

# COURIER MANAGEMENT SYSTEM



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# **Abstract**

It is now-a-days very important for the people to send or receive articles like imported furniture, electronic items, gifts, business goods and the like. People depend vastly on different transport systems which mostly use the manual way of receiving and delivering the articles. There is no way to track the articles till they are received and there is no way to let the customer know what happened in transit, once he booked some articles. In such a situation, we need a system which completely computerizes the cargo activities including time to time tracking of the articles sent. This need is fulfilled by Courier Management System software which is online software for the cargo management people that enables them to receive the goods from a source and send them to a required destination and track their status from time to time.

#### 1. INTRODUCTION

Courier Management System is a software for the cargo offices where the customer can use this software to enter the details of the goods along with the source and destination points. The details of loading the goods into the physical transport system are also recorded by the system. The system has GUI for the users to manage not only daily transactions but also to keep the historical data in the database for future reference.

The other user of the system is administrator who can manage the vehicles information as well as customer information. He can also create new branch based on based on branch requests and can decide the route for the cargo to take on a particular day so that delivery happens at the customer's nearest point. Also it provides the management reports like monthly goods bookings, loadings, deliveries, demurrages and receivers particulars.

#### 1.1 Objective

This project deals with the 'Courier management'. The system is used for daily activities such as booking, loading, delivery, status check, and managing branches. It is very difficult to do this process manually. Hence it is recommended to computerize the process by developing the relative software as the world is turning into information and technology; computerization becomes necessity in all walks of life.

# 1.2 Existing System

The existing system is a manual one in which users are maintaining ledgers, books etc to store the information like goods booking details, loading particulars, deliveries particulars, details of receivers of items at all branches, and customer details as well as employee details. It is very difficult to maintain historical data. Also, regular investments need to purchase stationar every year.

#### **Disadvantages of Existing System:**

The following are the disadvantages of current system

- 1. It is difficult to maintain important information in books
- 2. More manual hours need to generate required reports
- 3. It is tedious to manage historical data which needs much space to keep all the previous year's ledgers, books etc.
- 4. Daily transactions are to be entering into different books immediately to avoid conflicts which are very difficult.
- 5. No co-ordination between different branches because we are not storing the data at centralized location.

#### 1.3 Proposed System

The new system titled "Courier Management System" is hence proposed to remove all the problems in the existing system discussed above.

Proposed system is a software application which avoids more manual hours that need to spend in record keeping and generating reports. This application keeps the data in a centralized way which is available to all the users simultaneously. It is very easy to manage historical data in database. No specific training is required for the employees to use this application. They can easily use the tool that decreases manual hours spending for normal things and hence increases the performance. As the data is centralized it is very easy to maintain the status of the goods booked in all branches.

#### **Advantages of Proposed System:**

The following are the advantages of proposed system

- 1. Easy to manage all the daily transactions
- 2. Centralized database helps in avoiding conflicts between different braches
- 3. Avoids human errors
- 4. Provides better customer support from any branch
- 5. Can generate required reports easily
- 6. Easy to manage historical data in a secure manner
- 7. Easy to use GUI that does not requires specific training.

#### 2. SYSTEM ANALYSIS AND DESIGN

System analysis is the performance management and documentation of activities related to the life cycle phases of any software namely:

- The Study Phase
- The Design Phase
- The Development Phase
- The Implementation Phase

Software Analysis starts with a preliminary analysis and later switches on to a detailed one. During the preliminary analysis the Analyst takes a quick look at what is needed and whether the cost benefits. Detailed analysis studies in depth all the cornered factors, which builds and strengthens the software.

#### **2.1 SRS**

The introduction of the Software Requirements Specification (SRS) provides an overview of the entire SRS with purpose, scope, definitions, acronyms, abbreviations, references and overview of the SRS. The aim of this document is to gather and analyze and give an in-depth insight of the complete requirements of our project by defining the requirements in detail. Nevertheless, it also concentrates on the capabilities required to run out project on different high-level software features.

#### 2.1.1 Functional Requirements

The system after careful analysis has been identified to present itself with the following modules:

- customer Information & Branches Module
- Goods booking, Loading & Deliveries module
- Receivers & Reporting module

#### **Customer Information & Branches Module**

This module maintains the information about all the customer who have been using in the company. This module contains all the information of the customer. Each and every customer details will be included in the module. This module maintains the information related to the existing branches that is part of the organization. This module contains all the information about the branches. If at all the new branch is required or the company has get any requests for the new branches from the others then only the admin user can respond and add the new branches. He is only the responsible person to cancel the branches. The admin user can view the details of all the branches which are already existed. The manager user also can view the details of all the branches which are already existed.

