

COURIER MANAGEMENT SYSTEM



A project report submitted to
Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal
towards

Partial fulfillment of the diploma in

(Computer Science and Engineering)

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Rajendra Nagar, Indore (M.P.)



CERTIFICATE

This is to certify that the project work entitled "Courier Management System", submitted by Shivani Malviya, Kavita Kumari and Ayushi Soni towards partial fulfillment of diploma of Computer Science and Engineering of Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal, is a satisfactory account of their work and is approved for the award of diploma.

Internal Examiner

External Examiner



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H.O.D

External Examiner

Computer Science and Engineering

Principle



ACKNOWLEDGEMENT

After the completion of this work, words are not enough to express our feelings about all those who helped us to reach this goal, feeling above this is our indebtedness to The Almighty for providing us this moment in life.

It's a great pleasure and moment of immense satisfaction for us to express my profound gratitude to our respected supervisors, **Mr. Dinesh Bhuriya** whose constant encouragement enabled us to work enthusiastically. Their perpetual motivation, patience and excellent expertise in discussion during progress of the project work have benefited us to an extent, which is beyond expression. Their depth and breadth of knowledge of Computer Engineering field made us realize that theoretical knowledge always helps to develop efficient operational software, which is a blend of all core subjects of the field. We are highly indebted to them for their invaluable guidance and ever-ready support in the successful completion of this project in time. Working under their guidance has been a fruitful and unforgettable experience.

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We extend our sincere thanks to all the faculty members and the non-teaching staff of the Computer Science Department, for their cooperation. Special thanks to our colleagues and friends for providing us useful comments, suggestions and continuous encouragement.

Ayushi Soni (16049C04012) Kavita Kumari (16049C04024) Shivani Malviya (16049C04052)



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 receive the goods from source and send them to to a required destination and track their status from time to time.

Courier service system is very easy and allows many users to perform the job simultaneously. The courier service system is all about delivering a product to its destination with the help of their like the address of the receiver other details. personal details and The cost is decided depending on the product and the weight of the product. provide an option of quick delivery but it costs a little more. The user will always receive a message whenever his/her order is dispatched or delivered or canceled.

It makes the user work easier.

The objective of the project is to deliver an efficient Courier Management System whose main functionality apart from calculating the courier Bill include predicting the time required to reach the destination.

As per our client requirement, our main object should be managing consignment in an effective manner. The Proposed System is eliminating all problem of the existing system.

And automate all process in high-tech. It should keep record of customer booking and delivery details and so on can be proficient without much effort the success criteria depend on. The accuracy in calculating the bill for each consignment. The accuracy in predicting the time required to reach the destination. User interface simplicity and user-friendliness.



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OBJECTIVE:

The objective of the project is to deliver an efficient Courier Management System whose main functionality apart from calculating the courier bill include predicting the time required to reach the destination.

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And automate all process in high-tech. It should keep record of customer booking and delivery details and so on can be proficient without much effort the success criteria depend on. The accuracy in calculating the bill for each consignment. The accuracy in predicting the time required to reach the destination. User interface simplicity and user-friendliness.

Apart from that we introduced Barcode system, which is in the form of slip paste over the consignment when it will be received by source officer and barcode number is also provided to sender so that they will be able to Track their parcel.

PROBLEM DEFINITION :

The Current software courier management system provide Transition of Goods across States or Nation, and Nowadays People Face issue to Transit Goods across City Limits Due to Busy Day to Day Schedule.

Our client is not using its own online system for courier management. They are using some third-party tool to manage the consignment. There was no customisation for the client.

It was a very basic tool just to update the status of consignment, the client was maintaining billing in excels, shipment in excel too. There was no proper management of offers. All these works are a management headache without a proper system to manage.



PROBLEM SOLUTION :

As per above mentioned problem we introduced a courier management with the concept for small distance. With low cost and fast delivery. Also provided same Tracking system which we provided through out world and across the cities.

The system will be used for day to day activities like out return, company details, hub rates, booking, non-delivery and pickup centres. It is not easy to do this process manually because it would become very hectic.

