destination address
- Package weight
- Pickup address

2. Shipping Availability Check:

For home pickup requests, the cargo team checks if shipping is available in the customer's selected area.

If available, the cargo team proceeds to pick up the package.

3. Home Pickup Process:

The cargo team collects the package from the customer's provided pickup address.

Generates a unique tracking code for the customer to track the shipment in real time.

4. Drop-off at Shipping Center:

Customers opting for drop-off go directly to the nearest shipping center.

5. Product Verification and Weight Calculation:

- The cargo team checks if the product is eligible for shipping.
- Calculates shipping charges based on the product's weight.

6. Delivery Options:

Customers choose between three delivery methods:

1. By Road
2. By Flight
3. By Ship (Sea)

The chosen method may affect the shipping cost.

7. Type of Delivery:

Customers choose delivery type:

1. Normal
2. Speed

Delivery speed choice may impact the shipping cost.

8. Sender Details and Tracking Code Generation:

- The sender provides the sender address and receiver address.
- The cargo team generates a unique tracking code for the shipment.
- Generates a QR code for product labeling, containing information for the cargo team at the receiver's side.

9. Delivery to Receiver:

After shipping the product, once it reaches the shipping center near the receiver, the cargo team delivers it to the receiver.

1. Executive Marks Delivery Status:

The executive updates the system, marking the delivery status as "Delivered."

2. Failed Delivery Scenario:

If the package is not received by the receiver, the shipping center initiates a return to the sender's address. The return amount is to be paid by the sender.