Visvesvaraya Technological University
Belagavi-590 018, Karnataka

A Mini Project Synopsis on

"COURIER MANAGEMENT SYSTEM"

Mini Project Report submitted in partial fulfilment of the requirement for the DBMS Laboratory with Mini Project [18CSL58]

BACHELOR OF ENGINEERING
IN
ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

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CERTIFICATE

Certified that the mini project work entitled **"COURIER MANAGEMENT SYSTEM"** carriedout by **Deepak P [1JT20AI005]** and **Vaishnavi B S [1JT20AI048]** bonafide students of Jyothy Institute of Technology, in partial fulfilment for the award of **Bachelor ofEngineering** in **Artificial Intelligence and Machine learning Engineering** department of the **VisvesvarayaTechnological University, Belagavi** during the year **2022-2023**. It is certified that allcorrections/suggestions indicated for Internal Assessment have been incorporated in the Report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

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ACKNOWLEDGEMENT

ABSTRACT

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 and mobile number.

Through the tracking id, customers or its recipient will able to track their products from any location using internet. It will provide status of the product after placing orders within 1 minute.

The admin can manipulate the data through admin login page and add any new consignment if required. The profile section shows the data of the user and the ricing section of the project shows the price that will be charged for the consignment according to the weight categories.

Using the courier service person can easily send his/her parcel to other person in the particular destination within the time

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CHAPTER 1

INTRODUCTION

CHAPTER 1: INTRODUCTION

1.1 Introduction to DBMS

A database is simply an organized collection of related data, typically stored on disk, and accessible by many concurrent users, it is a logically coherent collection of data with some inherent meaning, representing some aspect of real world and which is designed, built and populated with data for a specificpurpose.

Databases are managed by a Database Management System (DBMS) which is a collection of programs that enables user to create and maintain a database.

Advantages of DBMS:

- Redundancy is controlled.
- Unauthorized access is restricted.
- Providing multiple user interfaces.
- Enforcing integrity constraints.
- Providing backup and recovery.

1.2   Introduction to SQL

Structured Query Language (SQL), is a language used to request data from a database which includes database creation, deletion, and retrieval of required tables and even manipulation of data held in a relational database management system.

SQL is considered as a Non-Procedural or a High level language in which the expectedresult or operation is given without the specific details about how to accomplish the task. So, SQL is a declarative language.

Therefore, SQL is designed at a higher conceptual level of operation than procedurallanguages as procedural languages includes only the information about opening and closing tables, loading and searching indexes, or flushing buffers and writing data to file systems, but the lower level logical and physical operations are not specified in SQL.

It is a standard language for Relational Database System. It enables a user to create, read, update and delete relational databases and tables.

All the RDBMS like MySQL, Informix, Oracle, MS Access and SQL Server use SQL as their standard database language.

SQL allows users to query the database in a number of ways, using English-like statements.

1.3 Introduction to Courier Management System

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 customer who is placing the order and all the details for the recipient such as its address, name and mobile number.

During billing process system will generate a tracking id for their products. Through this tracking id, customers or its recipient will able to track their products from any location using internet. It will provide status of the product after placing orders within 1 minute.

The courier service is one of the solutions of these problems. It is used to send things to any person in the country within a certain 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.

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.

CHAPTER 2

DESIGN

CHAPTER 2*:*

DESIGN

2.1 Theory of ER Diagram

The Entity–Relationship model (ER model) describes the structure of a database withthe help of a diagram, which is known as **Entity Relationship Diagram (ER Diagram)**
An **Entity Relationship Diagram (ERD)** shows the relationships of entity sets stored in a database.
An entity in this context is an object, a component of data.
An entity set is a collection of similar entities. These entities can have attributes thatdefine its properties. By defining the entities, their attributes, and showing the relationships between them, an ER diagram illustrates the logical structure of database.

ER diagrams are used to sketch out the design of a database.
ER Model stands for Entity Relationship Model is a high-level conceptual data model diagram. ER model helps to systematically analyze data requirements to produce a well-designed database. The ER Model represents real-world entities and the relationships between them. Creating an ER Model in DBMS is considered as a best practice before implementing your database.
ER Modeling helps you to analyze data requirements systematically to produce a well-designed database. So, it is considered a best practice to complete ER modeling before implementing your database.

ER DIAGRAM:

Helps you to define terms related to entity relationship modelling

Provide a preview of how all your tables should connect, what fields are going to be on each table

Help to describe entities, attributes, relationships

ER diagrams are translatable into relational tables which allows you to build databases quickly

2.2 Entities

An entity is an 'object' in the real world with an independent existence and an entity typedefines a collection (or set) of entities that have the same attributes. Each entity type in the database is described by its name and attributes.

An entity type is represented in ER diagrams as a rectangular box enclosing the entity type name.

In a database management system (DBMS), an entity is a piece of data tracked and stored by the system. This could be something as simple as a customer's name and address or more complex information such as an order or invoice. An entity is typically composed of multiple attributes, the individual data that make up the Entity.

For example, a customer entity might have attributes such as first name, last name, and address. In some cases, an entity will also have relationships with other entities in the system. For example, a customer entity might be related to an order entity. Entity-relationship diagrams (ERDs) visualize the connections between entities in a DBMS.

2.3 Relationships

A relationship among two or more entities represents an association among the entities and whenever an attribute of one entity refers to another entity, there exists arelationship between the two entities.

In a relationship, a foreign key of one table refers the primary key of the other table and it is represented by diamond shape in ER diagram.

A relationship in DBMS is the way in which two or more data sets are linked, i.e., any association between two entity types is called a relationship. So entity takes part in the relationship, and it is represented by a diamond shape.

That is how a relationship can be defined between the tables. Three types of relationships can exist between two entities.

One-to-One relationship

One-to-Many relationship or Many-to-One relationship

Many-to-Many relationship

2.4 Attributes

An attribute represents some property of interest that further describes an entityand the column header of the table shows the attributes. Each attribute in a tablehas a certain domain which allows it to accept a certain 'set of values' only.

The attribute values, of each entity, will define its characteristics in the tableand is represented by oval in the ER diagram.

An attribute is a piece of data that describes an entity. For example, in a customer database, the attributes might be name, address, and phone number. In a product database, the attributes might be name, price, and date of manufacture. Each attribute has a specific data type, such as string, integer, or date.

Attributes can be used to describe both simple and complex entities. A product, for example, might be described by a single attribute such as name or price. However, it can also be described by multiple attributes such as name, price, and date of manufacture. In addition, some attributes might be used to describe other attributes. For example, an attribute called "color" might describe a product's color.

2.5 Features

These are the important features of the project Courier Management System:

In computer system of the courier service computation of the rate is easily &   quickly done.

