



# An User Friendly Customer to Customer Courier Service (C2C) System

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**ABSTRACT:** This project C2C couriers has been developed in Angular or ReactJS, Bootstrap, CSS3/SASS. C2C which supports the high accessibility of courier services to the corporate and to the customer. The system is getting used for day to day activities like booking a courier, maintain hub details, maintain company details, process data of companies and lots of other things. C2C can be personalized to suit your business and may either be used as an entire system or as separate modules. This idea of the project represents the 'C2C Courier Services'. Using the courier service person can easily send his/her parcel to other person within the particular destination within the time. Nowadays, 50% of companies of the world uses the services of the various courier company.

## I. INTRODUCTION

This c2c courier service project will have different modules. The login selection will have login facility for the admin and for the user who will operate this system. While taking orders from these customers, it will take all the tiny print of its customers who is placing the orders and every one the small print for the recipient like its address, name, mobile number. During billing process systems will generate a tracking id for his or her products. Through this tracking id, customers or its recipient will be ready to track their products from any location using internet. It'll provide status of the merchandise after placing orders. This c2c couriers project will provide information recipient with following details where this consignment is, till when it'll reach its final destination, if any delay then reason of the delay, the route of this consignment, date of placing consignment, final date to achieve its destination. When it visits to the town office it'll be sent to the recipient with delivery status confirmation. Then after receiving this message its recipients can take its parcels by using their Track Id. When its recipient will receive their parcels, then this track id are becoming to be deleted automatically from the system database after sending final confirmation message to its recipient mobile or email id which may include information of track id, date of receiving and time in conjunction with greeting message for providing further service in future. Nowadays, as time increases, the wants & requirements of the persons are also increased, they have more facility & plan to do their task quickly & within time. But they can not get all the things at the closest market or area, so they got to import the things from anywhere within the planet. Within the country, the things are often imported through post services. But it consumes the time & sometimes problem of the damage or missing occurs. Where as within the international market, the a way is shipping. But it also requires longer. The courier services is one of the solutions of these problems. It's wont to send some things to a private within the earth within time. therefore the courier company has number of branches, which are cover the country or the earth. so as that when person wants to send things then he possesses to contact at nearest courier service branch. The c2c services creates the schedule & gives internal/external services. The courier service work as destination office. The company has certain rules consistent with the load.

## II. PREVIOUS SYSTEM

This project deals with the 'Courier information'. The system is employed for daily activities like booking, non delivery, out return, company details, hub rates, and pickup centers. It is very difficult to try to do this process manually. Hence it's recommended to computerize the method by developing the relative software because the world is popping into information and technology. Computerization becomes necessity altogether walks of life.

### A. Courier

Courier module contains bookings, incomings, out returns, no delivery, hub rates, and pickup centres details. Booking form contains different text fields, option buttons, list boxes and buttons to enter the small print about the source address. Estimation address, weight, amount details. Incoming form contains the small print like source address and destination address the date of delivery. Non delivery form contains the small print like forward date, in date, source address and destination address.



#### B. Employee

This module deals with the tiny print about the workers who are working within the organization and their payroll details

The following are the forms that exist during this module

- Employee details form
- payroll form

Employee form contains the various text fields, list boxes and buttons to enter the tiny print like employee number, name, and address, date of join, assigned area, and phone number .

Payroll form deals details like employee number, name, address, advances, net salary

### III. FEATURES OF PURPOSED SYSTEMS:

The given following features are the important facts that are obtained during this systems:

- During this service the computation of the speed is easily&quickly done.
- This is often ready to provide fast access.
- If any consignments are missed then we'll know it easily using the databases within the computer system of courier services.
- Easy transfer for all types of users.
- It provides id and easy access to the users
- It contains better storage capacity.
- Decreases the load of the persons involving within the manual systems.
- Access of any information individually.
- Work becomes faster.

### IV. PURPOSE OF C2C COURIERS

The purpose of C2C couriers is to automate the available manual system by the help of computer software, fulfilling requirements so that their valuable data/information are present entireperiod with easy accessing and manipulation of an equivalent . The required hardware and software are easily available and easy to work with. It can assist the user to believe their other activities rather to believe record keeping. Basically the project describes the because of manage permanently performance and better service for the clients.

### V. SCOPE OF C2C COURIERS

It may be helpful in collecting the knowledge during a really short time , the gathering are getting to be obvious , simple and sensible .It will help the customer to know the tracking details of the passed year perfectly and vividly and also helps in reducing the worth of collecting the management and collection procedure.

- It satisfy the user requirements
- Be easy to figure
- Have an honest interface
- Be expandable
- Delivered on schedule within the budget.