#### Goods booking, Loading & Deliveries module

This module maintains the information related to the Bookings of the goods. All the booking details means every item has its own id, LR No, Customers name, details of the customer, Branch ID, Branch Location, Booking date and all the details will be included in this module. If any user enters into his account then this module shows the functionalities of this module. It will display the two functionalities related to this module i.e., one is Goods Particulars and the other one is View Bookings. All the particulars of Goods will be included in Goods Particulars functionality, and the View Bookings contains the details of the all the bookings. For the booking of every item one booking form is displaying in the application. Only manager user can fill the details of all the fields in the booking form. Also manager user can view the details of all the bookings. The admin user also can view the details of all the bookings. This module maintains the information related to the loading of the items. All loading details means LR No of the particular item, Material code, No of Items, Destination, Vehicle No, Receivers name, Date of loading all these details will be included in this module. If any user enters into his own account then this module will display the two functionalities related to this module. I.e. one is Loading Details and the other one is View Loadings. One form is available in the Loading Details functionality. All the details of loadings will be included in loading

details functionality and all loadings will be included in the view loadings functionality. For loading of every item the corresponding user should fill the form. Only the manager user can fill the loading details form. Also he can view the details of all loadings. The admin also can view the details of all the loadings. This module maintains information related to the deliveries. All delivery details means LR No, Material particulars, No of Items, Booking Branch, Date of loading, Date of delivery, Delivered at Branch all these details will be included in this module. Whenever the user enters into his account then the Deliveries module will display the following functions. One is Deliveries Details and the other one is View Deliveries. The deliveries details function contains one form related to the details of all deliveries. Only the manager user can add the new delivery and also he can view the details of all the deliveries. The admin user also can view the details of all the deliveries.

#### **Receivers & Reporting module**

This module maintains the information related to all the receivers information. All the information related to receivers means LR No, Receivers name, booked at branch, Material particulars, No Of Items, Charges of Demurrages all these details will be included in this module. Whenever the user enters into his account then the receiver's information module will display the following functions. One is Receivers Details and the other one View Receivers. The Receivers details function contains one form related to the details of receivers. Only the manager user can add all the details related to receivers and also he can view the details of all the receivers' information. The admin user also can view the details of all the management reports. Whenever the user enters into his account then the Reporting module contains the following management reports. All the Bookings, Branches, Routes, Loadings, Deliveries, Demurrages, and Goods Status reports will be included in this module. All the admin user and the manager user can view or generate all the management reports

#### 2.1.3 Hardware Requirements

- Pentium IV Processor or later
- 1 GB RAM
- 40 GB Hard Disk Space
- Ethernet card with an Internet

#### 2.1.4 Software Requirements

- Windows XP Professional Operating System.
- Internet explorer 6.0 or Netscape navigation
- PHP
- HTML
- CSS.
- BootStrap

#### 2.2 System Analysis and Design

System design is the second step in the system life cycle, in which overall design of the system is achieved. The functionalities of the system is designed and studied in this phase. The first step is designing of program specification. This determines the various data inputs to the system, data flow and the format in which output is to be obtained.

Design phase is a transmission phase because it is a transition from user oriented document to computer data. The activity in the design phase is the allocation of functions to manual operations, equipment and computer programs. Flow charts are prepared in the study time and is decomposed until all functions in the system perform evidently.

Design is a multi-step process that focuses on data structures, software architecture, procedural details (algorithms etc.) and links between the modules. The design process goes through logical and physical stages. In logical design reviews are

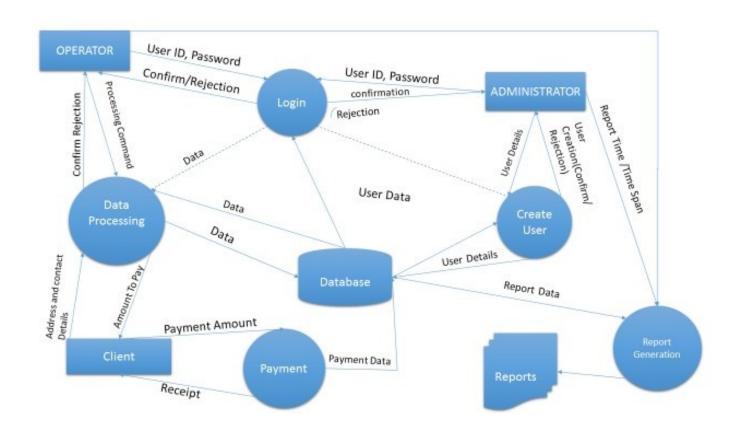
made linking existing system and specification gathered. The physical plan specifies any hardware and software requirement, which satisfies the local design.

