

Project Report on
Courier Management System

*For the partial fulfilment of Database Management System
Laboratory*

Submitted By
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CERTIFICATE



This is to certify that the project report entitled “**Courier Management System**”, submitted by **Mr. Pokala Anirudh** bearing RollNo.**B170001CS** is an authentic report for the work carried out under my supervision as a part of Database Management System Laboratory during the Monsoon semester, 2019 at National Institute of Technology Sikkim, Ravangla-737139, Sikkim.

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Acknowledgement

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ABSTRACT

CMS is a web-based Courier Management System which supports the high availability of courier services to the business and to the customer. This project deals with the '**Courier Management System**'. Courier Management System is the simplest solution for Courier & Cargo Tracking Business. The system is used for daily activities such as booking a courier, maintain employee details, maintain company details, tracking the courier etc. Courier Management System is the simplest solutions for Courier & Cargo Tracking Business.

This Courier Management System project will have different modules:

- The **login section** will have login facility for the admin who will operate this system, user for placing new couriers and tracking their couriers, and the employee who can view courier orders and edit courier statuses.
- While taking orders from its customers, it will take all the details of its customers who is placing the orders and all the details for the recipient such as its address, name, mobile number.
- During billing process, system generates a courier number for their products.
- In the **Track section** the user can track their placed couriers' status with the courier number generated.

INTRODUCTION

This Courier Management System Project will have different modules. The **login section** will have login facility for the admin and for the user who will operate this system. While **taking orders** from its customers, it will take all the details of its customers who is placing the orders and all the details for the recipient such as its address, name, mobile number. During **billing process** system will generate a courier id for their products. Through this courier id, customers or its recipient will able to track their products from any location. It will provide status of the product after placing orders within 1 minute.

This Courier Management System Project will provide information **recipient** with following details: - where the current consignment is, till when it will reach its final destination, the status of the courier placed, date of placing consignment, final date to reach its destination.

Why Courier Management Services?

In modern age, as time increase, needs & requirements of the person are also increased. They want more facility & try to do their task quickly & within time. But they cannot 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 & 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 management service is one of the solutions of these problems. It is used to send some things to any person in the world within time.

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 & gives internal/external services. The courier service work

as destination office or source office. The source office branch receives the order means consignments & 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. Now days, 50% of companies of the world uses the services of various courier company.

Problem Definition:

People when transfer their products using any courier management service wants to know whether their product has been shifted to their right place or not, if not then by what time it will be shifted and where it is now. Taking all this information manually is very difficult and time taking process. To handle all these activities, include various processes and paper work from the management side also.

Motivation behind this project:

To gain maximum business region, customer demands good service. So, to make more profit and gain maximum business region, their administration must also have a system to tackle all these problems on time. Its administration can take immediate orders and provide a receipt which will include all the details of the products along with appropriate price to their customers. Thus, saving time and eliminating line making process.

Scope of the Project:

- This project can be extended to different fields in which management is needed
- Like different domestic courier management services which provide a simple User platform for sending couriers to different places and easy to track form any Where

REQUIREMENT ANALYSIS

Requirement Gathering:

Requirement Analysis is the first and important step in the Software development activity for building robust and user-friendly applications. I have started working on determining the functionalities that the application should provide. I have done a good amount of research on existing systems and the disadvantages of those. Once the functional requirements are finalized, I did research on the current technologies that are widely used in the industry.

Requirement Specifications:

Hardware:

- CPU – Intel Core 2 Duo E7300(min)
- RAM – 512MB (min)
- Hard Disk – 80GB (min)

Software:

- Localhost (XAMPP control Panel).
- IDE (Visual Studio Code) for developing code.
- MySQL and PHP as the DBSM for database.

SYSTEM DESIGN

i) USE CASE DIAGRAM:

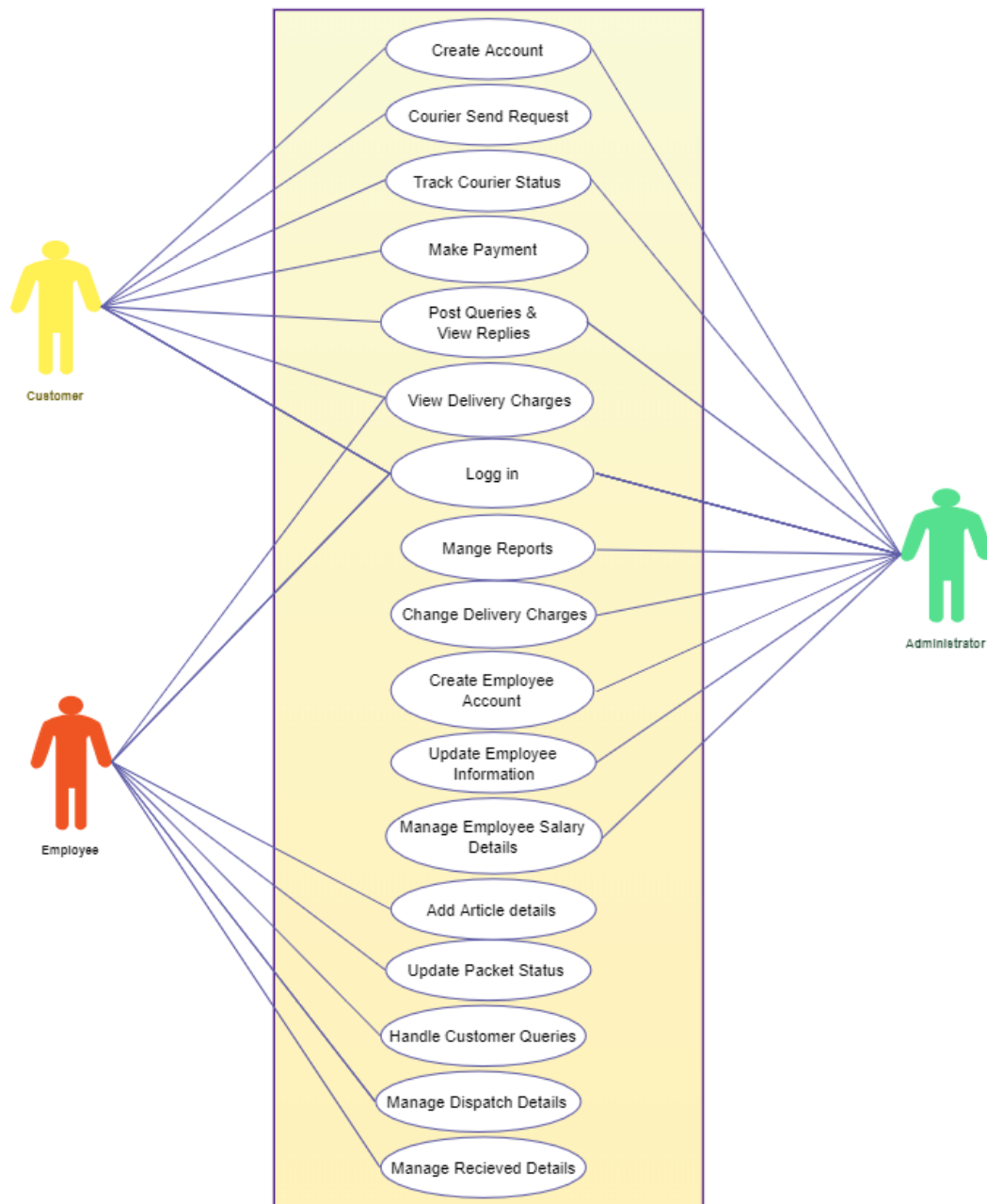


Fig: Use Case diagram of Courier Management System

II) SEQUENCE DIAGRAM:

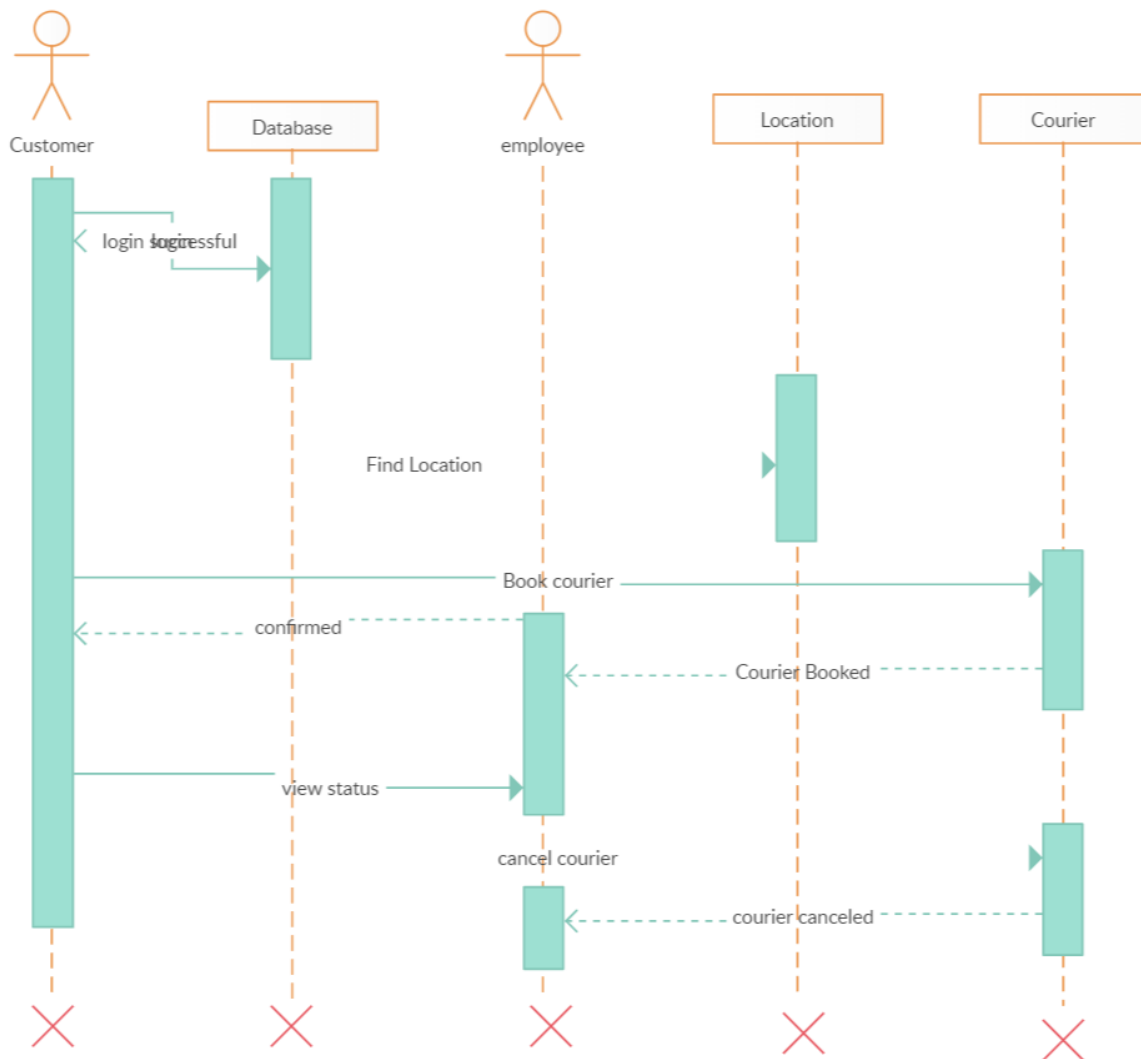


Fig: Sequence diagram of Courier Management System

III) CLASS DIAGRAM :