☐ Computer system of the courier service provide fast access.

☐ Using this computerized system, bill issued procedure becomes fast.

☐ In computer system the person has to fill the various forms & number of copies of the forms can be easily generated at a time.

☐ In computer system, it is not necessary to create the manifest but we can directly print it, which saves our time.

☐ It contains better storage capacity.

☐ Accuracy in work.

☐ Easy & fast retrieval of information.

☐ Well-designed reports.

☐ Decrease the load of the person involve in existing manual system.

☐ Access of any information individually.

☐Work becomes very speedy.

☐Easy to update information.

2.6 Hardware and software requirements

Software Requirement:

Apache Server 2.0

PHP Version 5.3 or above

MySQL Version 5.5 or above

Latest browser: Brave, Chrome, Firefox, Safari etc.

Operating System: Any (Linux, Windows, Mac etc.)

Hardware Requirements:

Processor Pentium IV or higher version.

Ram 2GB or above

Hard Disk 2GB or above.
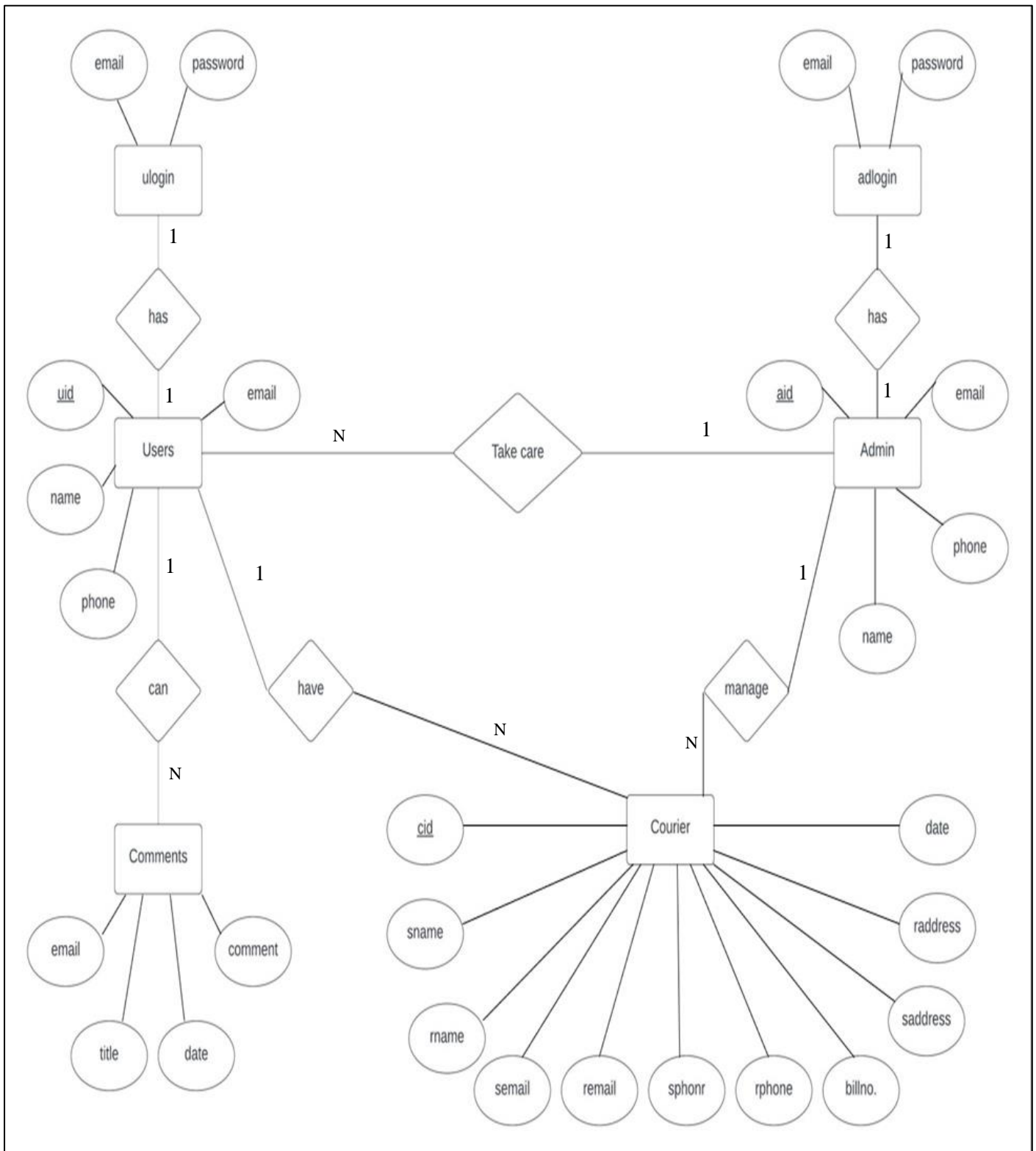
2.7 ER DIAGRAM

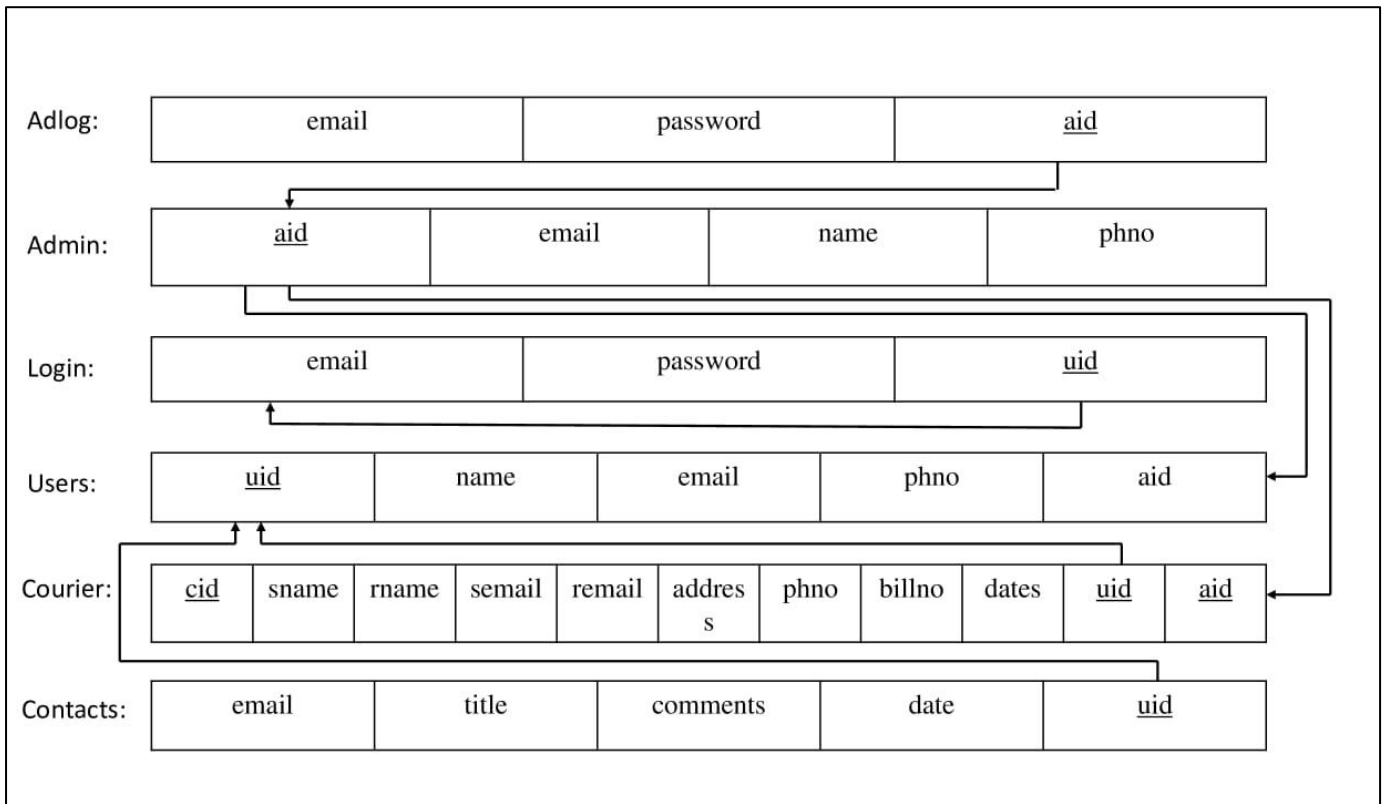Fig 2.1.1 E R Diagram

2.8 SCHEMA DIAGRAM

Fig 2.1.2 : SCHEMA DIAGRAM

2.9 LIST OF TABLES:

1. ADLOG (Admin Login)
2. ADMIN
3. LOGIN
4. USERS
5. COURIER
6. CONTACTS

CHAPTER 3

IMPLEMENTATION

CHAPTER 3:

IMPLEMENTATION

QUERIES : TABLE CREATION AND INSERTION OF VALUES

3.1 ADMIN LOGIN TABLE

```
CREATE TABLE `adlogin` (
  `email` varchar(50) DEFAULT NULL,
  `password` varchar(50) DEFAULT NULL,
  `a_id` int(11) DEFAULT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;


--
-- Dumping data for table `adlogin`
--

INSERT INTO `adlogin` (`email`, `password`, `a_id`) VALUES
('admin1@gmail.com', '12345', 1),
('admin2@gmail.com', '12345', 2);


-- --------------------------------------------------------


--
-- Table structure for table `admin`
--

CREATE TABLE `admin` (
  `a_id` int(11) NOT NULL,
  `email` varchar(50) NOT NULL,
  `name` varchar(50) DEFAULT NULL,
  `pnumber` int(14) DEFAULT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;


--