Hence it is suggested to automate the process by developing the relevant software as the world is moving from manual working to information and technology era where automation becomes important in all part of life.

The main purpose of this system is to connect all branches to centre database so the everywhere information is same. This system increases the efficiency and increases the customer satisfaction level.

• LITERATURE SURVEY:

Our client is not using its own online system for courier management. They are using some third-party tool to manage the consignment. There was no customisation for the client.

It was a very basic tool just to update the status of consignment, the client was maintaining billing in excels, shipment in excel too. There was no proper management of offers. All these works are a management headache without a proper system to manage. The Current software courier management system provide Transition of Goods across States or Nation, and Nowadays People Face issue to Transit Goods across City Limits Due to Busy Day to Day Schedule.



• TOOLS AND TECHNOLOGY:

• HARDWARE REQUIREMENT:

Processor Intel(R) Core(TM) i5-6200U CPU @ 2.30GHz 2.40 GHz

Main Memory 64MB RAM

Hard disk drive 40MB

• SOFTWARE REQUIREMENT:

<u>Term</u>	<u>Description</u>
Algorithm design	Used to create a mathematical process in solving problems.
Database	A collection of stored and related data.
ER-diagram	Data model for describing a database in an abstract way.
Back-End(Coding)	JAVA
Front End	Using HTML, CSS and JAVASCRIPT.
JDBC	Java-Database connectivity: to connect front end with back end.



• PROCESS MODEL ADOPTED :

User Authentication Only a valid user will able to log in this system. There are different users to work as per their rights. Admin has a right to create or delete users. Admin can also edit information.

Setup Master:

Set up Master helps you to enter and update the fiscal year data. This will help to pay taxes etc. Managing salaries of employees. Set up Company Details and Rate master It is used to define and update the company details and rate master such as cost per miles, domestic rates, surface rates etc. Set up Service Tax and Fuel charges This module is used to define Service tax and fuel charges. Fuel charges will be defined branch wise. Different places have different fuel rates

Consignment Detail:

All the consignments are stored in the system using this module and these consignments further distributed to employees of the courier company. Consignment has a different local to travel so it must have unique id attach to it.

Consignment Receipt:

Consignment system generated receipt is given to the client after getting a courier from them, in this module user must enter client details, consignment number, mode, weight and destination and amount will automatically have calculated as per the weight and destination. This module has access to another third party api to collect payment online.

Bill Generation:

This utility helps to generate bill according to date and company. It has consignment id, customer id, etc. The date range is given for date so that user will able to generate a bill for any number two months.



INTRODUCTION :

The Courier company has number of branches, which are spread over the country or the world. So that when person wants to send things then he has to contact at nearest courier service branch. The courier company creates the schedule and give internal/external services. The courier service work as destination office or source office. The source office branch receives the order means consignments and assign a delivery person for the same for nearest delivery and for other, sends it to the destination courier branch. The company has certain rules according to the weight. Using the courier service person can easily send his/her parcel to other person in the particular destination within the time.

When the consignment will visit to the city office of destination, a message will be send to the recipient with delivery status confirmation. Then after getting this message its recipient can take its parcels by using their Track Id. In modern age, as time increase, needs and requirements of the person are also increased. They want more facility and try to do their task quickly and within time. But they can not get all the things at nearest market or area, so they have to import the things from any place in the world. Within the country, the things can be imported through post service. But it consumes the time and sometimes problem of damage or missing occur. Where as in the international market, the one way is shipping. But it also requires more time. The courier service is one of the solutions of these problems. It is used to send some things to any person in the world within time.

Special solution offers that not only persons are able to send courier thought out the world but they can send their parcel to nearest places.

ANALYSIS OF THE SYSTEM STRUCTURE :

We analysis and found that there are many

advantages of courier management system. Thus, summarized below which can avoid the company from lagging from big delay in consignment delivery. This would help the managing the human resource and billing system etc. just using one system i.e. Courier Management

System.

There are several Advantages of using the Courier management system in a business setting are:



Cost savings:

This system manages the human and other resources in such a way that cost of delivery of each consignment decreases and help the company to get more profit.