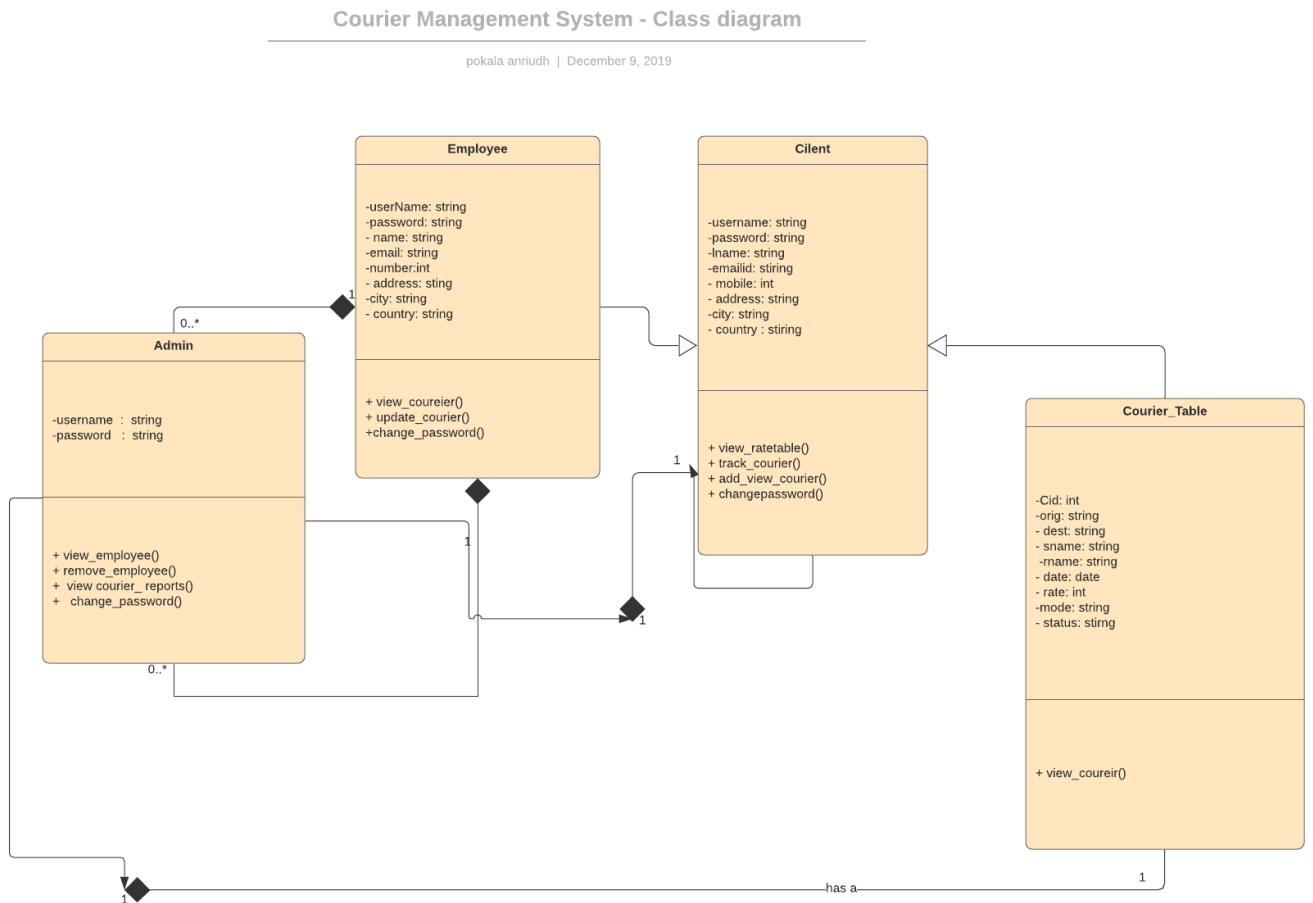


Fig: Class diagram of Courier Management System

IV) ER DIAGRAM:

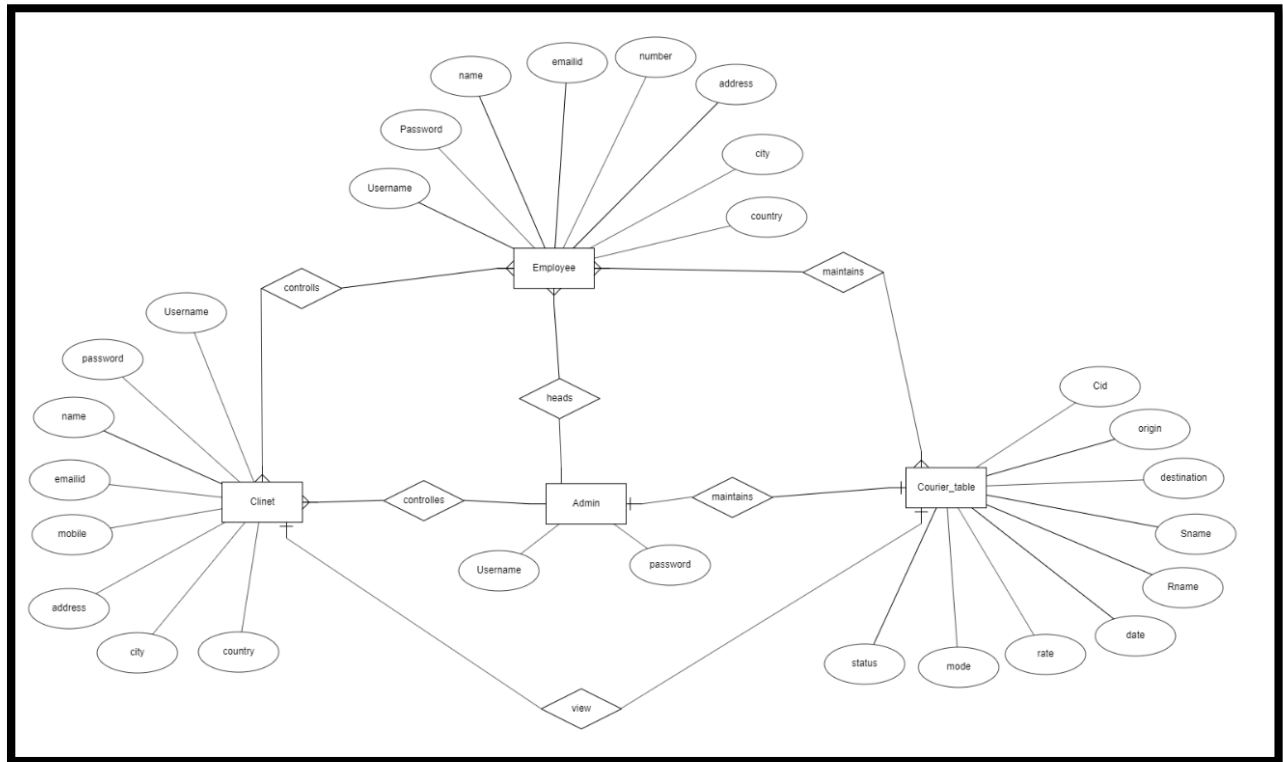


Fig: ER Diagram of Courier Management System

RELATIONAL SCHEMA:

- a) **Admin** (username, password)
- b) **Client** (username, password, name, emailed, mobile, address, city, country)
- c) **Courier_table** (courier_id, origin, destination, sender_name, receiver_name, Receiver_address, date, rate, mode, status)
- d) **Employee** (username, password, name, email_id, mobile, address, city, country)

Relational Tables:

a) Admin

The admin can do:

- View employee
- Remove employee
- View courier and courier report
- Change password

Name	Data Type	Type
USERNAME	STRING	PK Attribute
E_USERNAME	STRING	FK Attribute
C_USERNAME	STRING	FK Attribute

b) Client

The client can do:

- View Rate table
- Track courier
- Add courier & view courier
- Change password

Name	Data Type	Type
USERNAME	STRING	PK Attribute
PASSWORD	STRING	Attribute
NAME	STRING	Attribute
EMAILID	STRING	Attribute
MOBILE	INT	Attribute
ADDRESS	STRING	Attribute
CITY	STRING	Attribute
COUNTY	STRING	Attribute
C_ID	INT	FK Attribute

c) Employee:

The employee can do:

- View couriers
- Update couriers
- Change password

Name	Data Type	Type
USERNAME	STRING	PK Attribute
PASSWORD	STRING	Attribute
NAME	STRING	Attribute
EMAILID	STRING	Attribute
NUMBER	INT	Attribute
ADDRESS	STRING	Attribute
CITY	STRING	Attribute
COUNTY	STRING	Attribute
C_USERNAME	INT	FK Attribute
C_ID	INT	FK Attribute

d) Courier_table:

The courier table contains the details of the courier placed:

Name	Data Type	Type
C_ID	INT	PK Attribute
ORIGIN	STRING	Attribute
DESTINATION	STRING	Attribute
S_NAME	STRING	Attribute
R_NAME	STRING	Attribute
DATE	STRING	Attribute
RATE	INT	Attribute
MODE	STRING	Attribute
STATUS	STRING	Attribute