### VI. ASSUMPTION

To be helpful for the user in tracking the parcels wherever it reaches and delivering it so safer at any user friendly cost .Providing id for each and every users and saves all the knowledge about the transfers of the parcels which are often retrieved for the user's and admin' s lateral use. These process could be secured within the least time that's been login by the precise users.

### VII. WORKING OF EXISTING SYSTEM

On this existing days, there are different modules .The login section will have login facility for the admin and for the user who will operate this technique . While taking orders from its customers, it'll take all the small print of its customers who is placing the orders and every one the small print for the recipient like its address, name , mobile number .During billing process systems will generate a tracking id for his or her products .Through this tracking id, customers or its recipient are going to be ready to track their products from any location using internet. it'll provide status of the merchandise after placing orders within a moment.This technique will provide information recipient with



following details where the present consignment is ,till when it'll reach its final destination , if any delay then reasons of the delay, the route of the present consignment,date of placing consignment ,final date to succeed in the destination.When the consignment will visit to the town office of destination , a message are going to be sent to the recipient with delivery status confirmation. Then after getting this message its recipient can take its parcels by using their Track id are going to be deleted automatically from the system database after every week by sending final confirmation message to its recipient mobile number which can include information of Track Id , date of receiving and time along side greeting message for providing further service in future.

### VIII. PROJECT OBJECTIVE

A leading Courier Service in our country. We handle over 20,00,000 parcels per day. However currently, all our parcel handing is managed through manual operations. We are planning to automate the parcel management, in order to achieve the below objectives,

- Increase operational efficiencies
- Increase customer experience
- Reduce the operational cost

### IX. PARCEL REGISTERING & MONITERING MODULE

This module is used by the the customer facing offices work in our branch offices to accept the parcels and payments from users (Note: all payment and refund details should be pushed to the back-office accounting system as a daily job).The customer facing offices should be able to monitor current status of the parcels to answer the quires from the customers.

#### A. Parcels Management Module

This module is used by the back office to manage the parcel distribution.This module should decide the optimum transport routes based on the agreed upon SLA of the parcel type, while optimizing the transportation cost.

#### B. Transportation Planning Application:

This module is used by the back office to manage transportation vehicles and their routs. This module should plan the vehicle routs to optimize the cost, while maintaining the SLAs (of the parcel types).

#### C. Dashboard Application

The objective of this module is to provide a dashboard to the parcel distribution centres to optimize its operational efficiencies. This dashboard should show the arrival of parcels into the distribution centre (with their scheduled destination, transport vehicle and the priorities to be dispatched), scheduled dispatch time of each transport vehicle, etc. in real time. Parcel distribution centre workers will use this application to ensure that all parcels are dispatched on time, as planed by the 'Parcel Management Module'.

#### D. Consumer Parcel TrackingModule

This module includes a mobile application and a web application that enables our customers to track the parcel location and their estimated arrival time using the parcel id. The mobile application should support Android and iOS while the web application should support all major desktop and mobile browsers.

#### E. Parcel Location Data Capture Module

This module should capture entry and exit of all parcels to branch offices, parcel distribution centers, transportation vehicles and the final destination. This module should also capture the location of each parcel transport vehicle in every five minutes. This information is used by the other modules to track the parcel location, estimate the delivery time, optimize the delivery routes, etc.

#### F. Reporting Module:

This module is used to generate reports required by the management to monitor the SLA compliance and other key matrices, measure the performance of staff members and plan the optimization of overall delivery process. The management also needs to generate ad-hoc reports based on their special needs.

#### G. SSO Module

This module provides Single Sign On for all internal applications (all applications other than the two consumer facing applications that does not require any authentication).



H. Admin Module

This module is used to manage the application configurations, applications users and their permissions.

**X. TECHNOLOGY STACK**

|                            |   |
|----------------------------|---|
| Presentation Layer         | AngularJS or ReactJS<br>BootStrap<br>CSS3/SASS  |
| Server Side Implementation | Spring Boot<br>Spring Rest Controller<br>Spring Security<br>Spring AOP<br>Spring Hibernate or JPA |
| Database                   | MYSQL   |

**XI. DATABASE DESIGN**

A. DATA ABSTRACTION

The main purpose of a database is to provide users with an abstract view of the data . This system hides certain details that how the data is stored and maintained. However so as for the system to be usable, data must be retrieved efficiently. The efficiency cause the design of complex arrangement for the representation of data within the database. Certain things must be hidden from the database system users. This accomplished by defining several levels of abstraction at which the database could even be viewed.