-- Dumping data for table `admin`
--

INSERT INTO `admin` (`a_id`, `email`, `name`, `pnumber`) VALUES
(1, 'admin1@gmail.com', 'Admin1', 12345),
(2, 'admin2@gmail.com', 'Admin2', 12345);
```

Fig 3.1.1 : ADMIN LOGIN

3.2 TABLE : CONTACTS

TABLE : COURIER

```sql
CREATE TABLE `contacts` (
  `id` int(11) NOT NULL,
  `email` varchar(50) NOT NULL,
  `subject` varchar(30) NOT NULL,
  `msg` varchar(300) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;

--
-- Dumping data for table `contacts`
--

INSERT INTO `contacts` (`id`, `email`, `subject`, `msg`) VALUES
(1, 'deepak@gmail.com', 'delay', 'I have courier 2 weeks ago but its not delivered yet..'),
(2, 'de.18ai033@jyothy.edu.in', 'Delay', 'gjndfjkgnhdfjkgn');

-- --------------------------------------------------------

--
-- Table structure for table `courier`
--

CREATE TABLE `courier` (
  `c_id` int(11) NOT NULL,
  `u_id` int(11) DEFAULT NULL,
  `semail` varchar(50) DEFAULT NULL,
  `remail` varchar(50) DEFAULT NULL,
  `sname` varchar(50) DEFAULT NULL,
  `rname` varchar(50) DEFAULT NULL,
  `sphone` varchar(20) DEFAULT NULL,
  `rphone` varchar(20) DEFAULT NULL,
  `saddress` varchar(50) DEFAULT NULL,
  `raddress` varchar(50) DEFAULT NULL,
  `weight` int(11) DEFAULT NULL,
  `billno` int(11) NOT NULL,
  `image` text DEFAULT NULL,
  `date` date NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```

Fig 3.2.1 : TABLE CONTACTS

3.3 LOGIN TABLE

USERS TABLE

```sql
CREATE TABLE `login` (
  `email` varchar(50) DEFAULT NULL,
  `password` varchar(50) DEFAULT NULL,
  `u_id` int(11) DEFAULT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;

--
-- Dumping data for table `login`
--

INSERT INTO `login` (`email`, `password`, `u_id`) VALUES
('deepak1215225@gmail.com', '12345', 1),
('de@gmail.com', '12345', 4);

-- --------------------------------------------------------

--
-- Table structure for table `users`
--

CREATE TABLE `users` (
  `u_id` int(11) NOT NULL,
  `email` varchar(50) NOT NULL,
  `name` varchar(50) DEFAULT NULL,
  `pnumber` int(14) DEFAULT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;