Modularization of task is made in this phase. The success of any integrated system depends on the planning of each and every fundamental module. Usually a project is revised in step by step sequence. Inter-phase management of such module is also important. Software design methodology changes continually as new methods, better analysis and broader understanding evolve.

Various techniques for software design do exit with the availability of criteria for design quality. Software design leads three technical activities-design, code and test. Each activity transforms information, which validates the software. The design system converts theoretical solution introduced by the feasibility study into a logical reality.

# **System Design**

#### 2.2.1 ER Diagrams



# 2.2.2 Table Design

The project has been identified to contain twelve data base tables which are practically as follows:

Table Name: Deliveries

Field Name	Data Type	Size
DELIVERIES ID	INT	5
LR NO	INT	50
MATERIAL	VARCHAR	100
PARTICULARS		
NO OF ITEMS	INT	50
BOOKED AT BRANCH	VARCHAR	100
DATE OF LOADING	DATE	
DATE OF DELIVERY	DATE	
DELIVERED AT	VARCHAR	100
BRANCH		
DELIVERY STATUS	VARCHAR	100

Table Name: GoodsBooking

Field Name	Data Type	Size
BOOKING ID	INT	5
LR NO	INT	10
CUSTOMER NAME	VARCHAR	50
PHONE NO	VARCHAR	50
MATERIAL		100
PARTICULARS	VARCHAR	
NO OF ITEMS	INT	50
BRANCH ID	INT	5
BOOKED AT BRANCH	VARCHAR	100
BRANCH LOCATION	VARCHAR	100
DATE OF BOOKING	DATE	
DESTINATION	VARCHAR	100
CHARGES CATEGORY	VARCHAR	100
CHARGES	FLOAT	
GOODS STATUS	VARCHAR	100

Table Name: Login

Field Name	Data Type	Size
USER ID	VARCHAR	50
PASSWORD	VARCHAR	50
AUTH	INT	11

# Table Name: Material particulars

Field Name	Data Type	Size
MATERIAL ID	INT	10
LR NO	INT	10
MATERIAL	VARCHAR	100
PARTICULARS		
NO OF ITEMS	INT	10
TOTAL WEIGHT	INT	10
CHARGES CATEGORY	VARCHAR	20
CHARGE	FLOAT	

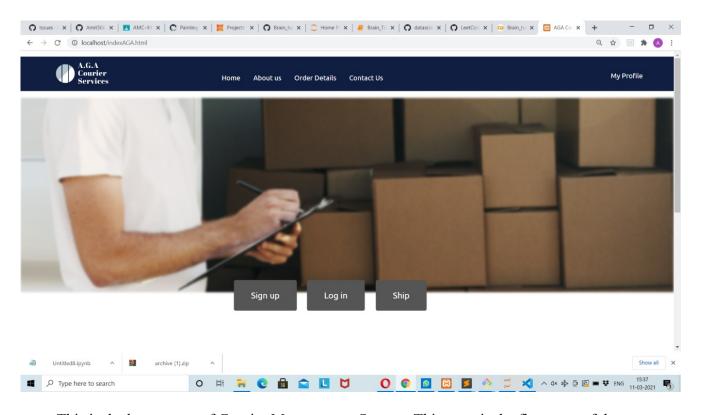
# Table Name: Receivers

Field Name	Data Type	Size
RECEIVERS ID	INT	5
LR NO	INT	50
RECEIVERS NAME	VARCHAR	100
BRANCH NAME	VARCHAR	100
RECEIVERS PHONE NO	VARCHAR	100
BOOKED AT	VARCHAR	100
MATERIAL PARTICULARS	VARCHAR	100
NO OF ITEMS	INT	50
DATE OF RECEIVE	DATE	
CHARGES OF DEMURRAGE	FLOAT	
CHARGE	FLOAT	

