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Documentation On
“Online Package Delivery Service”
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Project Guide

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1. Introduction

Courier Delivery System is a web based delivery service within a city, System which supports the high availability of courier services to the business and to the customer. The system is being used for day to day activities such as booking a courier that is basically a pickup and drop service within city, process data of companies and many other things. It is programmed using Java technologies. It can be customized to fit your business and can either be used as a complete system or as separate modules.

Document Purpose

The system will be used for providing day to day activities like pick up and drop service for various things like food, medicines, documents etc. from one place to another. Actually it is not easy to do this process manually because it would become very hectic. Hence it is recommended to automate the process by developing the relevant software as the world is moving from manual working to information and technology era where computerization becomes important in all part of life.

Enhance Courier Processes:

To be able to use internet technology to project to the global world instead of limiting their services to their local domain alone, thus increases their return on investment.

Online Package Delivery Service:

A tool through which admin can register a Delivery partner and provide many functionalities to them. The admin also receives some set of functionalities which help in managing the web application.

Bill generation:

This system's key functionality is that it helps in generating the bill of the courier conveniently.

Problem Statement

Existing system for a courier is based on our traditional way keeping records and details on paper and registers. Access of these details and papers are not granted to common member in absence of the authority. It is hard to manage all the courier details with pen and paper. It gets really hard to maintain the records and then keep track of past records. Hence this system is proposed to overcome the flaws of the existing system and giving power to the admin of the courier so that he/she will be able to manage the courier details easily.

Product Scope

This project traverses a lot of areas ranging from business concept to computing field, and required to perform several researches to be able to achieve the project objectives.

The area covers include:

- The use of the system for better services and fast processing.
- Courier facility in India is very cheaper and maximum charges but we can send the courier to destination in minimum charges within city.
- J2EE Technology used for the development of the application.
- Web-platform means that the system will be available for access 24/7 except when there is a temporary server issue which is expected to be minimal.

Aims & Objectives

Specific goals are: -

- The main objective of the Courier Delivery System is to manage the details of Package, Email Notification, Payment, Delivery and Customer.
- To build an application program to reduce the manual work for managing the package.

2.Overall Description

Product Perspective:

Existing system function:

The existing is automated only to a particular extent they does lot of manual work.

The existing system involves several processes like,

- Mention the details of the package, customer, and employee.
- The user has to reach the delivery office if there is any query about package delivery.
- There is no optimal route for transmitting the package. It saves a lot of time, money and labour work.
- The details of the outgoing package are maintained manually.
- The delivery details is also maintained manually.

PROPOSED SYSTEM

The proposed system eliminates manual work that is done. The following are the facilities that are added to an existing system in order to make more efficient:

- Maintaining the details of the customer in the database.
- Provides the pickup service that is agency provides delivery partner to pick the package from pickup address.
- The customer can send the email.
- Customer can get the information about their package.
- Customer will be notified about status of delivery by emails.

Maintenance Manager:

The project helps the administrator to generate monthly bill of the agency based on various deliveries and salaries of workers working in the agency and to be paid by agency owner.

Benefits of Package Delivery Agency-

- This application is fully functional and flexible.
- It is very easy to use.
- Package delivery management software helps in setting up and measuring delivery departure and return times.
- It saves a lot of time, money and labour work.
- Using software solutions for package delivery management gives the complete visibility over their operations to the companies.
- This application is available at customer service.
- Admin can provide customer service.
- It increases the efficiency of the management at offering quality services to the customers.

Users and Characteristics:

Admin:

- Admin can login to the system.
- View the list of all users.
- Add new delivery partner.
- Delete customer.
- Update delivery partner.
- View the list of all delivery partner.
- View all reviews.

Delivery Partner:

- Delivery Partner can login to the system.
- View his/her details.
- Update delivery status.
- Update their personal credentials.
- Delete his/her account.

Operating Environment:

Server Side:

Processor: Intel® Xeon® processor 3500 series

HDD: Minimum 500GB Disk Space

RAM: Minimum 4GB

OS: Windows 8.1

Database: MySQL

Client Side (minimum requirement):

Processor: Intel Dual Core

HDD: Minimum 80GB Disk Space

RAM: Minimum 4GB

OS: Windows 7

Design and Implementation Constraints:

- This web application developed using J2SE, J2EE, Spring MVC, MySQL and Hibernate as ORM tool and bootstrap for user interface.
- HTTP and FTP protocols are used as communication protocols. FTP is used to upload the web application in live domain and the client can access it via HTTP protocol.
- Several types of validations make this web application a secured one and SQL Injections can also be prevented.
- Since Package Delivery Service is a web-based application, internet connection must be established.
- The Package Delivery Service will be used on PCs and will function via internet or intranet in any web browser.

3. Specific Requirement

External Interface Requirements:

User Interfaces:

- All the users will see the same page when they enter in this website. This page asks the users a username and a password.
- After being authenticated by correct username and password, user will be redirect to their corresponding profile where they can do various activities.
- The user interface will be simple and consistence, using terminology commonly understood by intended users of the system. The system will have simple interface, compatible with standard interface, to eliminate need for user training of infrequent users.

Hardware Interfaces:

- No extra hardware interfaces are needed.
- The system will use the standard hardware and data communication resources.
- This includes, but not limited to, general network connection at the server/hosting site, network server and network management tools.

