

Courier Tracking and Delivery System

About:

Courier service providers usually have a very large network across countries. A courier goes through several places including distribution center, aeroplane, ship, road transport etc. At this time, even customer is conscious about where has his package reached. The customer can track his courier and track the location status of his package in this system. Here we propose a dedicated courier tracking system where customer may check the status and location of his courier.

Goal:

Complete satisfaction of all stakeholders.

Function:

The customer can track his/her courier through a login where he may enter this courier number and track the location status of his package.

- Company Side

Here every distribution channel has a system operated by authorized people of that particular point of distribution. Each point of distribution has its login access. On login, the person needs to make an entry of a package that reaches it. This data is directly uploaded the main system means the database which is used to regulate tracking system that now keeps track of latest location/status of the package through an active internet connection. The data stored on server can now be used for live package status tracking by customers.

- Customer Side:

Customers may login to the server in order to enter their unique courier tracking number. On entering the number system first gets the last recorded status of that particular package and shows this data to the user. The user may now track his package as and when needed.

Advantages:

- Customer can track his/her courier or ordered goods.
- It helps the authority to keep an eye on sent goods.
- It gives satisfaction to the customer that it's package is secure all the way.
- Company and customer can know the actual date to deliver the specific package based on the delivery tracking.

Requirements:

Booking Details

- All the Information of customer and receivers like name, address, contact and so on.
- Destination Address (where to send).
- Products information like name of the product, weight of the product.
- Quantity and Price of the Products.
- Type to send like urgent delivery or normal delivery of the package.
- Discounts if any

Note: Based on the booking details and information, the system will provide a courier id to the customer through which the customer can track the package.

Tracking Details

- Date of Booking
- Place of Booking
- Destination Address
- Time taken to reach destination.
- Whether the package is dispatched, delivered or rejected or replaced.
- The actual location where the package received till delivery.

Problems:

1. The amounts of information that the customer has to give while submitting the courier must be minimum and enough.
2. The customer must be able to track his/her courier location at any time.
3. Proper tracking Id should be provided to each customer.
4. The payment method must be as easy as possible.
5. If the receiver of a particular courier is not available then the courier must be sent back to the sender properly.
6. Different plans (prime/normal) must be given to the customer based upon the urgency.
7. The user interface must be very easy so that a normal employ can fill in the forms and could help the customer in tracking the details if he wants.
8. The economically-shortest path must be followed in order to send a courier from source to destination.

Solutions:

1. The customer has to give only his/her name and the address of the sender and the receiver only.
2. Proper tracking Id (Unique) must be given to each customer.
3. All way of payment must be given to the customer like. Net banking, card, and Cash.
4. If the receiver is not available, 2-3 chances must be given to the receiver. If still he is not available the courier must be sent back to the sender.
5. Each and every city will have the path from that city to any other city which is the economically-smallest.

Features:

1. Fast and slow delivery depending upon the time and price.
2. Courier is returned back to the sender safely if receiver is unavailable.
3. Tracking.

Software Deployment

To deploy a software of courier tracking and delivery system, we will make a web page through which the customer can either book the order which he/she wants to send at the particular destination or he/she can track the package which he actually booked.

On clicking booking button in the page, the customer can be able to fill all the information of where the products will be delivered.

On clicking the track button and entering the courier id, the customer can be able to track the packages.

Web framework:

MEAN Stack

Language: Javascript

Technology Used: ExpressJS, AngularJS, NodeJS

Database: MongoDB