# 3. IMPLMENTATION

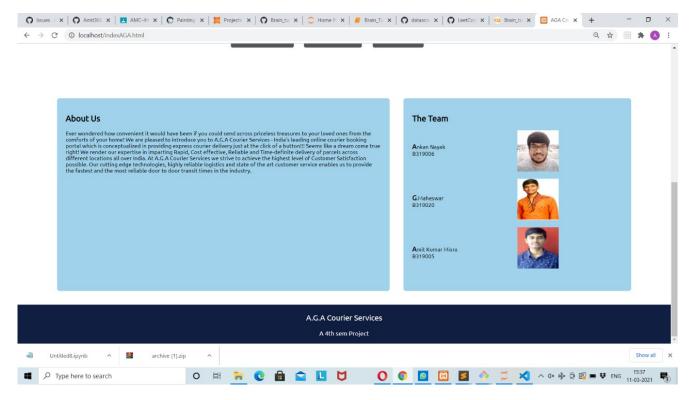
# 3.1 Module Screens

# 3.1.1 Screenshot for viewing Home page



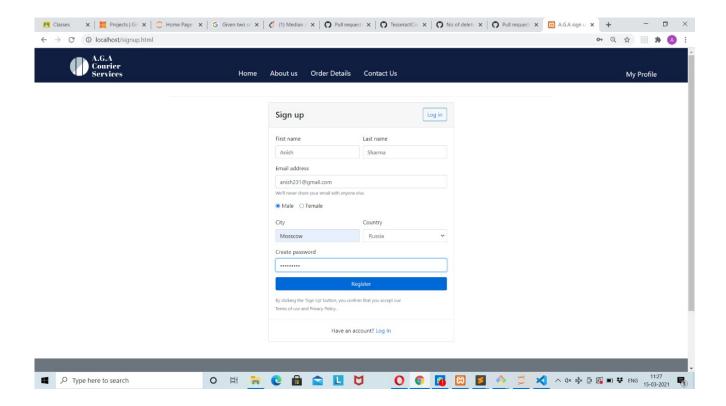
This is the home page of Courier Management System. This page is the first page of the website.

# 3.1.2 Screenshot for viewing about us page



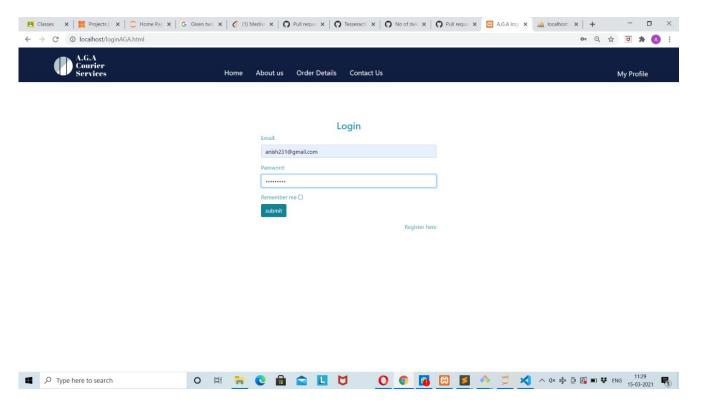
Once the user clicks the About us on Home page, this page will be displayed.

# 3.1.3 Screenshot for Sign up page



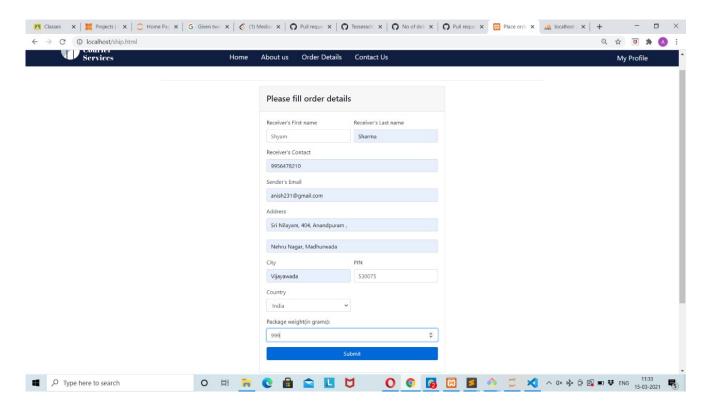
Once the user clicks the Sign up on Home page, this page will be displayed. This page is used by user to create an account.