--
-- Dumping data for table `users`
--

INSERT INTO `users` (`u_id`, `email`, `name`, `pnumber`) VALUES
(1, 'deepak1215225@gmail.com', 'prem', 56665),
(4, 'de@gmail.com', 'LOVE RAJ', 2147483647);
```

Fig 3.3.1 : USERS TABLE

2.PHP MYADMIN:

1. DATABASE TABLES LIST

Table	Action							Rows	Type	Collation	Size	Overhead
☐ adlogin	⭐	🔲 Browse	🔧 Structure	🔍 Search	🔩 Insert	🗑 Empty	⊘ Drop	2	InnoDB	utf8mb4_general_ci	32.0 KiB	-
☐ admin	⭐	🔲 Browse	🔧 Structure	🔍 Search	🔩 Insert	🗑 Empty	⊘ Drop	2	InnoDB	utf8mb4_general_ci	32.0 KiB	-
☐ contacts	⭐	🔲 Browse	🔧 Structure	🔍 Search	🔩 Insert	🗑 Empty	⊘ Drop	3	InnoDB	utf8mb4_general_ci	16.0 KiB	-
☐ courier	⭐	🔲 Browse	🔧 Structure	🔍 Search	🔩 Insert	🗑 Empty	⊘ Drop	2	InnoDB	utf8mb4_general_ci	48.0 KiB	-
☐ login	⭐	🔲 Browse	🔧 Structure	🔍 Search	🔩 Insert	🗑 Empty	⊘ Drop	2	InnoDB	utf8mb4_general_ci	32.0 KiB	-
☐ users	⭐	🔲 Browse	🔧 Structure	🔍 Search	🔩 Insert	🗑 Empty	⊘ Drop	2	InnoDB	utf8mb4_general_ci	32.0 KiB	-
6 tables	Sum							13	InnoDB	utf8mb4_general_ci	192.0 KiB	0 B

Fig 3.2.1 : TABLE LIST

2.ADMIN LOGIN TABLE DESCRIPTION

🔲 Browse 🔧 Structure 📄 SQL 🔍 Search 🔩 Insert 📤 Export 📥 Import 🔐 Privileges 🔧 Operations 🔺 Triggers

🔧 Table structure   🔳 Relation view

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action		
☐	1	email	varchar(50)	utf8mb4_general_ci		Yes	NULL			🖊 Change	⊘ Drop	More
☐	2	password	varchar(50)	utf8mb4_general_ci		Yes	NULL			🖊 Change	⊘ Drop	More