Application Interfaces:

OS: Windows 7

Web Browser:

The system is a web-based application; clients need a modern web browser such as Mozilla Firebox, Internet Explorer, Opera, and Chrome. The computer must have an Internet connection in order to be able to access the system.

Communication Interfaces:

- This system uses communication resources which includes but not limited to, HTTP protocol for communication with the web browser and web server and TCP/IP network protocol with HTTP protocol.
- This application will communicate with the database that holds all the booking information. Users can contact with server side through HTTP protocol by means of a function that is called HTTP Service. This function allows the application to use the data retrieved by server to fulfil the request fired by the user.

4.System Diagram

Activity Diagram

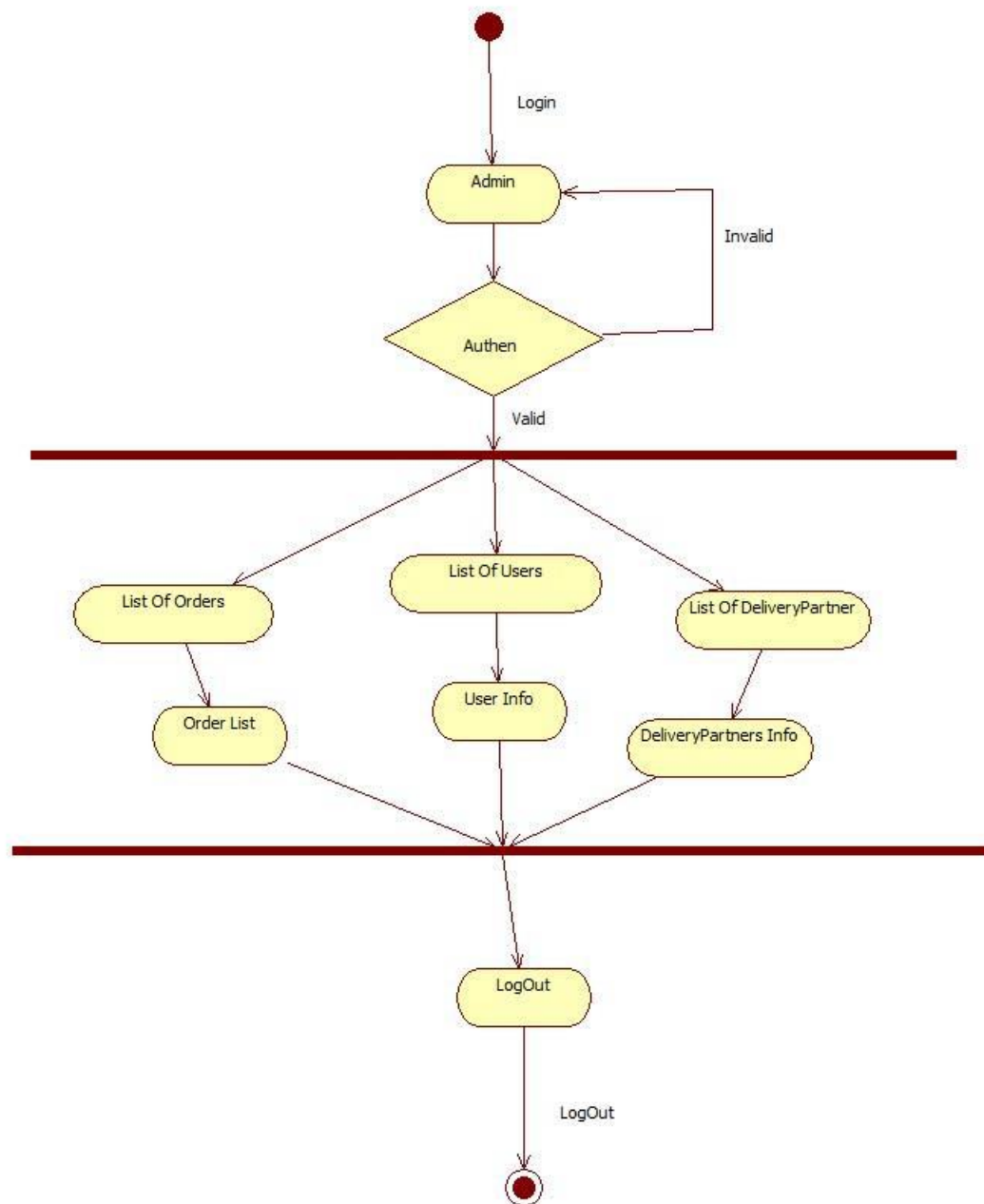


Figure 1: Admin Activity Diagram

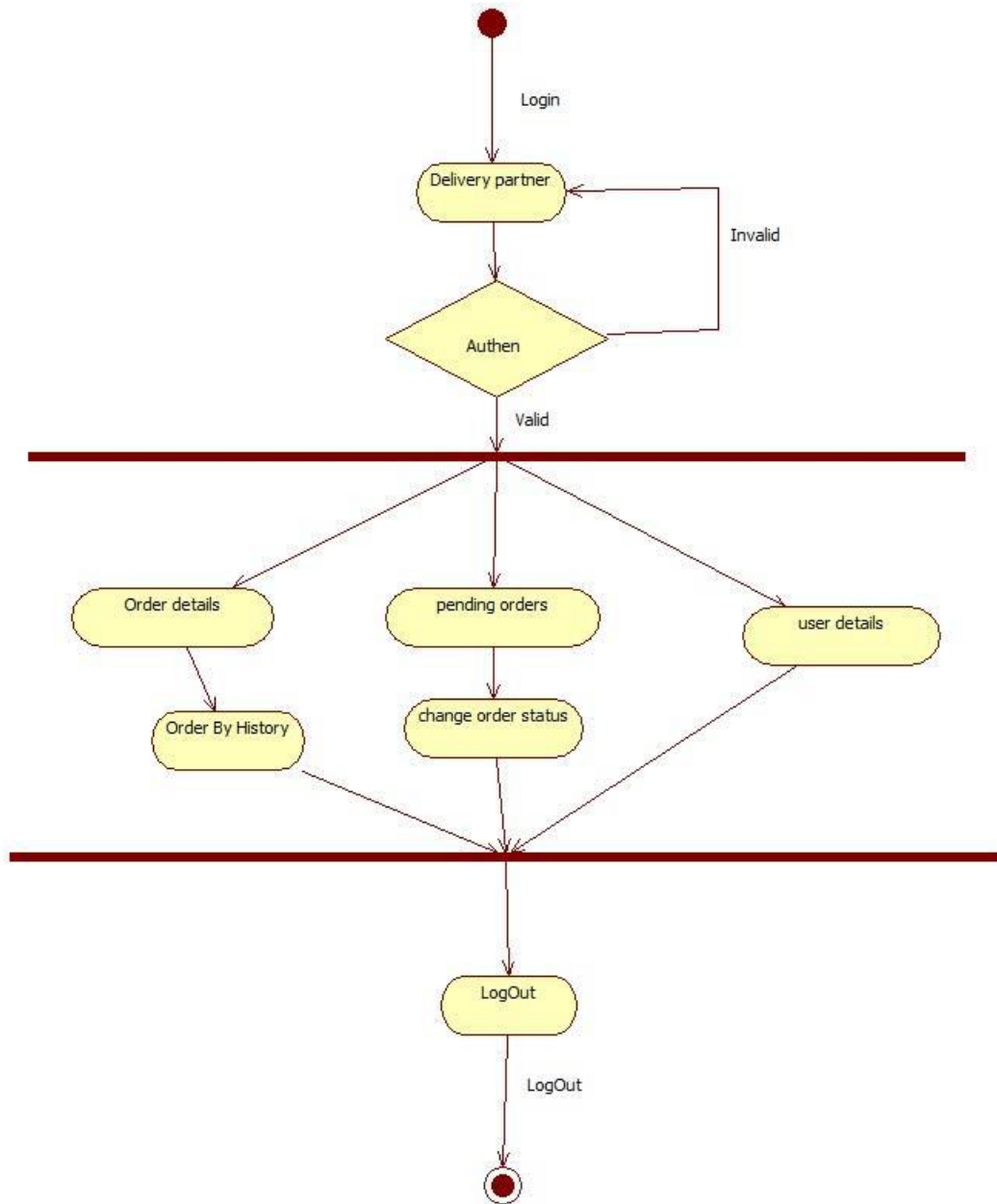


Figure 2: Delivery Partner Activity Diagram

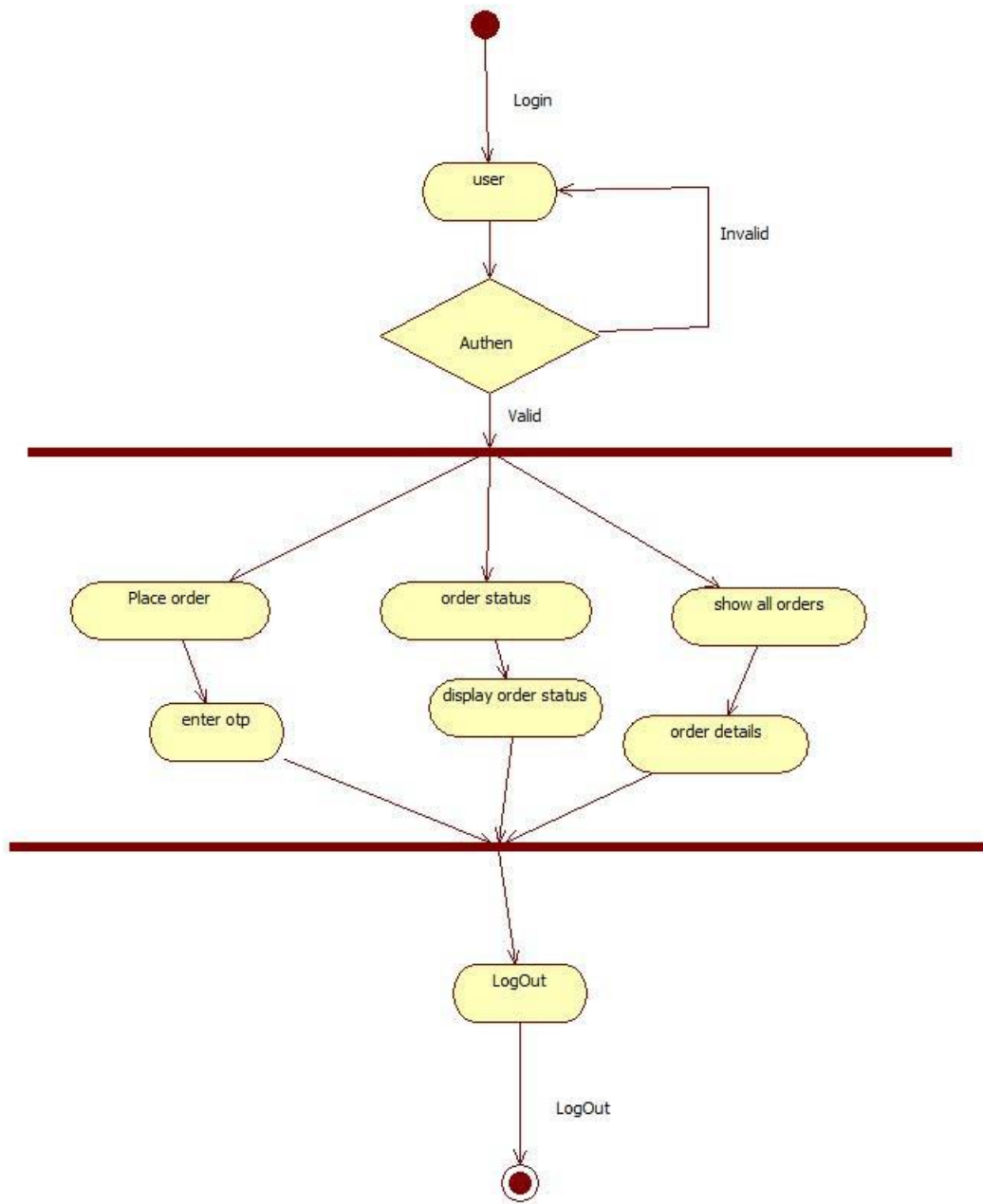


Figure 3: User Activity Diagram

Data Flow Diagram



Figure 4: Level 0 Data Flow Diagram

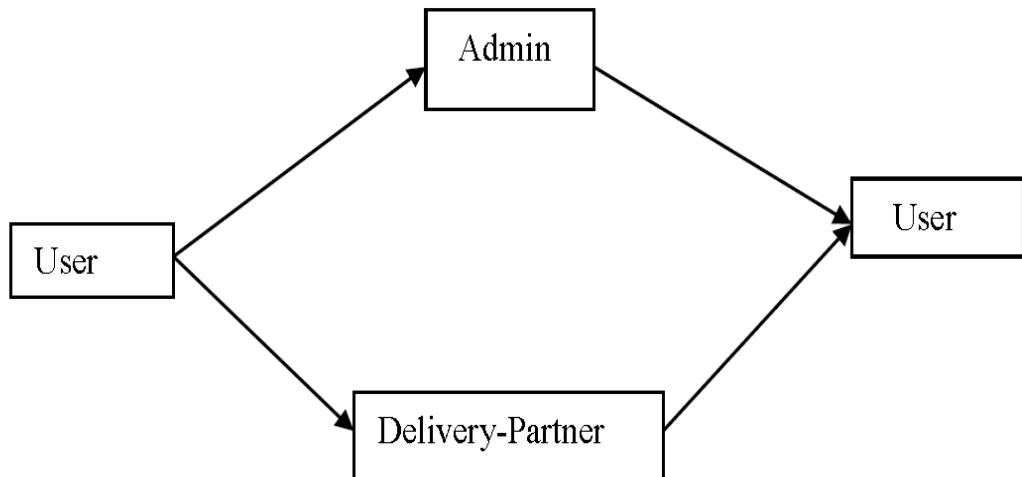


Figure 5: Level 1 Data Flow Diagram

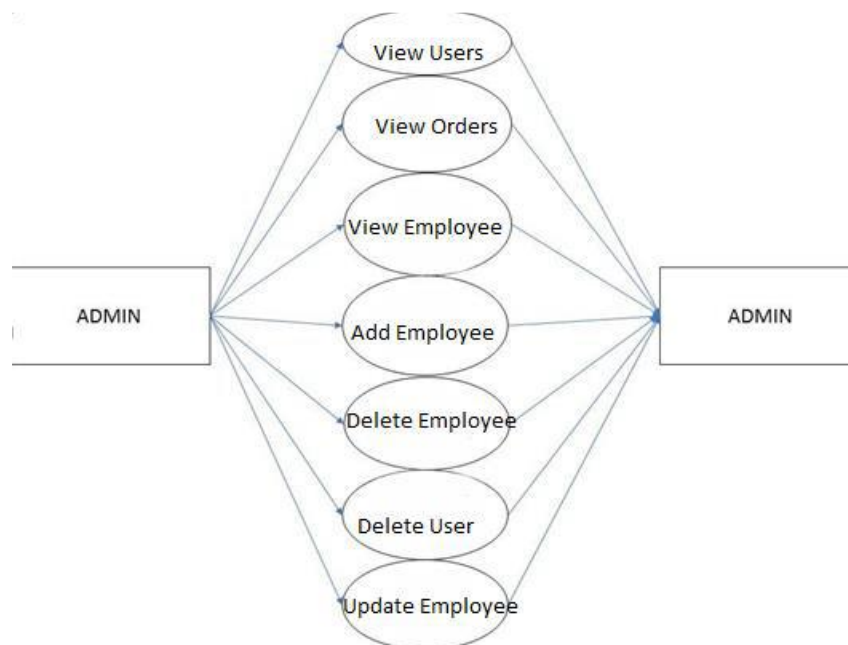