B. CLASSIFICATION OF DATABASE

There are 3 kinds of database approaches given below,

A. Hierarchical Database:

In this kind of model data is represented in simple tree structured. The record at the very best of three is known as root, the idea may have any number of dependents. Each of these may have any number of low level dependents then on up to any number of levels. The disadvantage of the approach is that no independent record occurrence can exist without it's superior.

B .Network Database

In a Network database, data is shown by Network structure. During this approach record occurrence can have any number of superiors also as any number of immediate dependents thus allow many to many correspondence directly than an hierarchical approach. the foremost disadvantage of the Network model is data representation is extremely complex resulting in complexity of the DML (Data Manipulation Language).

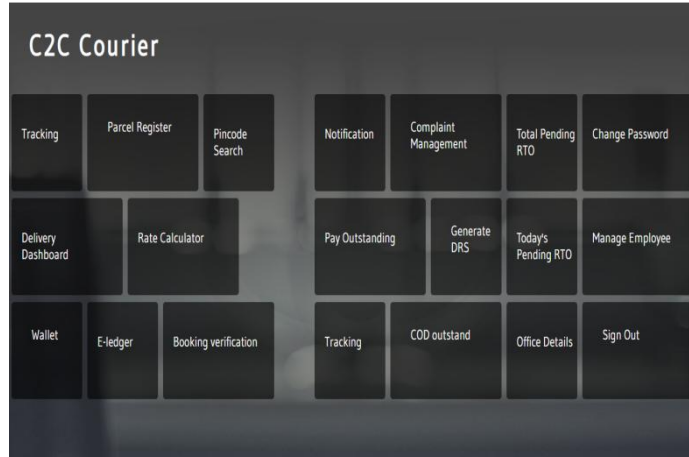
C Relational Database:

The Relational model represents data and relationships among data by a group of tables each of which features variety of columns with unique names.

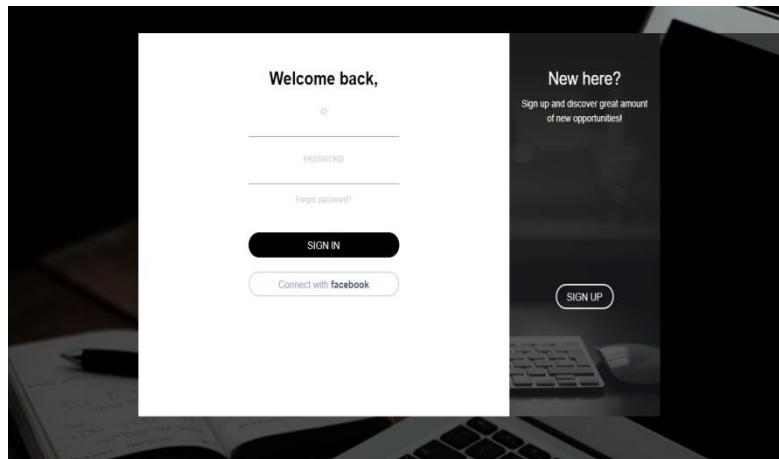


## XII.RESULT

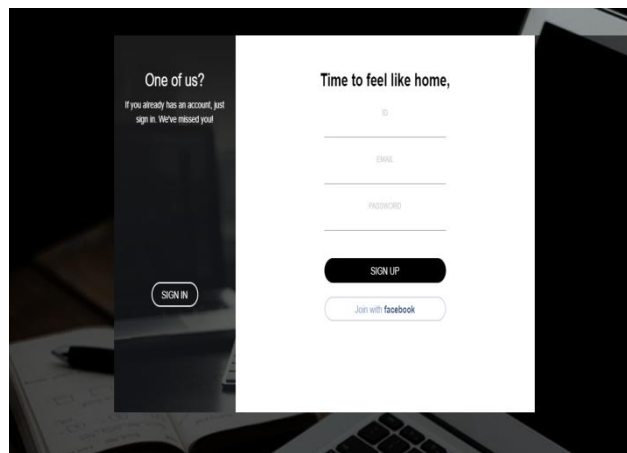
### 1.1MAIN PAGE



### 1.2PARSEL REGISTER PAGE



### 1.3SIGNIN PAGE



### 1.4SIGNUP PAGE



1.5 TRACKING PAGE



1.6 WELCOME PAGE

### XIII. CONCLUSION

The project titled 'C2C Courier Service' was developed to the courier services and for the direction and with their help. The system was tested and therefore the performance of the system was found to be acceptable. All the required output was created. The system will be found to be user-friendly with help message for the customer. The menu Driven Architecture of the system provides a simple to use environment for the users. The system was implemented successfully. The manpower and dealing hours needed to work the system was less and it had been seen to be safer. Thus, the Project was completed successfully.

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