# MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

**Skill Based Mini Project Report**

**On**

# TAXI MANAGEMENT SYSTEM DATABASE


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Submitted to:

## DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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**MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR**

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# CERTIFICATE

This is certified that **Pavitra khare** (0901CS201082) has submitted the project report titled **Taxi Management system Database** under the mentorship of **Ms. Jaimala Jha**, in partial fulfilment of the requirement for the award of degree of Bachelor of Technology in Computer Science and Engineering from Madhav Institute of Technology and Science, Gwalior.

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**MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR**

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# DECLARATION

I hereby declare that the work being presented in this project report, for the partial fulfilment of requirement for the award of the degree of Bachelor of Technology in Computer Science and Engineering at Madhav Institute of Technology & Science, Gwalior is an authenticated and original record of my work under the mentorship of **Ms. Jaimala Jha**, **Assistant Professor**, Department of CSE.

I declare that I have not submitted the matter embodied in this report for the award of any degree or diploma anywhere else.

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# ABSTRACT

In today's world travel agencies need an effective management platform for handling their respective transportation services. The existing system relies on manual data recording for management which is very tedious and time consuming, involving a lot of manpower and paper work. So, the current system needs to be computerized. These problem is solved by this taxi management system. .

Taxi management system consist of the database design and implementation of the database for booking a taxi. The database involves three main entities Taxi, User and trip.Database is implemented by using MySQL.

This project aims at offering the best of car services to the clients in need. It has a fleet of cars ranging from normal budget cabs to expensive luxury cars. The best thing about a web-based system such as this is that it offers online cab hire for corporate houses. This makes the overall car service work easily accessible and reliable.

When a trip is started it stores the information about the Taxi, user , starting time of the trip and the ending time and finally a unique bill is generated with bill number, total amount .User can also give the feedback/rating for the trip they travelled and for the driver through message or rating out of five star.

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# Chapter 1: PROJECT OVERVIEW

## 1.1 INTRODUCTION:

Transport facility is a matter of headache for those people who do not have any personal transport in Gwalior city. On occasions like Wedding, Vacation, house shifting, and tour outside Gwalior and on many other situations they feel the necessity of a vehicle to sort out the problems. So if it is possible to design or develop an application for availing transport whenever and wherever possible, then it will be beneficial for both renter and transport provider. Now a days, by some clicks only, we can get whatever you want at home. We already know about the online shopping, e-banking etc. Similarly, The Car Rental System is the online facility to book cars online within few clicks only. Some people can not afford to have a car, for those people this system becomes very helpful. This system includes various cars, as per the customer order and comfort, it place the order and deliver the car as per the location within the area. For travelling a long distance, booking can be done via internet service only.

Thus, Taxi management system fulfil all these requirements by providing a platform to user to book the taxi for travel and taxi driver a platform to expand their business.

## 1.2 OBJECTIVE AND SCOPE:

- To produce a system that allow customer to register and reserve car online and for the company to effectively manage their car rental business.
- To ease customer's task whenever they need to rent a car.
- General customers as well as the company's staff will be able to use the system effectively.
- the system will be available for access 24/7 except when there is a temporary server issue which is expected to be minimal.

## 1.3 PROJECT FEATURES:

- The Taxi service Database involves three entities Taxi, User and Trip
- A user is uniquely identified by his/her User_id. User information consists of his name as first name, last name, address, age and contact number.
- When a user books a taxi and starts the trip by the driver the start time automatically updated by the system.
- When the trip ends, the end trip time also automatically updated in the database by the system.
- A unique bill is generated with a Bill_no after a trip ends which has the information of user, driver, amount, date.
- The total amount and net amount are calculated based on start time, end time, taxi price per hour and promotional code if any.
- A taxi is categorized as Individual Owner and Taxi Service Company. Every taxi has a owner and he/she can give his/her car for the taxi service. Every owner has SSN and name. For the taxi service company information like tcs_id and tsc_name will also be there..
- A taxi can be drive by a driver. Driver has uniquely identified by the Driver_id. Other information consists of name, gender, contact_no, rating and age.
- After the trip over a unique trip_id is generated for that particular trip. Along with all the necessary trip_details such as amount, date etc.
- Users can also the give the feedback/rating for the trip they travelled into it. The feedback can be a message or rating out five for the driver who is giving trip to that user.
- Feedback can be taking by the customer service centre representative. They have the information like emp_id, name and email.