SNAPSHOTS OF THE PROJECT

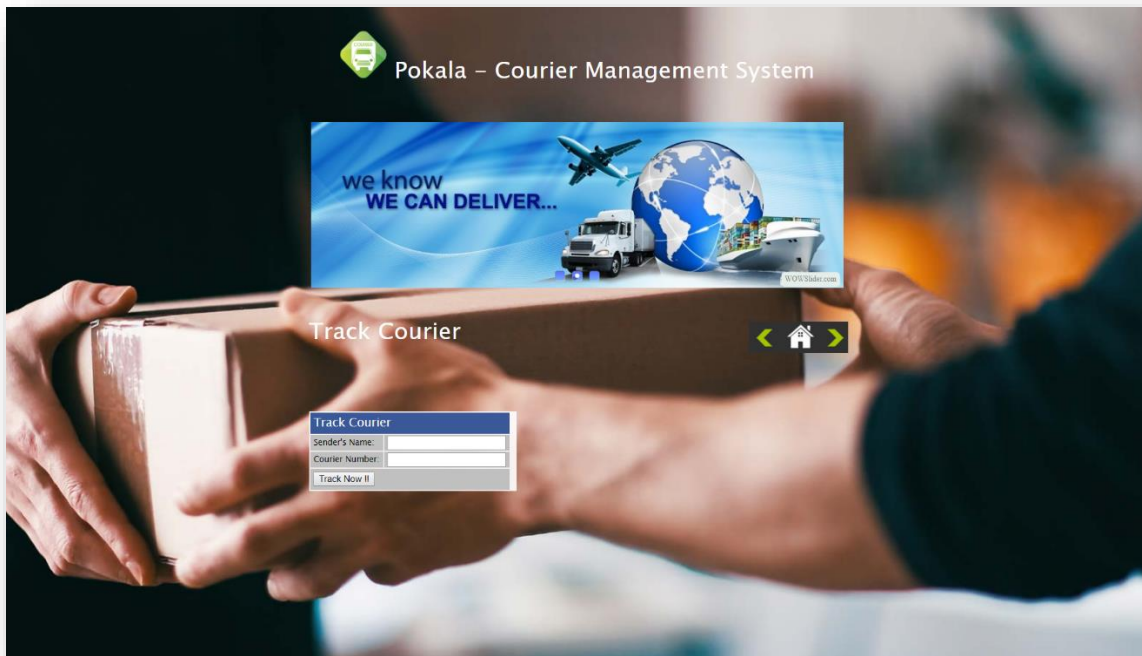
i) Home Page:



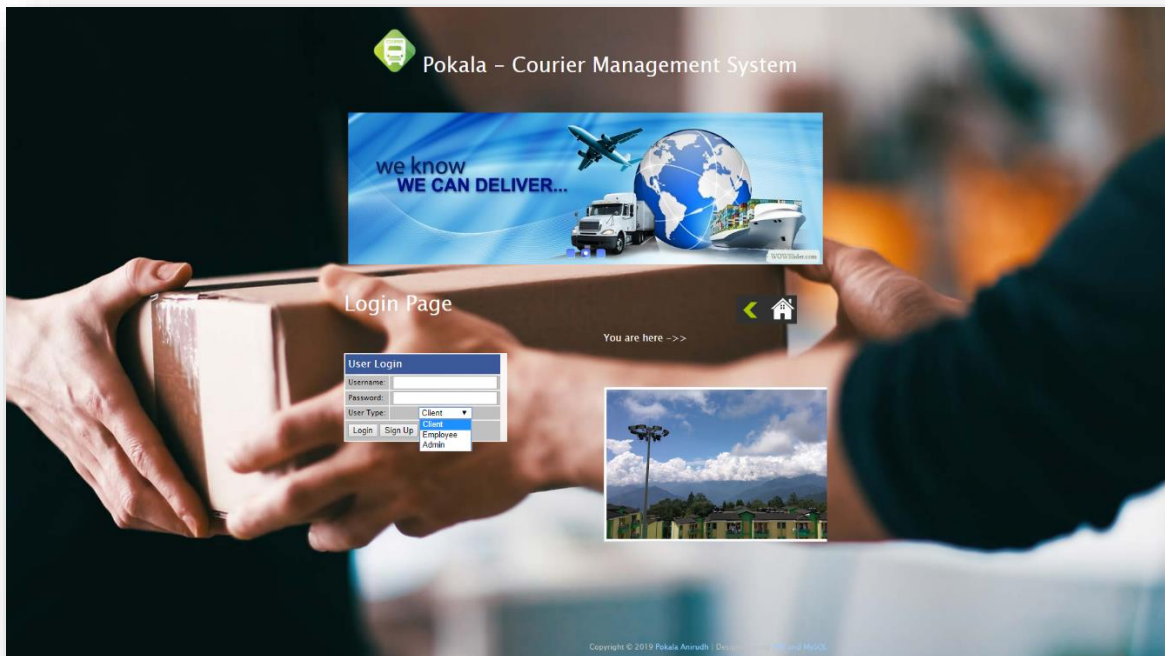
ii) About Us:



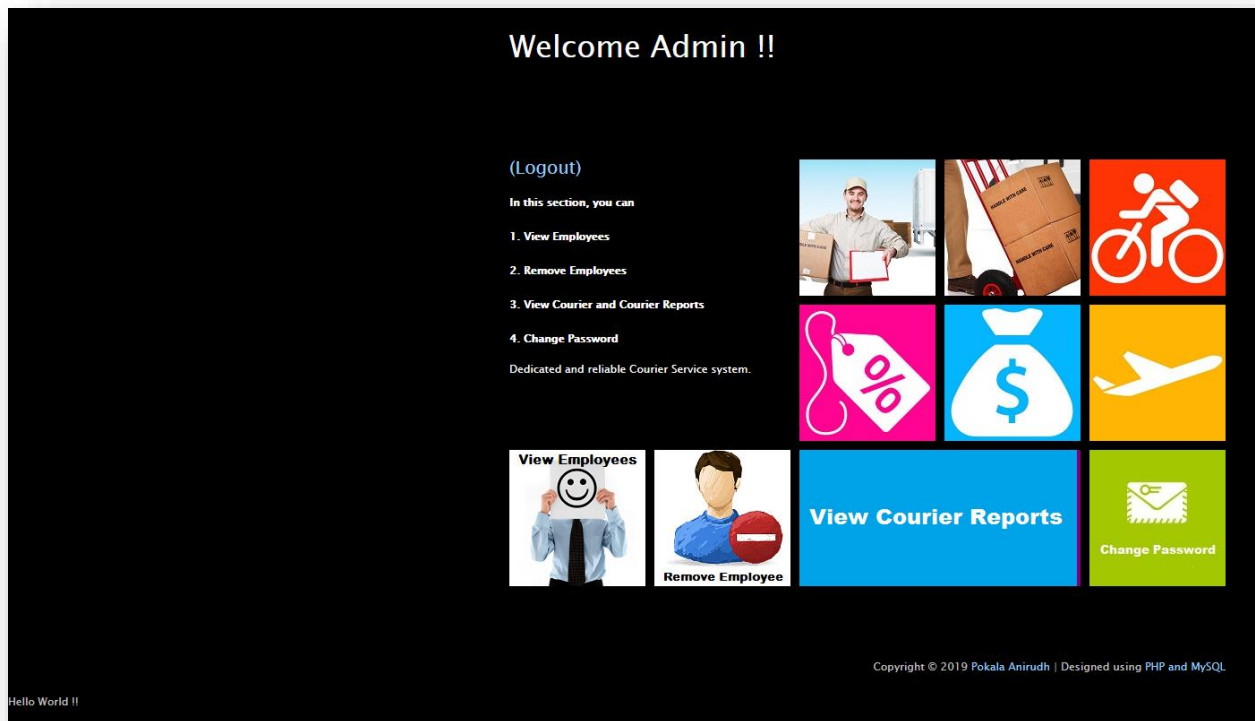
iii) **Track Courier (via sender):**



iv) **Login:**



v) Admin Page:



vi) View Employee:

Employee Names							home
username	name	email-id	mobile	address	city	country	
rasesh	Rasesh Rout	raseshrout@gmail.com	9439344276	B-3, M.V. Hall of Residence, NIT Rourkela	Rourkela	India	
rohit	Rohit Rajat Mohanty	rohit.r.mohanty@gmail.com	8598000238	C-1, M.V. Hall of Residence, NIT Rourkela	Rourkela	India	
manu	Siddharth Manu	siddharthmanu94@gmail.com	7894428180	B-256, Horni Bhabha Hall of Residence, NIT Rourkela	Rourkela	India	

vii) Remove Employee:

Welcome Admin !!

Remove Employee

Remove Employee

Enter the Employee's username

Remove Employee

Ex: rasesh

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Hello World !!

viii) View Courier and Courier report:

Welcome Employee !!

View Courier Orders

Click here to view courier orders

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Hello World !!

Courier Report											home
Couriers in 'Loaded' state-->>											
id	orig	dest	sname	rname	radd	date	rate	mode	status		
7	Rourkela	Lucknow	Rohit	Ritu	Gomti Nagar	2013-04-14 22:34:55	1600	surface	Loaded		
21	Rourkela	Bangalore	Ganesh	Sambit	Indira Nagar	2013-04-14 22:37:55	280	air	Loaded		
23	Bangalore	Bhubaneswar	Aditya	Chetan	Infocity	2013-04-14 23:36:28	70	air	Loaded		
26	New Delhi	Kolkata	Navin	Sneha	Sealdah	2013-04-15 14:53:41	400	water	Loaded		
29	Lucknow	Mumbai	Om	Uday	Dadar	2014-02-14 15:30:03	500	air	Loaded		
30	Sky	New York	Nick Fury	Tony Stark	Top Floor, Stark Tower	2014-04-05 15:15:16	21000	air	Loaded		
Couriers in 'In Transit' state-->>											
id	orig	dest	sname	rname	radd	date	rate	mode	status		
9	Rourkela	Bhubaneswar	Anmol	Sudhanshu	Infocity	2013-04-14 22:37:01	100	surface	In Transit		
8	Lucknow	Berhampur	Manu	Swetaswini	Hill Patna	2013-04-14 22:36:00	2500	surface	In Transit		
20	Rourkela	Rourkela	Swati	Ravi	NIT Rourkela	2013-04-14 22:37:26	400	surface	In Transit		
22	Rourkela	Kandy	Sushovan	Aditi	Kandy, Sri Lanka	2013-04-14 23:13:30	400	water	In Transit		
28	Bangalore	Rourkela	Manu	Sourav	Udit Nagar	2013-04-19 20:51:09	40	air	In Transit		
Couriers in 'Delivered' state-->>											
id	orig	dest	sname	rname	radd	date	rate	mode	status		
6	Rourkela	Rourkela	Rasesh	Khired	NIT Rourkela	2013-04-14 22:33:28	100	surface	Delivered		
5	Rourkela	Bangalore	Shivane	Rohan	Indiranagar	2013-04-14 22:32:36	420	air	Delivered		
Total Revenue-->> ₹ 27810											

ix) Change password (admin):

Welcome Admin !!

Change Password

You are here -->

Change Password

Username:

Old Password:

New Password:

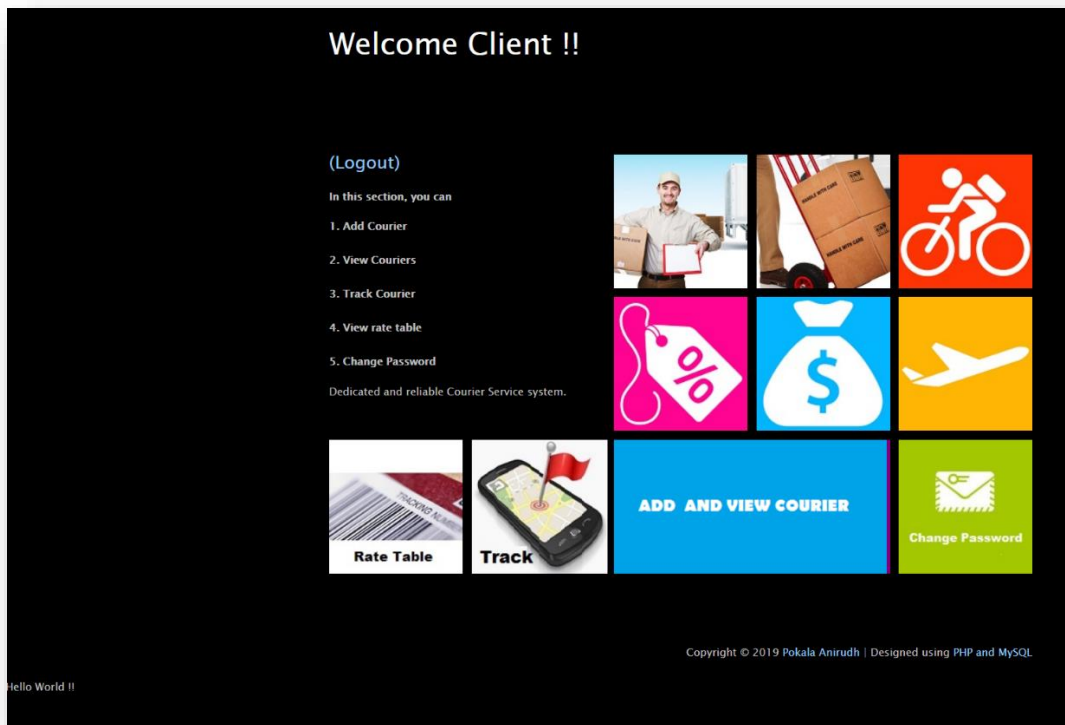
Change

[View Larger Map](#)

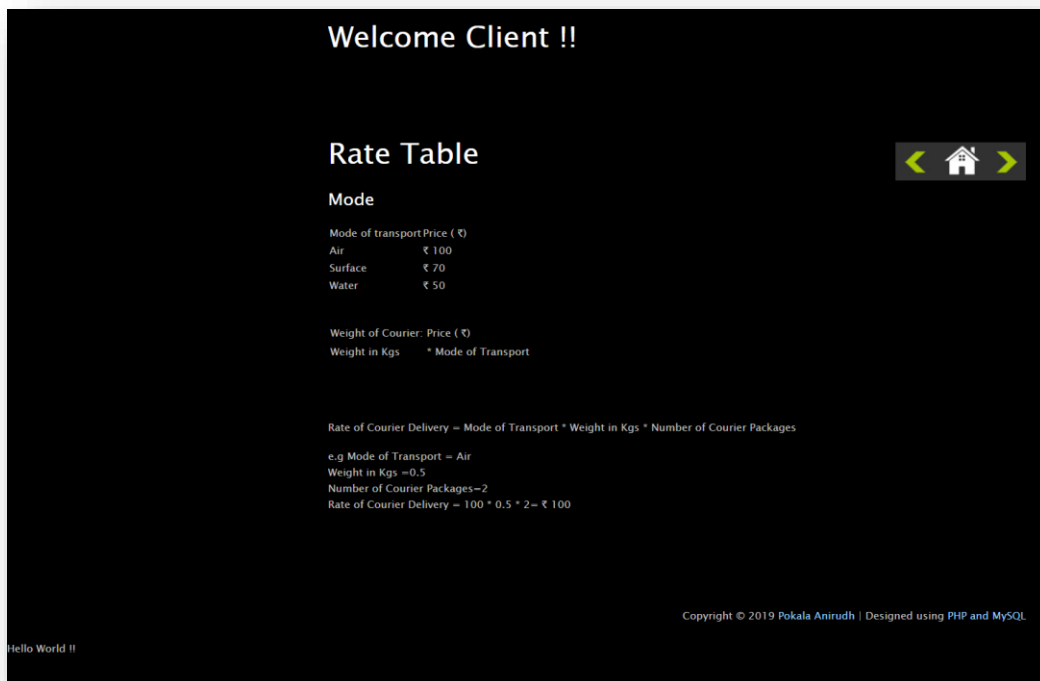
ello World !!

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x) **Client page:**



xi) **Rate table:**



xii) Track courier (via user):

Welcome Client !!

Track Courier

Track and Trace your Cargo/Courier

Track Courier

Username:

Courier Number:

Track Now !!

Ex: Username: rasesh
Consignment Number: 12

Hello World !!

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xiii) Add & View Courier:

Add and View Couriers

home

Add Courier

Sender's info :

Sender Name :

Origin City :

Sender's Address :

Receiver info :

Receiver's Name :

Destination City :

Receiver's Address :

Courier info :

Mode of Transport :

Air ▼

Weight :

 (kg)

Number of Packages:

Status :


Loaded ▼

Add Courier

xiv) Change password (Client):


Welcome Admin !!

Change Password

You are here --> 

Change Password

Username:	<input type="text"/>
Old Password:	<input type="password"/>
New Password:	<input type="password"/>
Change	<input type="button" value="Change"/>



[View Larger Map](#)

Hello World !!

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xv) Employee Page:




Welcome Employee !!




(Logout)



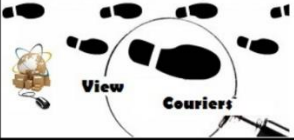
In this section, you can

1. View Courier Orders
2. Edit Courier Statuses
3. Change Password

Dedicated and reliable Courier Service system.