Increased efficiency:

The courier management system allows the process of delivery of consignment faster than before. This also increases the customer satisfaction level.

Data security:

By supplementary with the restricted user rights, company managers can allow many employees to contribute in courier management.

They can process the consignment and update the status only with the authenticated process to make user data secure which is our main concern in this era.

FUTURE ENHANCEMENT OF COURIER MANAGEMENT SYSTEM

It is still mature and fully enthusiastically. Any requirements, this project is completed but still, they want to update and modify some modules. We are always thinking about association requirements also growing day by day.

We always want to implement something more. This project is completed when you watch, but we want to implement more things.

Online Chat

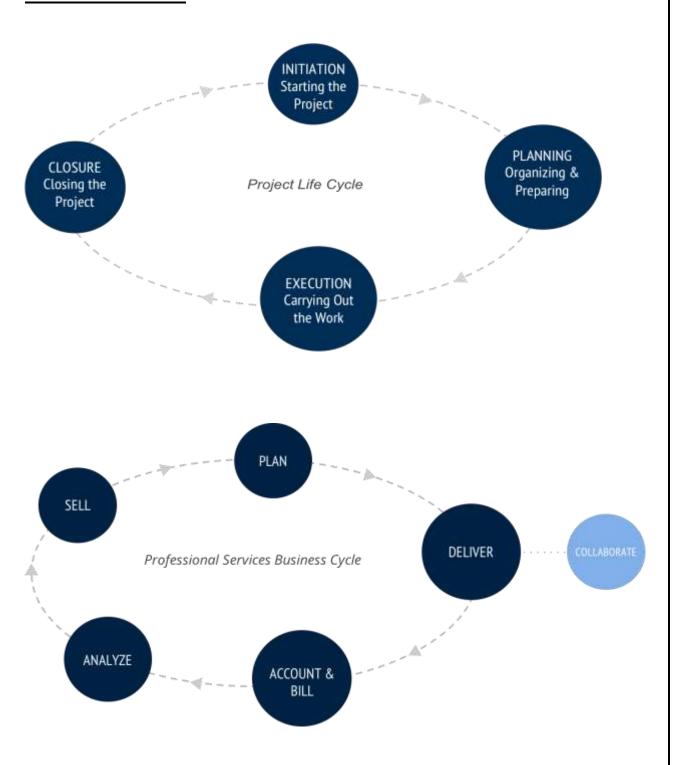
Overseas Service

Pickup Request On chat

Extending geographical research



• **SYSTEM DESIGN**:





• DATABASE DESIGN :

Table Structure for table "emp1".

Field	Туре	Null	Default
name	varchar(15)	No	
id	varchar(10)	No	
sal	int(15)	No	
bname	varchar(15)	No	

Table Structure for table "user".

Field	Туре	Null	Default
name	varchar(20)	No	
email	varchar(20)	No	
pwd	varchar(20)	No	

Table Structure for table "worker".

Field	Туре	Null	Default
name	varchar(15)	Yes	NULL
emp_id	varchar(10)	Yes	NULL



Table Structure for table "parcel".

Field	Туре	Null	Default
s_name	varchar(15)	YES	NULL
s_address	varchar(20)	YES	NULL
s_pin	int(10)	YES	NULL
s_mobile	int(25)	YES	NULL
s_email	varchar(20)	YES	NULL
s_city	varchar(10)	YES	NULL
s_state	varchar(10)	YES	NULL
s_dis	varchar(10)	YES	NULL
r_name	varchar(15)	YES	NULL
r_address	varchar(20)	YES	NULL
r_pin	int(10)	YES	NULL
r_mobile	int(25)	YES	NULL
r_email	varchar(20)	YES	NULL
r_city	varchar(10)	YES	NULL
r_state	varchar(10)	YES	NULL
r_dis	varchar(10)	YES	NULL
Date	date	YES	NULL
p_time	time	YES	NULL
opt	varchar(30)	YES	NULL
pri	varchar(15)	YES	NULL
qty	int(10)	YES	NULL



• DETAILED DESIGN:

According to the <u>Project Management Institute</u>, the project life cycle is critical for any managers hoping to deliver projects to clients successfully. Let's take a look at the steps involved for detailed design.