☐	3	a_id 🔑	int(11)			Yes	NULL			🖊 Change	⊘ Drop	More

Fig 3.2.2 : ADMIN LOGIN

3.ADMIN PAGE TABLE

🔲 Browse 🔧 Structure 📄 SQL 🔍 Search 🔩 Insert 📤 Export 📥 Import 🔐 Privileges 🔧 Operations 🔺 Triggers

🔧 Table structure   🔳 Relation view

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action		
☐	1	a_id 🔑	int(11)			No	None		AUTO_INCREMENT	🖊 Change	⊘ Drop	More
☐	2	email 🔑	varchar(50)	utf8mb4_general_ci		No	None			🖊 Change	⊘ Drop	More
☐	3	name	varchar(50)	utf8mb4_general_ci		Yes	NULL			🖊 Change	⊘ Drop	More
☐	4	pnumber	int(14)			Yes	NULL			🖊 Change	⊘ Drop	More

Fig 3.2.3 : ADMIN PAGE

4. CONTACTS TABLE

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action		
☐	1	id 🔑	int(11)			No	None		AUTO_INCREMENT	🖉 Change	⊖ Drop	More
☐	2	email	varchar(50)	utf8mb4_general_ci		No	None			🖉 Change	⊖ Drop	More
☐	3	subject	varchar(30)	utf8mb4_general_ci		No	None			🖉 Change	⊖ Drop	More
☐	4	msg	varchar(300)	utf8mb4_general_ci		No	None			🖉 Change	⊖ Drop	More

Fig 3.2.4 : CONTACTS

5. COURIER TABLE

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action		
☐	1	c_id 🔑	int(11)			No	None		AUTO_INCREMENT	🖉 Change	⊖ Drop	More
☐	2	u_id 🔑	int(11)			Yes	NULL			🖉 Change	⊖ Drop	More
☐	3	semail	varchar(50)	utf8mb4_general_ci		Yes	NULL			🖉 Change	⊖ Drop	More
☐	4	remail	varchar(50)	utf8mb4_general_ci		Yes	NULL			🖉 Change	⊖ Drop	More
☐	5	sname	varchar(50)	utf8mb4_general_ci		Yes	NULL			🖉 Change	⊖ Drop	More
☐	6	rname	varchar(50)	utf8mb4_general_ci		Yes	NULL			🖉 Change	⊖ Drop	More