# Chapter 2: INFORMATION OF ENTITIES

In total we have eight entities and information of each entity is mentioned below:-

1. **TAXI (Taxi_id, Registration_no, Taxi_Model, Taxi_Year , Taxi_type, Status, Driver_id integer)**

2. **USER_TBL (Usr_id,F_name , L_name, Contat_no ,Gender, Address, Taxi_id)**

3. **DRIVER ( Driver_id, F_name, L_name, Gender ,Conatct_no, Rating , Age integer)**

4. **TRIP_DETAILS (Trip_id, Trip_date, Trip_amt , Driver_id, Usr_id, Taxi_id,**

   **Strt_time , End_time)**

5. **BILL_DETAILS ( Bill_no, Bill_date, Advance_amt , Discount_amt , Total_amt , Usr_id, Trip_id)**

6. **CUSTOMER_SERVICE ( Emp_id, F_name , L_name )**

7. **FEEDBACK (Fbk_id, Message , Email ,Emp_id, Usr_id, Trip_id)**

8. **OWNS (Owner_id , No_Cars )**

9. **OWNER_TAXI (Owner_id , Taxi_id )**

10. **INDIVIDUAL (Ssn , Name, Owner_id)**

11. **TAXI_SERVICE_COMPANY (Tsc_id , Tsc_name, Owner_id)**

# Chapter 3: MODELLING OF REQUIREMENTS

## 3.1 ER-DIAGRAM

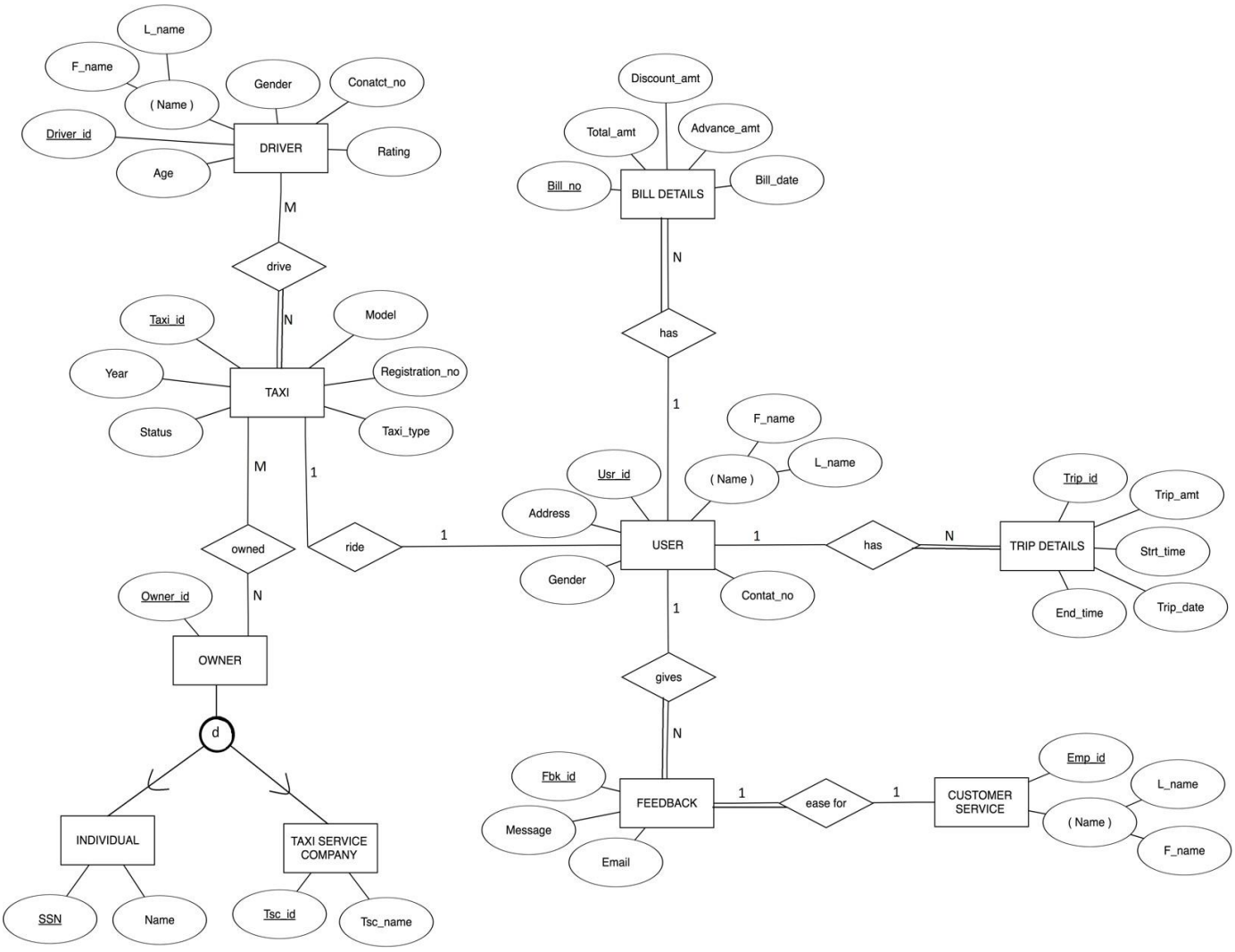


**Figure-1**

## 3.2 MAPPING WITH REATIONAL SCHEMA:

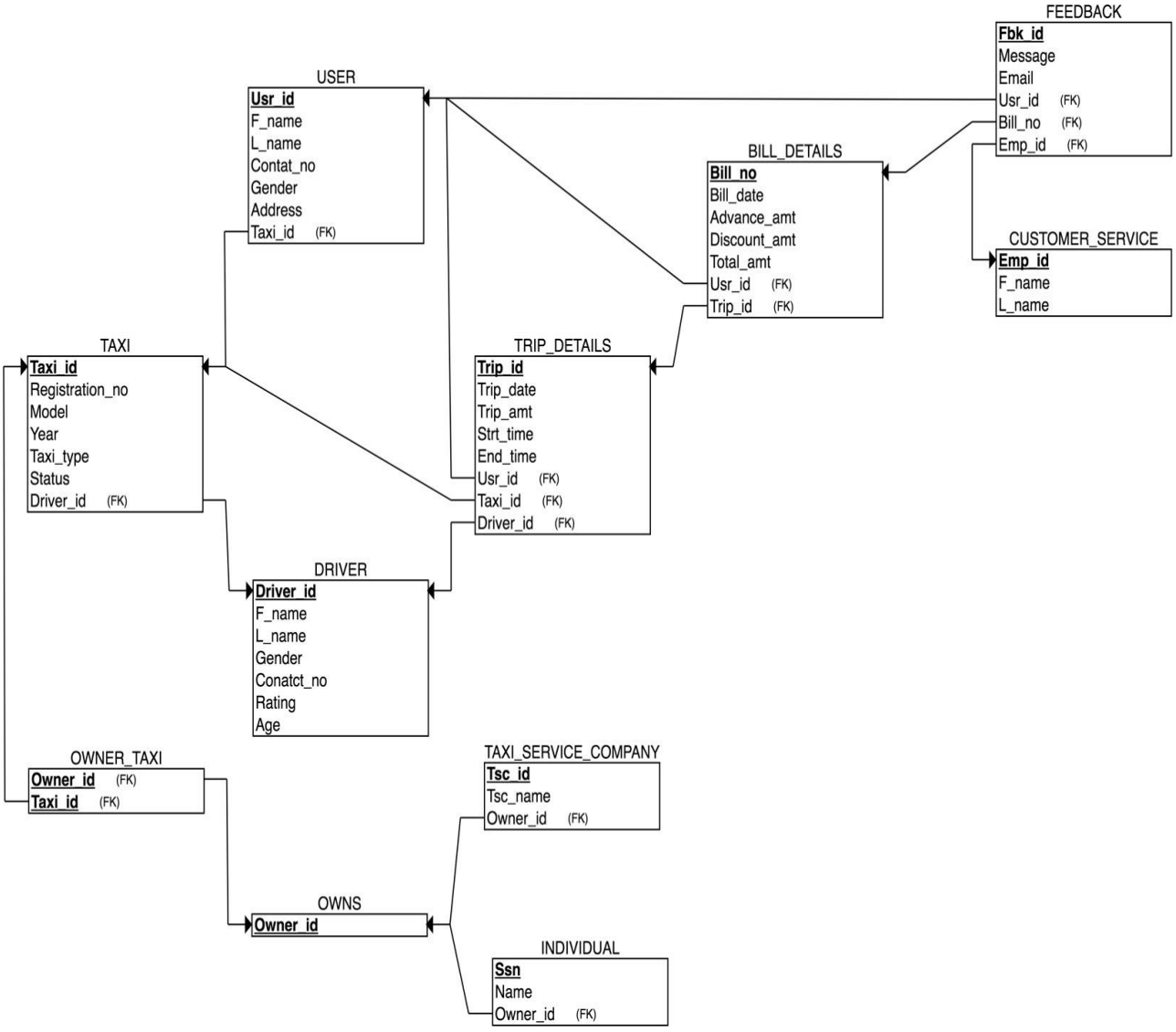


**Figure-2**

# Chapter 4: NORMALIZATION

TAXI

{Taxi_id → Registration_no, Taxi_Model, Taxi_Year, Taxi_type, Status}

USER

{Usr_id → F_name, L_name, Contat_no, Gender, Address, Taxi_id}

DRIVER

{Driver_id → F_name, L_name, Gender, Conatct_no, Rating, Age}

TRIP_DETAILS

{Trip_id → Trip_date, Trip_amt, Driver_id, Usr_id, Taxi_id, Strt_time, End_time}

BILL_DETAILS

{Bill_no → Bill_date, Advance_amt, Discount_amt, Total_amt, Usr_id, Trip_id}

CUSTOMER_SERVICE

{Emp_id → F_name, L_name}

FEEDBACK

{Fbk_id → Message, Email, Emp_id, Usr_id, Trip_id}

OWNER_TAXI

{Owner_id → Taxi_id}

OWNS

{Owner_id → No_Cars}

INDIVIDUAL

{Ssn → Name, Owner_id}

TAXI_SERVICE_COMPANY

{Tsc_id → Tsc_name, Owner_id}

# Chapter 5: SQL STATEMENTS

## 5.1 TABLE CREATION:

**1.**
```
CREATE TABLE TAXI (
   Taxi_id integer NOT NULL,
   Registration_no VARCHAR(20),
   Taxi_Model VARCHAR(20),
   Taxi_Year DATE,
   Taxi_type VARCHAR(20),
   Status VARCHAR(20),
   Driver_id integer,
   PRIMARY KEY (Taxi_id),
   UNIQUE (Registration_no)
);
```