The Project Phases Involved:

- Phase 1: The Conceptualization Phase
- Phase 2: The Planning Phase
- Phase 3: The Execution Phase
- Phase 4: The Termination Phase

Phase #1: The Conceptualization Phase

This can also be referred to as the 'Initiation Phase' and is the starting point of any project or idea. For the Conceptualization Phase to begin, a strategic need for the project or service must be recognized by upper management.

Ask yourself the following questions during Conceptualization:

- What is the problem?
- Will the development of a project solve that problem?
- What are the specific goals of the project?
- Do we have enough resources to create and support the project? The Conceptualization Phase typically involves:
 - Creation of the statement of work (SOW).
- Presenting the business case.
- Creation of a business contract.

Phase #2: The Planning Phase

The second phase of the project management life cycle is referred to as the Planning Phase. Once management has given the OK to launch a project, a more formal set of plans—outlining initial goals—is established.

Ask yourself the following questions during Planning:

- What is the project purpose, vision, or mission?
- Are there measurable objectives or success criteria?
- Do you have a high level description of the project, requirements and risks?
- Can you adequately schedule and budget high level milestones?



Phase #3: The Execution Phase

The third phase is labelled Execution. This is when the actual work of the project is performed. Required materials, tools, and resources are transformed to reach the project goals. During this phase, <u>performance is continually measured</u> to ensure the project is successful.

Ask yourself the following questions during Execution:

- Are all resources being tracked?
- Is the project on budget and on time?
- Can resource planning be optimized?
- Are there major roadblocks that require change management? The Execution Phase typically involves:
- Strategic planning.
- Implementation planning.

Phase #4: The Termination Phase

The fourth and final phase is called Termination Phase, also referred to as Project Closure. This phase begins once the project has been completed.

The Termination Phase typically involves:

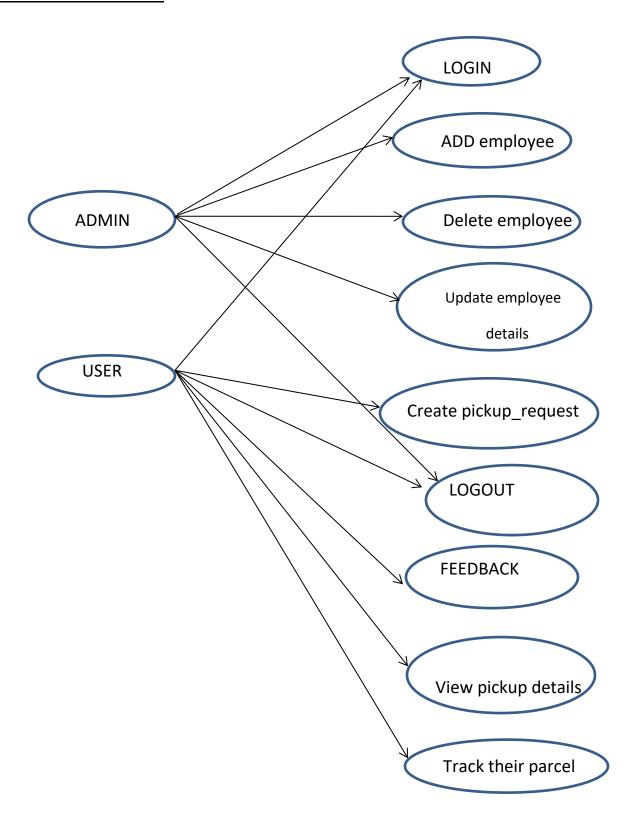
- The disbandment of the project team.
- Personnel and tools are reassigned to new duties.
- Resources released back to parent organization.
- Project transferred to intended users.

Ask yourself the following questions during Termination:

- Are the project's completion criteria met?
- Is there a project closure report in progress?
- Have all project artifacts been collected and archived?
- Has a project postmortem been planned?