☐	7	sphone	varchar(20)	utf8mb4_general_ci		Yes	NULL			🖉 Change	⊖ Drop	More
☐	8	rphone	varchar(20)	utf8mb4_general_ci		Yes	NULL			🖉 Change	⊖ Drop	More
☐	9	saddress	varchar(50)	utf8mb4_general_ci		Yes	NULL			🖉 Change	⊖ Drop	More
☐	10	raddress	varchar(50)	utf8mb4_general_ci		Yes	NULL			🖉 Change	⊖ Drop	More
☐	11	weight	int(11)			Yes	NULL			🖉 Change	⊖ Drop	More
☐	12	billno 🔑	int(11)			No	None			🖉 Change	⊖ Drop	More
☐	13	image	text	utf8mb4_general_ci		Yes	NULL			🖉 Change	⊖ Drop	More
☐	14	date	date			No	None			🖉 Change	⊖ Drop	More

Fig 3.2.5 : COURIER TABLE

6.USER TABLE

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action		
☐	1	**u_id** 🔑	int(11)			No	*None*		AUTO_INCREMENT	🖉 Change	⊖ Drop	More
☐	2	**email** 🔑	varchar(50)	utf8mb4_general_ci		No	*None*			🖉 Change	⊖ Drop	More
☐	3	**name**	varchar(50)	utf8mb4_general_ci		Yes	*NULL*			🖉 Change	⊖ Drop	More
☐	4	**pnumber**	int(14)			Yes	*NULL*			🖉 Change	⊖ Drop	More

Fig 3.2.6 : USERS

7. LOGIN TABLE

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action		
☐	1	**email**	varchar(50)	utf8mb4_general_ci		Yes	*NULL*			🖉 Change	⊖ Drop	More
☐	2	**password**	varchar(50)	utf8mb4_general_ci		Yes	*NULL*			🖉 Change	⊖ Drop	More
☐	3	**u_id** 🔑	int(11)			Yes	*NULL*			🖉 Change	⊖ Drop	More

Fig 3.2.7 : LOGIN TABLE

CHAPTER – 4

RESULT AND SNAPSHOTS

CHAPTER 4

1.SNAPSHOTS

1. USER LOGIN PAGE
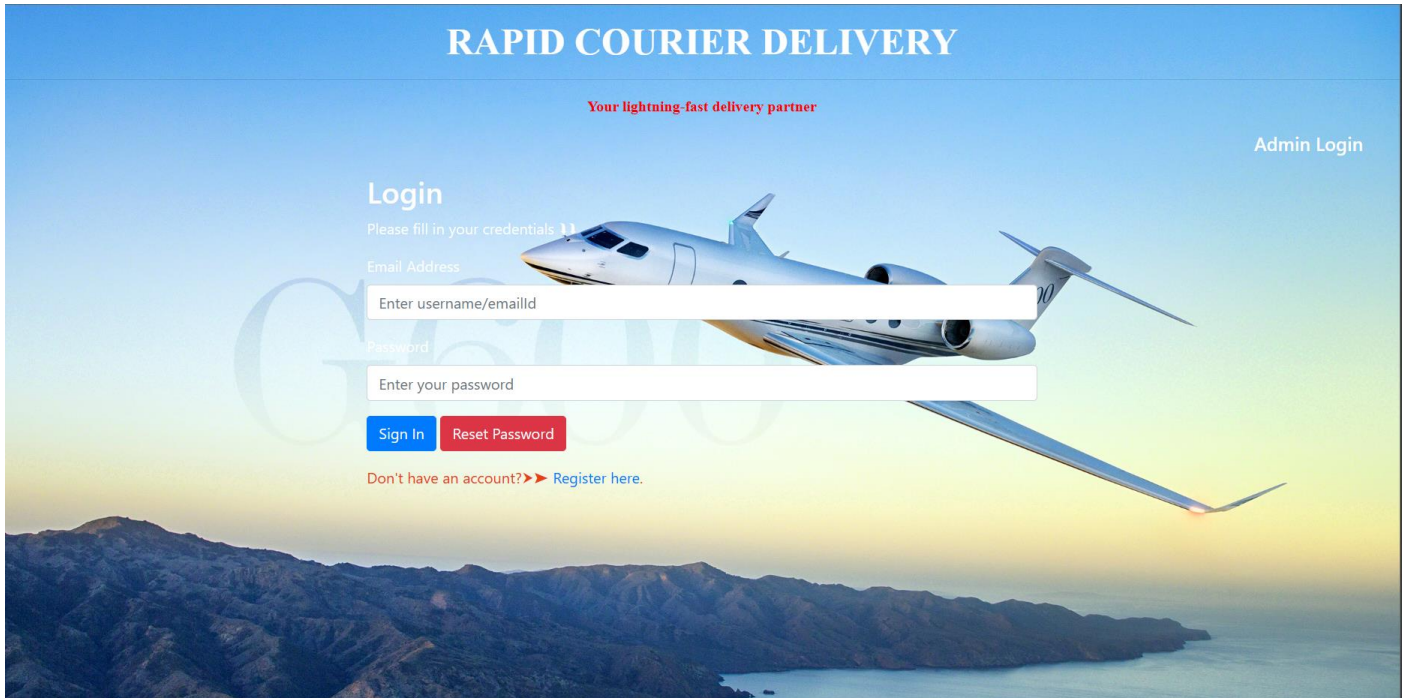
Fig 4.1.1 : LOGIN PAGE