**2.**
```
CREATE TABLE  USER_TBL (
   Usr_id integer NOT NULL,
   F_name VARCHAR(20),
   L_name VARCHAR(20),
   Contat_no integer,
   Gender VARCHAR(10),
   Address VARCHAR(50),
   Taxi_id integer,
   PRIMARY KEY (Usr_id)
);
```

```
3.CREATE TABLE   DRIVER (
   Driver_id integer NOT NULL,
   F_name VARCHAR(10),
   L_name VARCHAR(20),
   Gender VARCHAR(10),
   Conatct_no VARCHAR(20),
   Rating integer,
   Age integer,
   PRIMARY KEY (Driver_id)
);

4.CREATE TABLE  TRIP_DETAILS (
   Trip_id integer NOT NULL,
   Trip_date DATE,
   Trip_amt decimal(10,2),
   Driver_id integer,
   Usr_id integer,
   Taxi_id integer,
   Strt_time TIMESTAMP,
   End_time TIMESTAMP,
   PRIMARY KEY (Trip_id)

5.CREATE TABLE  CUSTOMER_SERVICE (
   Emp_id integer NOT NULL,
   F_name VARCHAR(20),
   L_name VARCHAR(20),
   PRIMARY KEY (Emp_id)
);
```

```
6.CREATE TABLE BILL_DETAILS (
   Bill_no integer NOT NULL,
   Bill_date DATE,
   Advance_amt decimal(10,2),
   Discount_amt decimal(10,2),
   Total_amt decimal(10,2),
   Usr_id integer,
   Trip_id integer,
   PRIMARY KEY (Bill_no),
   UNIQUE (Trip_id)
);


7.CREATE TABLE  FEEDBACK (
   Fbk_id integer NOT NULL,
   Message VARCHAR(140),
   Email VARCHAR(50),
   Emp_id integer,
   Usr_id integer,
   Trip_id integer,
   PRIMARY KEY (Fbk_id),
   UNIQUE (Emp_id)
);


8.CREATE TABLE  TAXI_SERVICE_COMPANY (
   Tsc_id integer NOT NULL,
   Tsc_name VARCHAR(20),
```

```
    Owner_id integer,
    PRIMARY KEY (Tsc_id)
```

## 5.2 VALUE INSERTION

```
INSERT INTO TAXI VALUES(1,'KA-15R-3367','BENZE
300','2017/01/01','SUV','Available',1);


INSERT INTO TAXI VALUES(2,'KA-15R-3387','BENZE
300','2017/02/15','SUV','Available',2);


INSERT INTO DRIVER
VALUES(1,'Abhi','Gowda','Male','4693805870',5,25);
INSERT INTO DRIVER
VALUES(2,'Abhi','Gowda','Male','4693805870',5,25);


INSERT INTO USER_TBL
VALUES(1,'kshitij','sharma','123456','Male','MCCAllum','1');
INSERT INTO USER_TBL
VALUES(2,'mahesh','katara','123456','Male','MCCAllum','2');


INSERT INTO TRIP_DETAILS VALUES(1,'2017/01/01',123,1,1,1,'2017-01-
01 06:14:00','2017-01-01 08:14:00');
INSERT INTO TRIP_DETAILS VALUES(2,'2017/02/15',123,1,1,1,'2017-02-
15 08:25:00','2017-02-15 09:18:00');


INSERT INTO BILL_DETAILS
VALUES(1,'2017/01/01',1000.10,20.11,null,1,1);
INSERT INTO BILL_DETAILS
VALUES(2,'2017/01/01',1000.10,20.11,null,2,2);


INSERT INTO CUSTOMER_SERVICE VALUES(1,'prashuk','ajmera');
INSERT INTO CUSTOMER_SERVICE VALUES(2,'abhi','gowda');


INSERT INTO FEEDBACK
VALUES(1,'good','prashuk.ajmera@gmail.com',1,1,1);


INSERT INTO FEEDBACK VALUES(2,'not so
good','abhi@gmail.com',2,1,1);


INSERT INTO OWNER_TAXI VALUES (1,1);
INSERT INTO OWNER_TAXI VALUES (2,2);


INSERT INTO TAXI_SERVICE_COMPANY VALUES (1,'OLA',2);
```

# Chapter 6 : RESULTS AND CONCLUSION

## 6.1 RESULTS AND OUTPUT

Taxi management system database is implemented using MySQL which is a Relational database and the output of various entities are hereby attached .