USE-CASE DIAGRAM:





FEATURES OF IMPLEMENTED SOFTWARE :

On disk, an Eclipse based product is structured as a collection of *plug-ins*. Each plug-in contains the code that provides some of the product's functionality. The code and other files for a plug-in are installed on the local computer, and get activated automatically as required. A product's plug-ins are grouped together into features. A *feature* is a unit of separately downloadable and installable functionality.

The fundamentally modular nature of the Eclipse platform makes it easy to install additional features and plug-ins into an Eclipse based product, and to update the product's existing features and plug-ins. You can do this using the Eclipse platform's install and update support found in the **Help** menu. Eclipse allows you to discover, download, and install features and plug-ins from special web-based Eclipse software sites.

Large Eclipse based products can organize their features into trees starting from the root feature that represents the entire product. This root feature then includes smaller units of functionality all the way down to leaf features that list one or more plug-ins and fragments. The capability to group features hierarchically allows products to be stacked using a 'Russian doll' approach - a large product can build on top of a smaller one by including it and adding more features.

Some included features may be useful add-ons, but are not vital to the proper functioning of the overall product. Feature providers can elect to mark them as **optional**. Optional features will only be installed if all their required features and plug-ins are available. If not installed right away, optional features can be added at a later date.



• <u>DESCRIPTION OF DIFFERENT MODULES</u>:

There are two Modules we included in our

project:

- Admin module
- User module

Admin module:

In the Admin module, Admin has all the control over the Websites. The admin plays a major role in this application and only admin can add, view and remove item

details.

Additionally, the admin has the possibility to add or remove the delivery person. Before doing the above-mentioned process, at first, the admin has to create a separate login in that Web application and can perform certain operations.

<u>View/Update user detail</u>: Only admin has right to change the user details.

<u>Update policy detail</u>: Only admin has right to change the policy details.

Track your courier details: Like any other user, admin can also track and instruct his team to manage the consignment.

Update Offers: Admin can update the offer details.

Primarily, the user which will interact the system will be the administrator of company assign to take care of all data transaction and insertion or update. It will have to go through an authorization process of login and log out.

It will have the ability to create user details, manager's details, couriers' details, Track details, Shipment details and take care of development and maintenance of application



User module:

Here in this module user has to enter the personal details like name, mobile number, the address of the user as well as the receiver, Aadhaar number. The user should also enter the details of the item like the weight of the item and name. And the order gets placed.

The user is any user have authentication key to access the system. The user can view the consignment status, track it, view offers etc.

<u>UserID</u>: User ID is Primary key to identify the user uniquely.

Name: Name of user activity with the system

This module is for customers who will register online via the application. The will be asked to provide all the important info at the time of registration. Once registered they can log in and book package.

They will have the option to add their profile info wherein the address, email id, phone number etc can be updated. The option will be provided to view the status of the packages that are booked online.

- Registration
- Book Package
- View delivery
- My Profile
- Logout / Login



• FEATURES PROSOECTS AND CONCLUSION :

The courier

services are automated as hand written documentation is minimized to a bare minimum the software is fully implemented.

The data can be easily backed up onto a reliable media so that no or minimal data loss is there in case of system crash.

Unauthorized access to the data is nearly eliminated by providing password authentication system.

This project has made us require a professional outlook towards problem statement and solving it to the best and maximum.

The project titled 'Courier Management Service' was developed to the courier services and direction and with their help. The system was tested and the performance of the system was found to be acceptable.

All the necessary output was created. The system was found to be user-friendly with help message for the customer. The menu Driven Architecture of the system provide an easy to use environment for the users.

The system was implemented successfully. The manpower and working hours needed to operate the system was less and it was seen to be more secure. Thus, the Project was completed successfully.



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- 11. JDK Demos and Samples (to be downloaded @ https://www.oracle.com/technetwork/java/javase/downloads/index.html).



Bibliography:

Author:

Nelson H. F. Beebe

beebe @ math . utah . edu> (email mangled to prevent spamming)

Center for Scientific Computing Department of Mathematics University of Utah Salt Lake City, UT 84112 USA

Abstract:

This bibliography records books and other publications about the Java programming language, and related software.