2. HOME PAGE
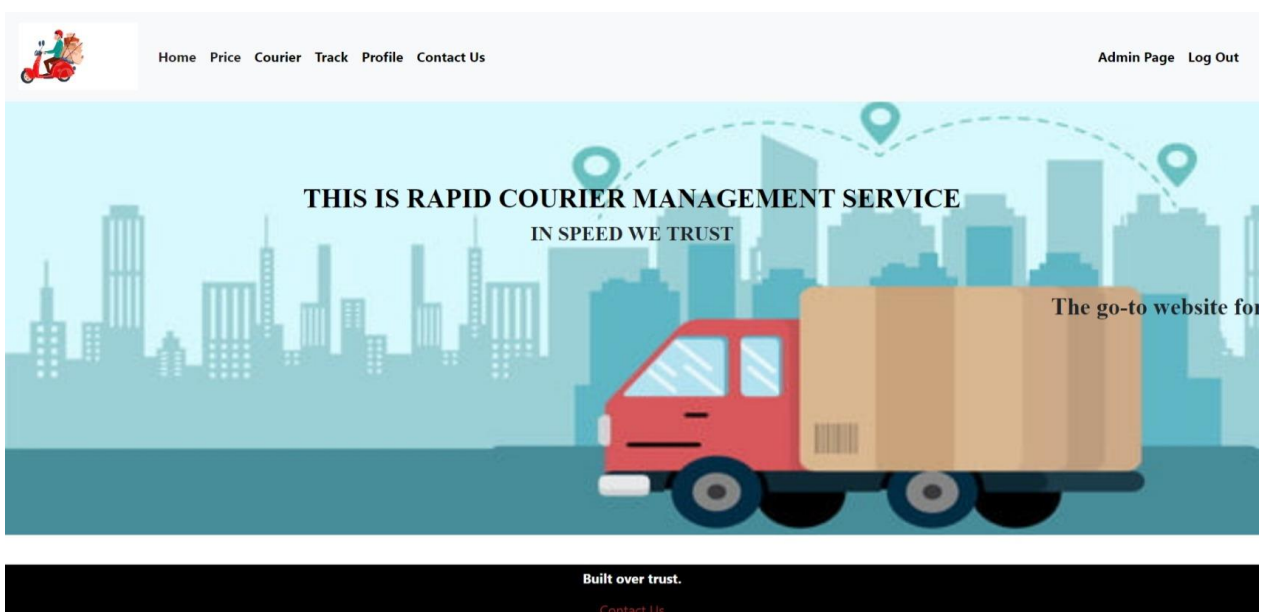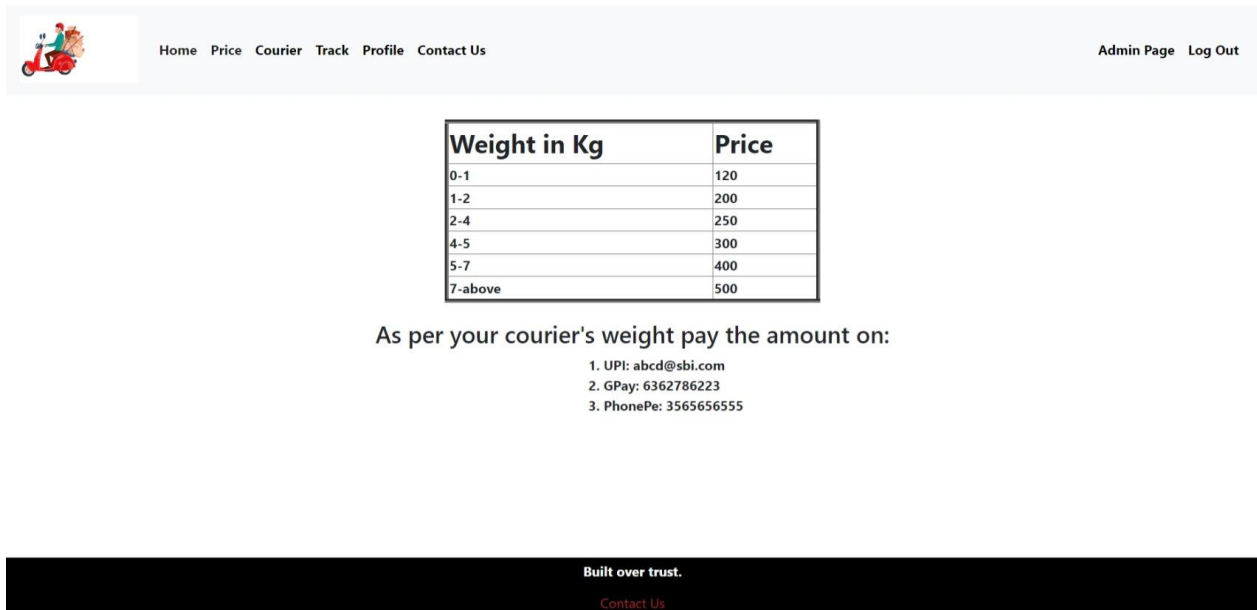
Fig 4.1.2 : HOME PAGE

3. PRICING OF COURIER PAGE

Weight in Kg	Price
0-1	120
1-2	200
2-4	250
4-5	300
5-7	400
7-above	500
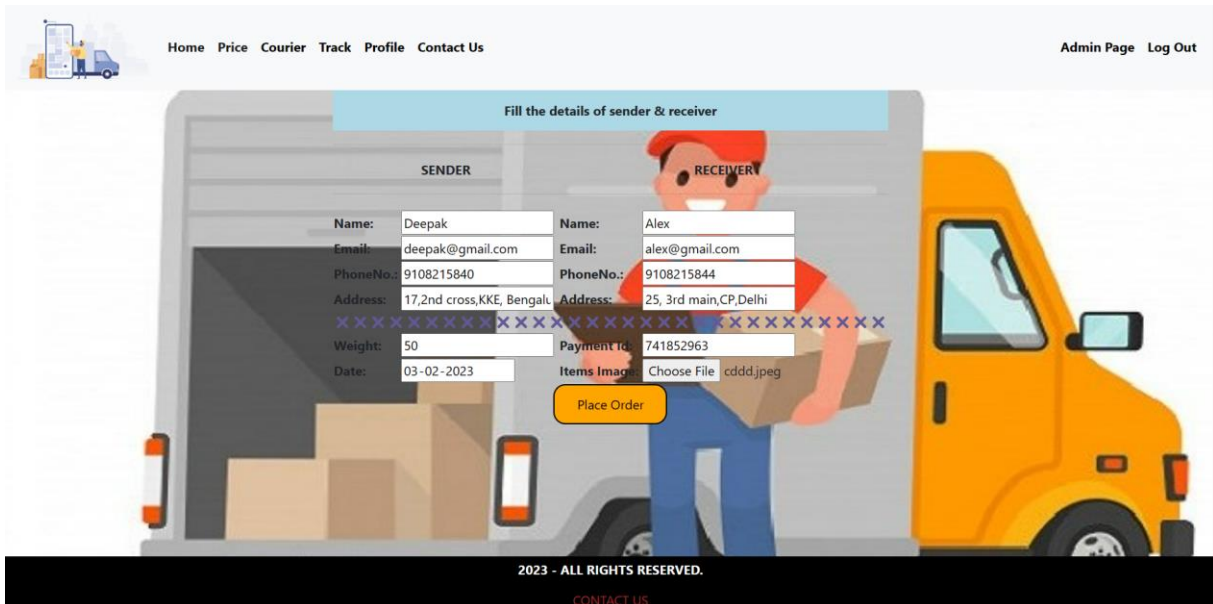
As per your courier's weight pay the amount on:

1. UPI: abcd@sbi.com
2. GPay: 6362786223
3. PhonePe: 3565656555

Built over trust.

Contact Us

Fig 4.1.3 : PRICING

4. COURIER SENDING PAGE

Fig 4.1.4 : COURIER

5. TRACKING PAGE

Home Price Courier Track Profile Contact Us   Admin Page Log Out

No.	Item's Image	Sender Name	Receiver Name	Receiver Email	Action
1		Deepak	Alex	alex@gmail.com	Edit || Delete|| Check status
2		Deepak	Rajesh	rajesh@gmail.com	Edit || Delete|| Check status

2023 - ALL RIGHTS RESERVED.
CONTACT US

Fig 4.1.5: TRACKING

6. TRACK STATUS PAGE

Home Price Courier Track Profile Contact Us   Admin Page Log Out

Status >> On The Way...

GoBack

2023 - ALL RIGHTS RESERVED.
CONTACT US

Fig 4.1.6 : TRACK STATUS

7. PROFILE PAGE
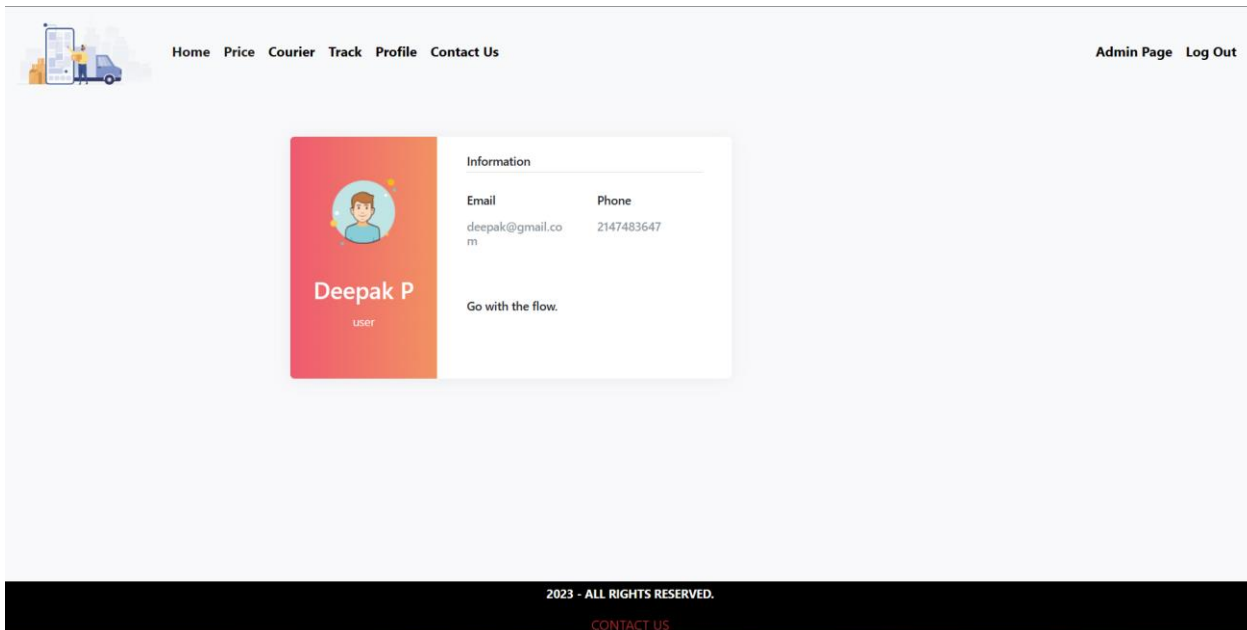
Fig 4.1.7: CONTACT US

8. CONTACT US PAGE
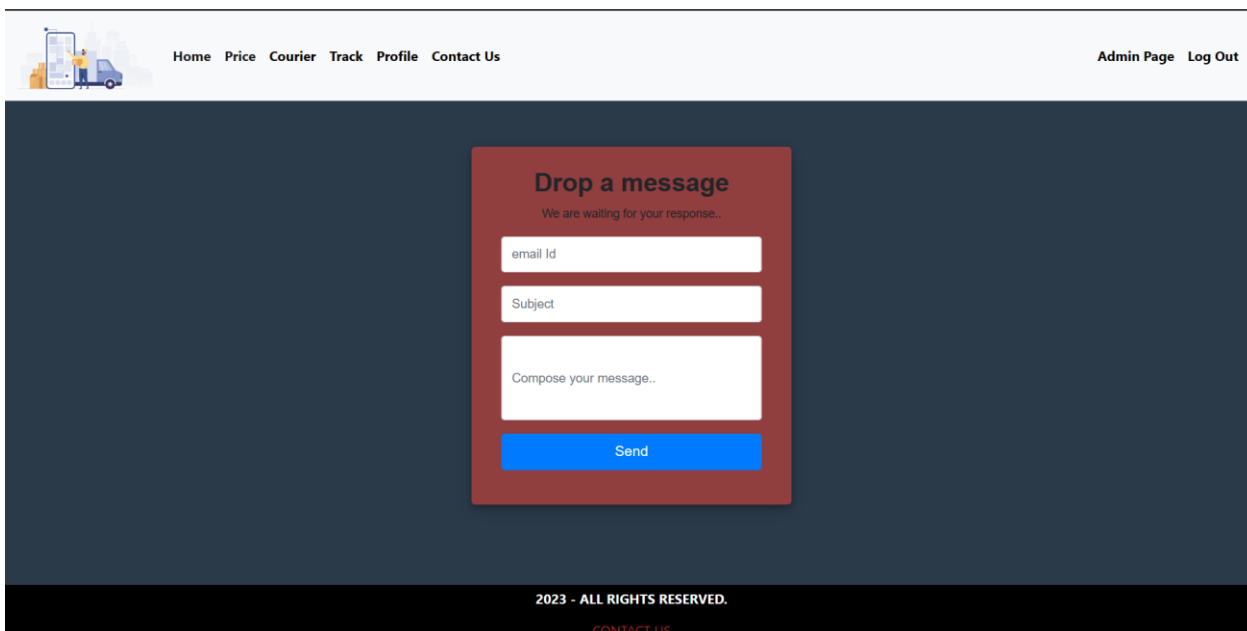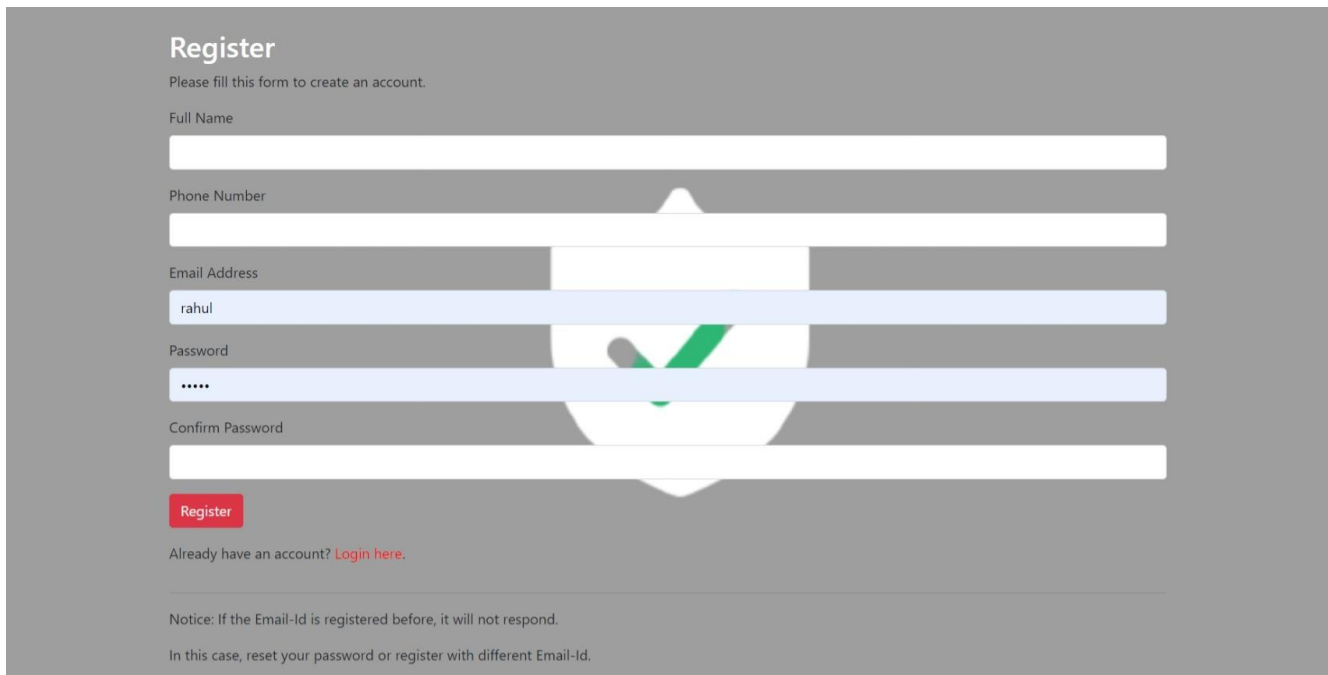
Fig 4.1.8: CONTACT US

9. REGISTER NEW USER PAGE

Fig 4.1.9: REGISTER NEW USER

10. ADMIN LOGIN PAGE

Fig 4.1.10: ADMIN LOGIN

11. ADMIN DASHBOARD PAGE
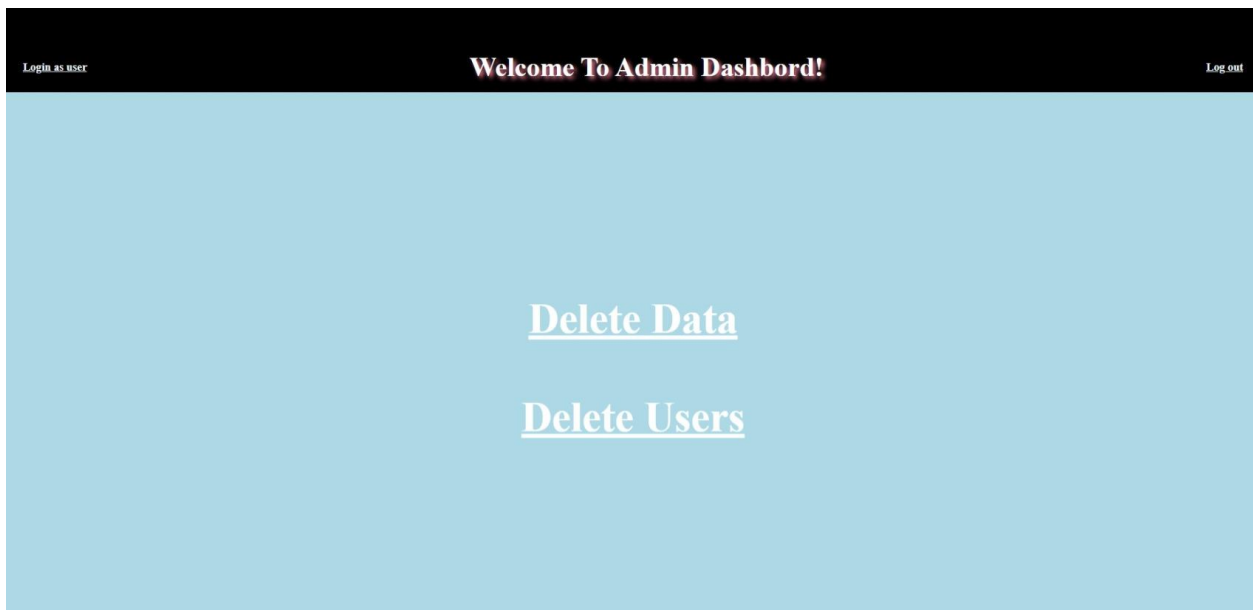

Fig 4.1.11: ADMIN DASHBOARD

12. USER DETAILS PAGE
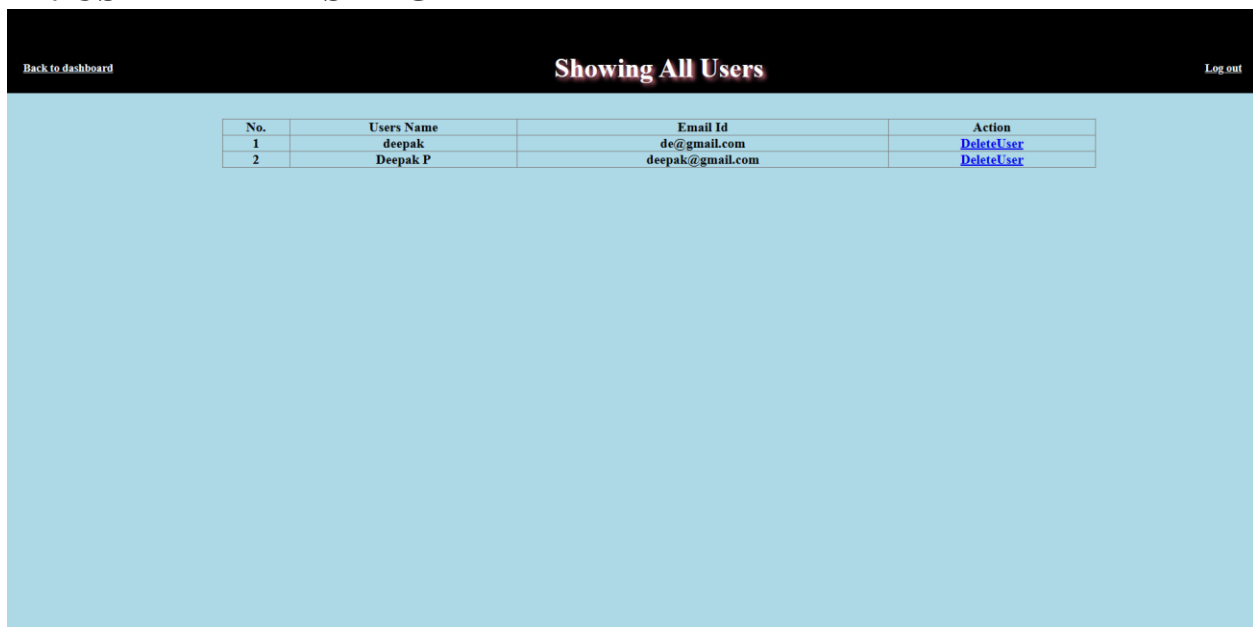