# 3.1.4 Screenshot for viewing Login page



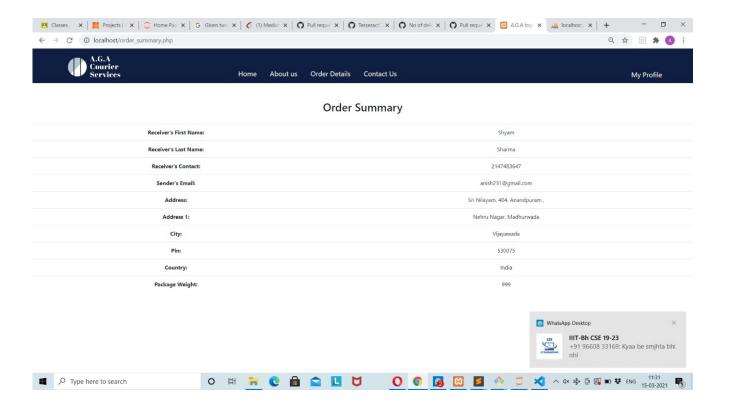
Once the user Signed up, he/she will be taken to login page to login to his/her account.

# 3.1.5 Screenshot for adding Order details



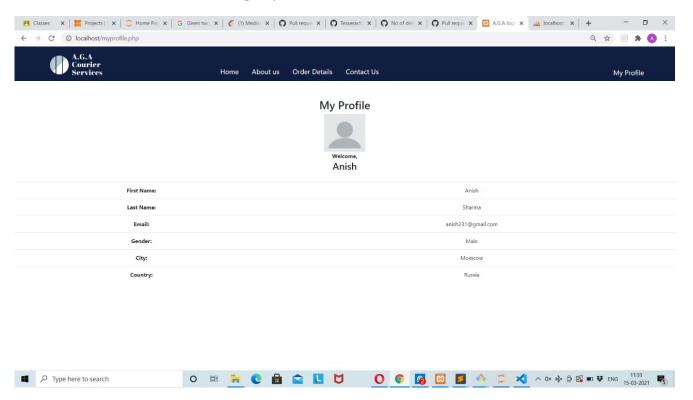
User can add Order details by entering the details in Order details page.

#### 3.1.6 Screenshot for viewing Order Summary page



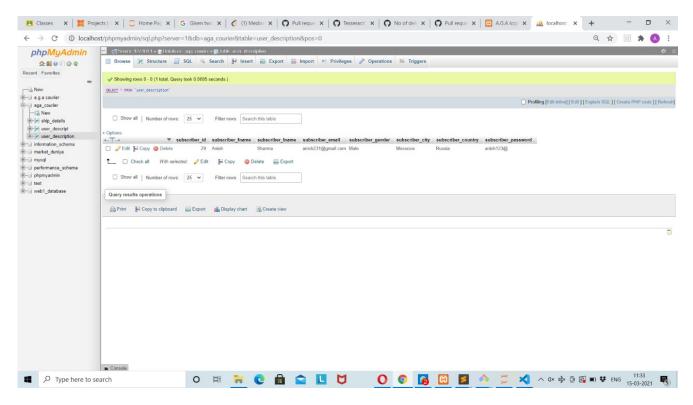
Once the User submitted the Order Details, he/she can check their Order Summary in Order Summary page by clicking Order Details in home page.

# 3.1.7 Screenshot for viewing My Profile



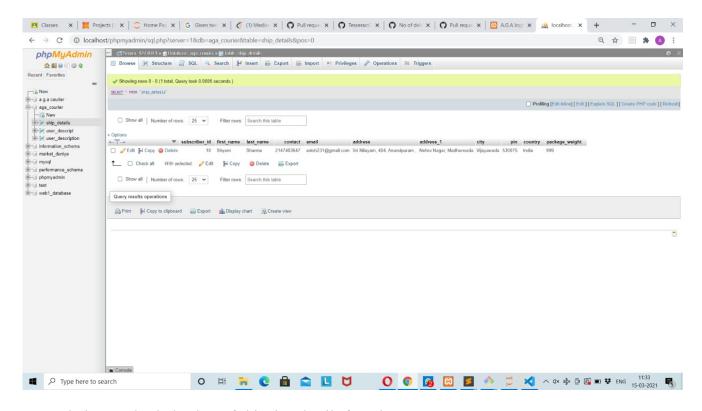
User can see their profile by clicking on My Profile on Home Page.

## 3.1.8 Screenshot for viewing Backend user details



Admin can check the details of customer from here.

## 3.1.9 Screenshot for Backend shipping Details



Admin can check the data of shipping details from here.

#### 4. CONCLUSION

The entire project has been developed and deployed as per the requirements stated by the user, it is found to be bug free as per the testing standards that is implemented. Any specification-untraced errors will be concentrated in the coming versions, which are planned to be developed in near future. The system at present does not take care of the money payment methods, as the consolidated constructs need SSL standards and are critically to be initiated in the first face, the application of the credit card transactions is applied as a developmental phase in the coming days. The system needs more elaborative technicality for its inception and evolution.