Figure 6: Level 2 Data Flow Diagram for Admin

Class Diagram

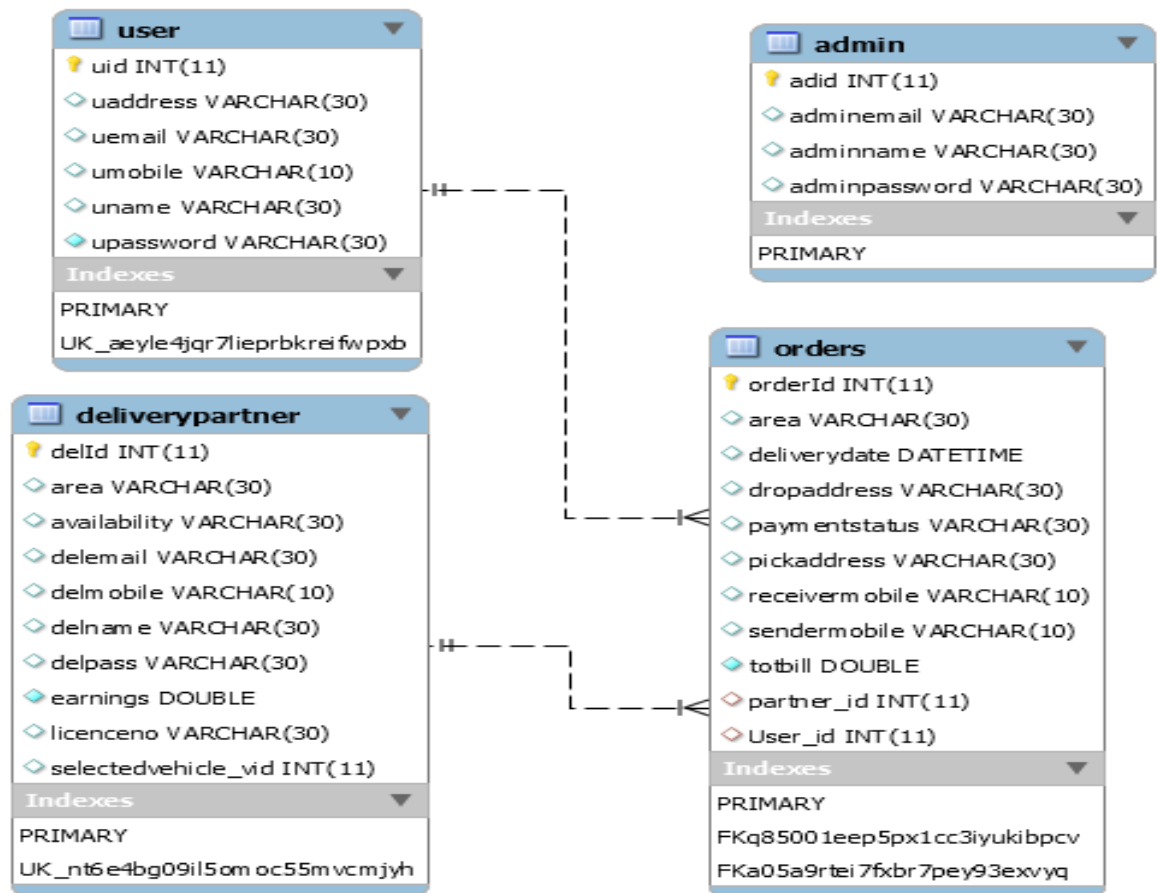


Figure 9: Class Diagram

Use Case Diagram

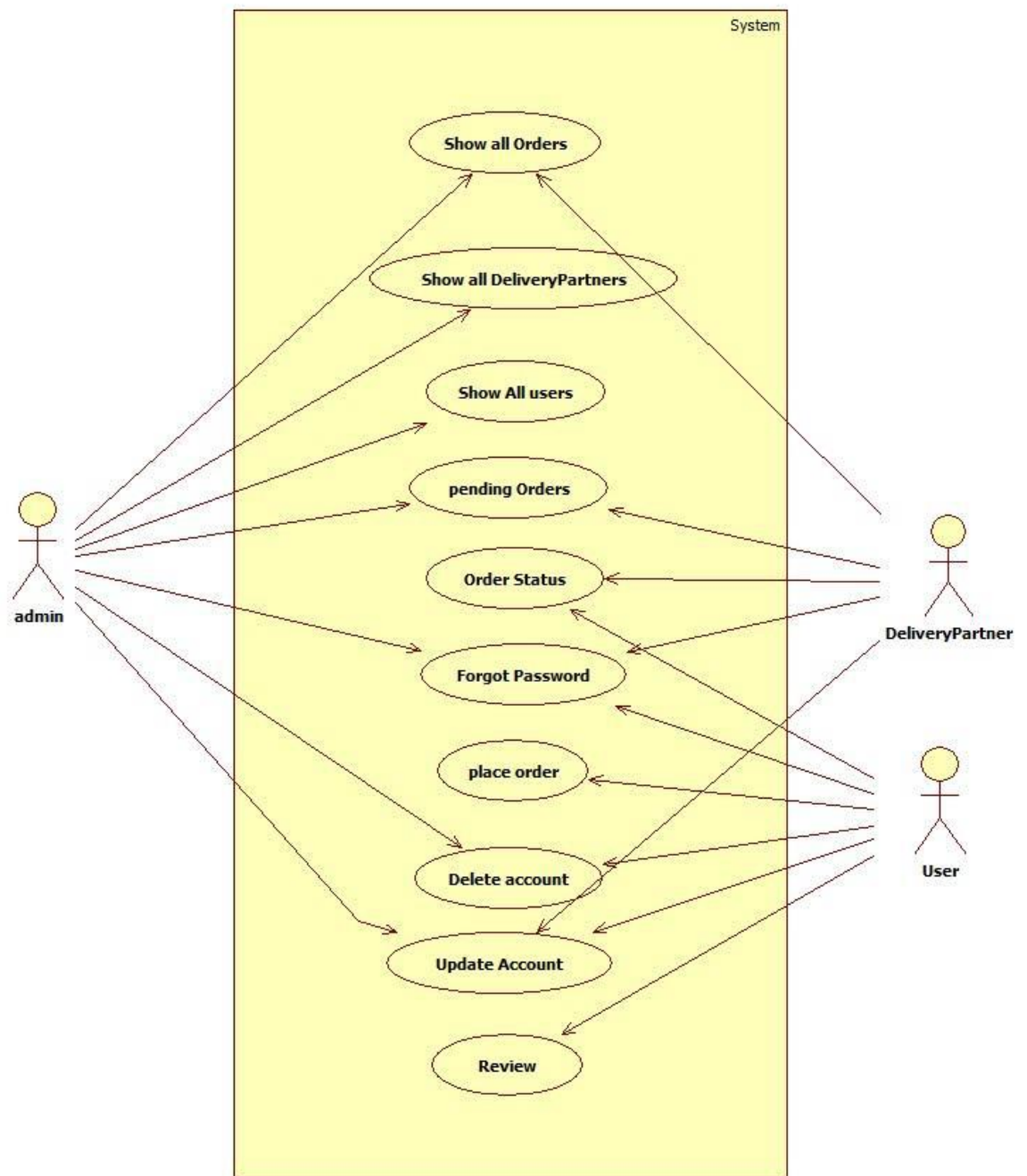


Figure 10: Use Case Diagram

ER Diagram

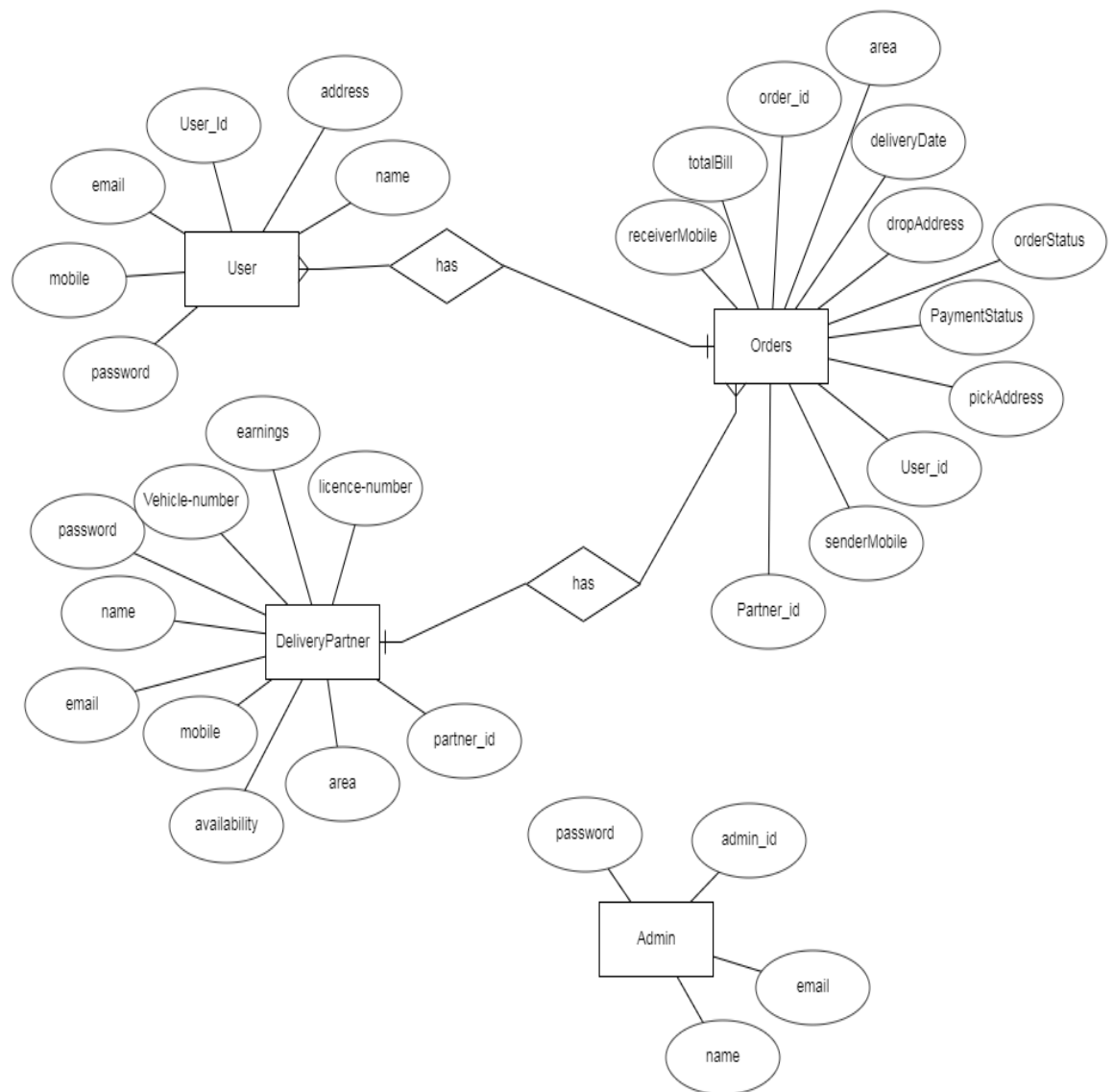


Figure 11: ER Diagram

5.Table Structure

User:

<u>Field</u>	<u>Type</u>	<u>Null</u>	<u>Key</u>	<u>Default</u>	<u>Extra</u>
Uid	int(11)	NO	PRI	NULL	Auto_increment