Fig 4.1.12: USER DETAILS

13. ADMIN DELETE DATA PAGE

Search Data Information

Back to dashboard   Log out

No.	Items Image	Sender Name	Receiver Name	Sender Email	Action
1		Deepak	Alex	deepak@gmail.com	Delete
2		Deepak	Rajesh	deepak@gmail.com	Delete

Fig 4.1.13: ADMIN DELETE

14. UPDATE COURIER DETAILS PAGE

Update The Details As Required

SENDER   **RECEIVER**

Name: Deepak   **Name:** Alex

Email: deepak@gmail.com   **Email:** alex@gmail.com

PhoneNo.: 9108215840   **PhoneNo.:** 9108215844

Address: 17,2nd cross,KKE, Bengalu   **Address:** 25, 3rd main,CP,Delhi

✕ ✕

Weight: 50   **ReceiptNo.:** 741852963

Date: 03 - 02 - 2023   **Items Image:** Choose File No file chosen

Update

Fig 4.1.14: UPDATE COURIER

CHAPTER 5

CONCLUSION

Courier agency is considered as an expansion of business relations. It contributes a lot by providing quick & fast services of sending documents letters (formal & informal both) to business as it enables any business to flourish.

Following modification or upgrades can be done in system:

1) More than one company can be integrated through this software.

2) Web services can be used to know exact delivery status of packets.

3) Client can check the repacked delivery status online.

4) Distributed database approach in place of centralized approach.

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

References

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