Keywords:

html, Java, JavaScript, HotJava, WWW, WorldWideWeb, object-oriented

Author Comments:

Further information on Java development and the HotJava WorldWideWeb browser can be found at the URL http://java.sun.com/. Netscape versions 2.03-beta or later support Java as well.

A Java applet index and repository is available at http://www.gamelan.com/.

Visix has extended their platform-independent window systems support to include Java; details are at http://www.visix.com/

A tutorial on Java is available at http://java.sun.com/tutorial, a white paper on the Java language is at http://java.sun.com/doc/Overviews/java/java-overview-1.html, and a white paper on the HotJava browser is at http://java.sun.com/nav/read/whitepapers.html.

A status report on Java security problems is available at http://java.sun.com/sfaq; a good discussion of these issues can be found in the reference Hamilton:1996:JSN in this bibliography.

John December maintains a Java bibliography that includes press releases and online references at http://www.rpi.edu/~decemj/works/java/bib.html; a snapshot of that collection was incorporated in this bibliography on 17-Dec-1995.

The Web site for Java World magazine is at http://www.javaworld.com/; many entries in this bibliography were found in resources there.



OUTPUT:

This is our first page or home page for project:



After you click on link "features", then you are directed to this page and same for "About Us" and "Contact Us".

FEATURES OF COURIER MANAGEMENT SYSTEM



Client Management

Customized prices, billing, and services to satisfy customers specific needs. Client management also includes contract billing, sales tracking, electronic notifications, invoicing and a built-in collections tool.



Dispatch

Dispatchers can customize the information they want to see on their screen. Enables dispatchers to know when a driver is, what packages they have and which driver is best-suited for the next job. Warns dispatchers if a delivery is "almost late" or late.



About Our Website

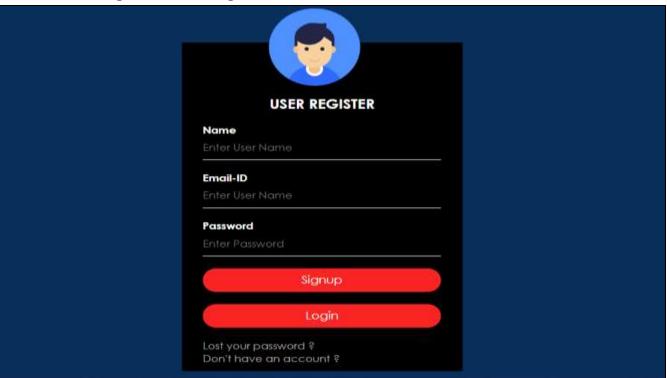
Courier Management System project is a web application which is implemented in Java Servlet platform Courier Management System Java Servlet project with tutorial and guide for developing a code.

This project works at country level This is developed in java platform so it is a secure website You can register in the website without having issues for security.

Project Information

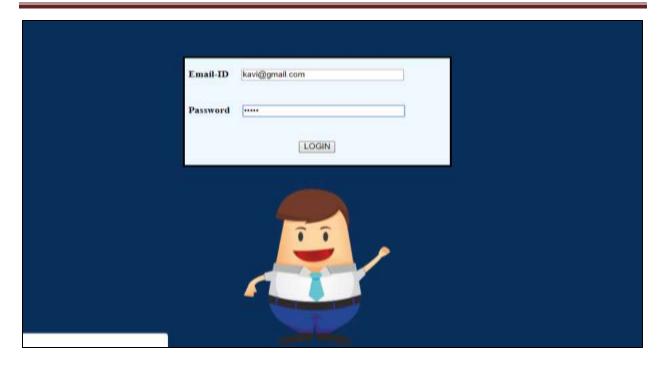
project Name: Courier Management
System
project ID: 1295
Developer Name: Kavita, Shivani Ayushi
Upload Date: 2019-05-13
project Platform: Java Servlet
Programming Language: jsp
IDE Tool:
project Earning: Kavita, Shivani, Ayushi Earn
Rs. 25 from this project.
Database: jsp
project Type: Web Application

After clicking on ""User Login":



If a user is already registered, then he just need to "Login" otherwise to register in the site, click on "SignUp". If you click on login then you are directed to...