uaddress	varchar(30)	NO		NULL	
uemail	varchar(30)	NO	UNI	NULL	
umobile	varchar(10)	NO	UNI	NULL	
uname	varchar(30)	NO		NULL	
upassword	varchar(30)	NO		NULL	

Admin:

<u>Field</u>	<u>Type</u>	<u>Null</u>	<u>Key</u>	<u>Default</u>	<u>Extra</u>
adid	int(11)	NO	PRI	NULL	Auto_increment
adminemail	varchar(30)	YES		NULL	
adminname	varchar(30)	NO		NULL	
adminpassword	varchar(30)	YES			

Delivery Partner:

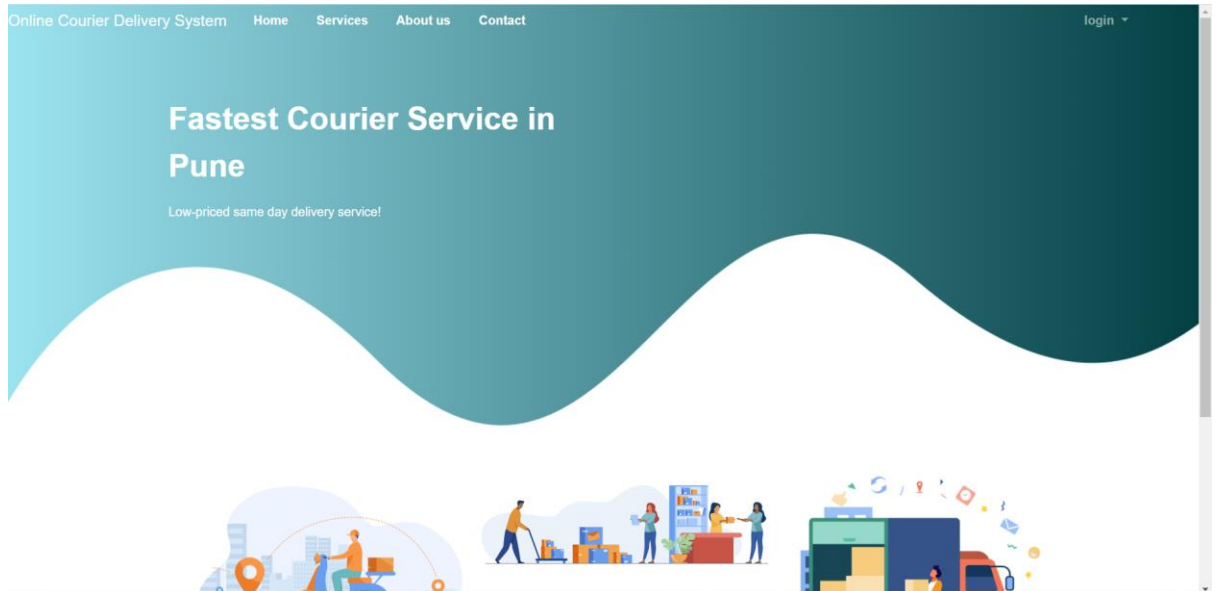
<u>Field</u>	<u>Type</u>	<u>Null</u>	<u>Key</u>	<u>Default</u>	<u>Extra</u>
delId	int(11)	NO	PRI	NULL	Auto_increment
area	varchar(30)	YES		NULL	
availability	varchar(30)	YES		NULL	
delemail	varchar(10)	YES		NULL	
delmobile	varchar(30)	YES		NULL	
delname	varchar(30)	YES	UNI	NULL	
delpass	varchar(30)	YES		NULL	
earnings	double	NO		NULL	
licenceno	varchar(30)	YES		NULL	
selectedvehicle_vid	int(11)	YES	MUL	NULL	

Orders:

<u>Field</u>	<u>Type</u>	<u>Null</u>	<u>Key</u>	<u>Default</u>	<u>Extra</u>
orderId	int(11)	NO	PRI	NULL	Auto_increment
Area	varchar(30)	NO		NULL	
Deliverydate	datetime	NO		NULL	
Dropaddress	varchar(30)	NO		NULL	
Paymentstatus	varchar(30)	NO		NULL	
Pickaddress	varchar(20)	NO		NULL	
receivermobile	varchar(10)	NO		NULL	
sendermobile	varchar(10)	NO		NULL	
totbill	doubles	NO		NULL	

6. Screenshots

Home Page:



User Login:

Customer Login

Email:

Password:

[Create New Account](#)

User Registration:

Create new Account here

Customer Name:

Email:

Password:

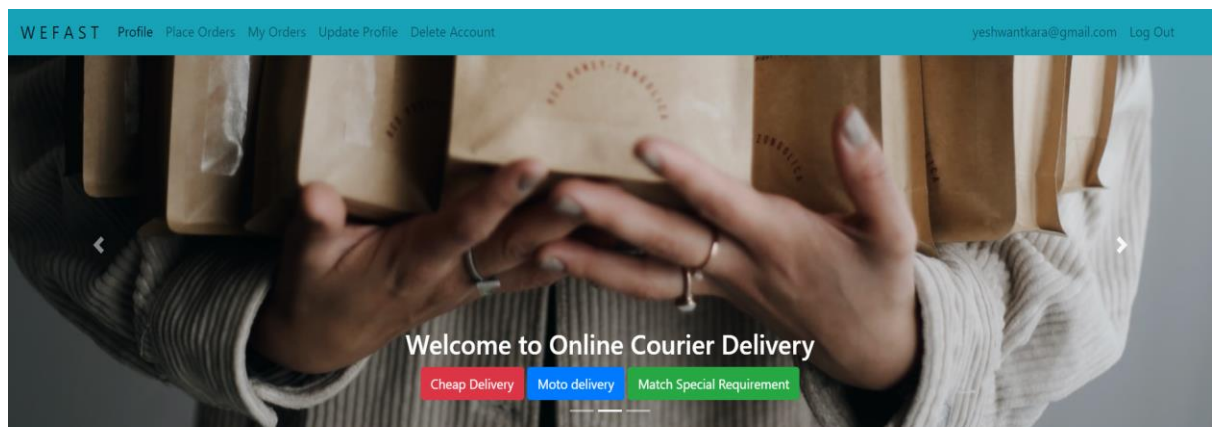
Confirm Password:

MobileNo:

Address:

submit

User Functionality:



Order Place Functionality:

Place Your Order here

Pickup Address:

Drop Address:

Sender's Mobile No:

Receiver's Mobile No:

Area:

pune

Date of Delivery:

dd-mm-yyyy

Place Order

One Time Password for security and confirming order:

Customer Login

Enter OTP:

submit

Successfully Placed Order:

WEFAST [Profile](#) [Place Orders](#) [My Orders](#) [Update Profile](#) [Delete Account](#)

[yeshwantkara@gmail.com](#) [Log Out](#)

Receipt

Order ID:	3
Delivery Date:	Sun Jan 31 00:00:00 IST 2021
Pickup Address:	akurdi
Drop Address:	baner
Sender's Contact No:	9011040752
Receiver Contact No:	8011040752
Area:	pune
Total Amount:	200.0

Delivery Partner Login:

Delivery Partner Login

Email:

Password:

[Create New Account](#)

Partner Profile with Pending orders:

My Orders

Order ID	Pickup Address	Drop Address	Sender's Contact No	Receiver's Contact No	Delivery Date	Area	Order Status	Total Amount
2	akurdi	baner	9011040752	8011040752	2020-12-10 00:00:00.0	pune	pending	200.0
3	akurdi	baner	9011040752	8011040752	2021-01-31 00:00:00.0	pune	pending	200.0

Admin Login:

Admin Login

Email:

Password:

submit

Admin Functionality:

WEFAST

[All Orders](#)

[All Customers](#)

[All Delivery Partners](#)

admin@gmail.com

Log Out

All Orders

Order ID	Pick Address	Drop Address	Area	Sender Mobile No	Receiver Mobile No	Payment Status	Delivery Date	Total Bill
2	akurdi	baner	pune	9011040752	8011040752	pending	2020-12-10 00:00:00.0	200.0
3	akurdi	baner	pune	9011040752	8011040752	pending	2021-01-31 00:00:00.0	200.0

7.Conclusion

This system is a user friendly and GUI based website. It satisfies all the requirements of the proposed system to a great extent. This system is developed in a way that it is easy to use and easy to maintain. This system is mainly designed to reduce the cost, to increase the experience of the customer and to increase the operational efficiency. The system is developed to help the customer to find the location of the package. It helps them to know the package departure status. This added feature makes the user to conveniently use the system.

Future Scope

This project can be enhanced further by adding live tracking to it. The software is flexible enough to be modified and implemented as per future requirements. We have tried our best to present this free and user–friendly website to the customers.

8. References

[1] Mr. Nishikant Kumar, Prof. Jayanti T,” A Simple web Application of Courier Management System”, IJERP.

ONLINE REFERENCE

[2] Learning spring boot, angular and MySQL to create responsive website.

[3] Javatpoint website for core java concepts.

[4] Tutorials point website for learning MySQL.