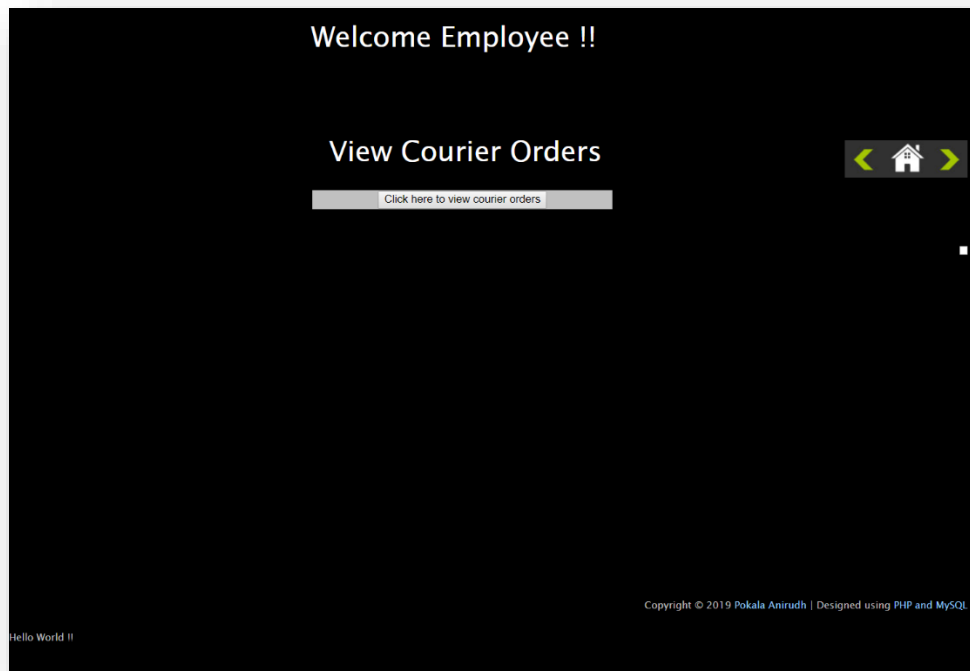




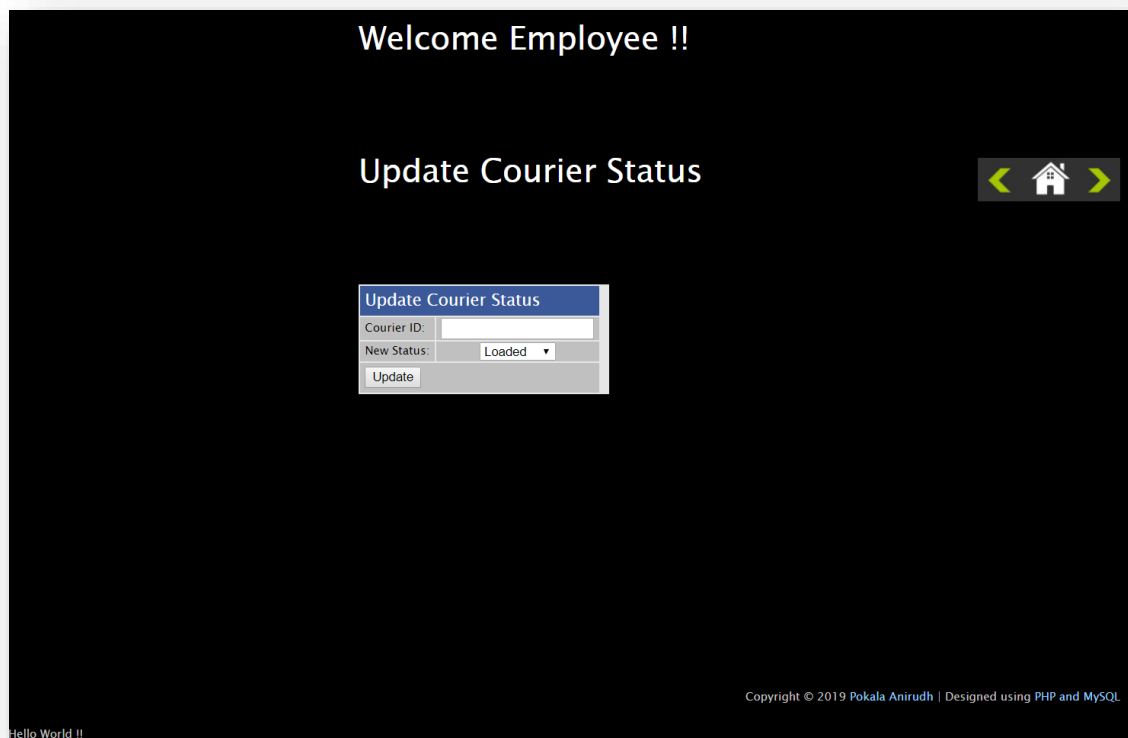
Hello World !!

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xvi) View couriers placed:



xvii) Update couriers:



CONCLUSION

The Courier Management System will provide a simple user interface for placing a courier and tracking it from any location. Courier management system can be personalized to fit your business and can either be used as a complete system or as separate modules.

The system is being used for day to day actions such as maintaining employee details, courier details which are placed, tracking the courier and many things.

- The main aim of this project is to computerize the maintenance of courier management.
- The objective of the project is to deliver an efficient Courier Management System whose main functionality apart from calculating the courier Bill.
- User interface simplicity and user-friendliness.

REFERENCE

Book used:

1. Henry F Korth, Abraham Silberschatz, "Database system concepts", McGraw-Hill International editions, Computer Science Series (1991). Second Ed.

Sites Referred:

- i) www.google.com
- ii) www.w3school.com
- iii) www.phpmyadmin.net
- iv) www.scribd.com
- v) www.lucidchart.com