Enter your email and password and click "Login" and then you are directed to this page:

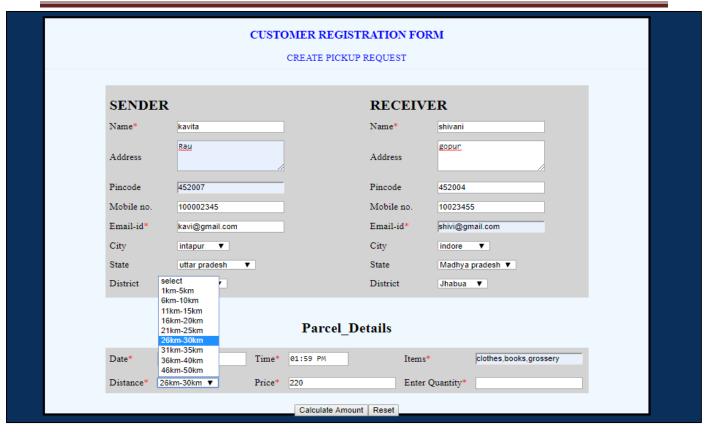


After this just click on "Create pickup request" if you want to create a parcel and to track the parcel click on "Track the parcel". And to logout click on "Logout" then you just go to Home page and index page.

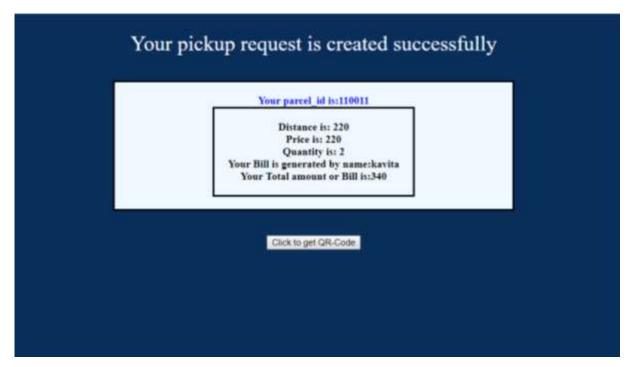
NEXT PAGE:

Here fill all sender and receiver details and click on click amount to get your bill.......





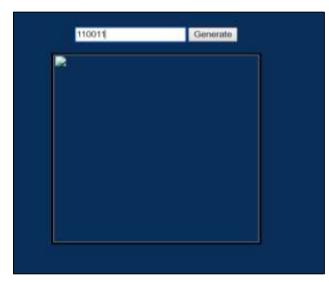
Now, this is the bill page:



Then a unique code is generated for your parcel, then click to generate "QR CODE" for the parcel id generated..... write the parcel_id in the input box and click "Generate".



Click "Generate" and scan the QRcode using a smart phone.



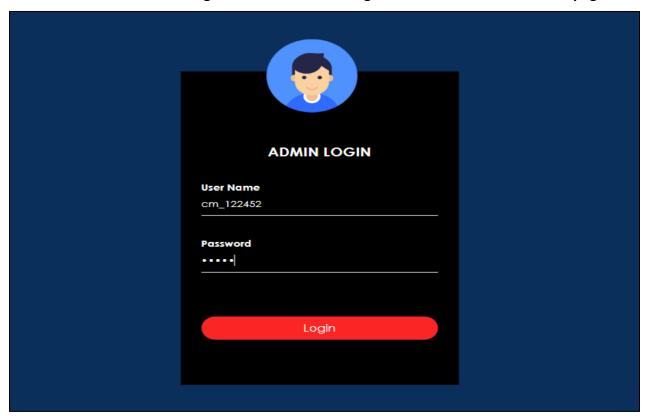




Then you get the same code, this proves that the qrcode generated is correct for the corresponding parcel_id.



Now if an Admin wants to login then click "Admin Login" and admin directed to this page.



After login you are directed to admin panel where admin control all the employee and updation details.



From here you can add, delete and update details of all employees in a company. As well as view the all logged in users and their pickup requests.