### 1.TAXI ENTITY

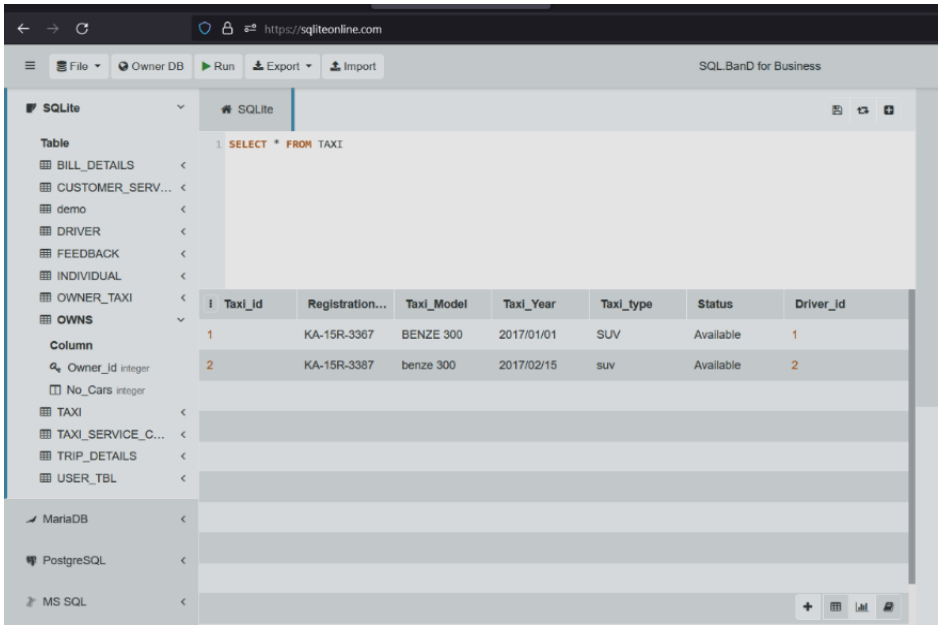


**FIGURE 3**

### 2.USER_TBL

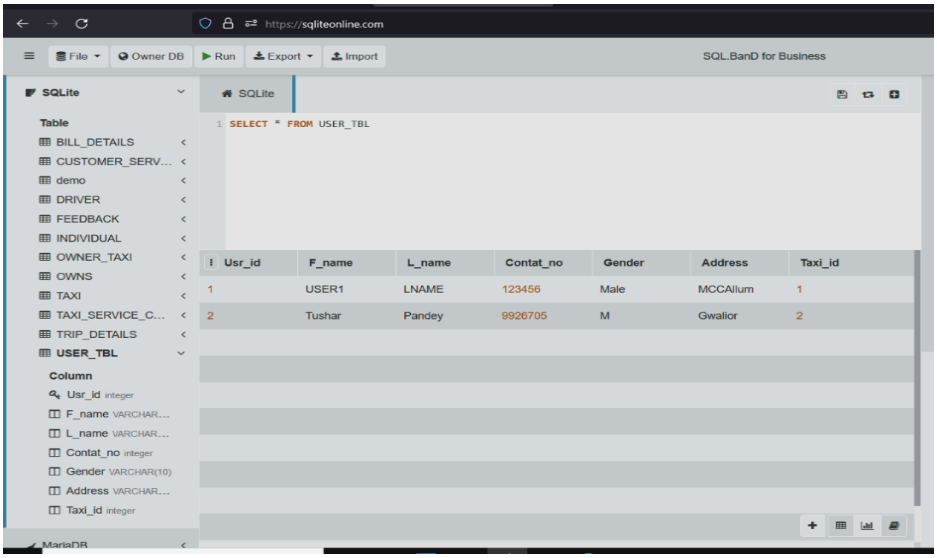


**FIGURE 4**

### 3.BILL DETAILS

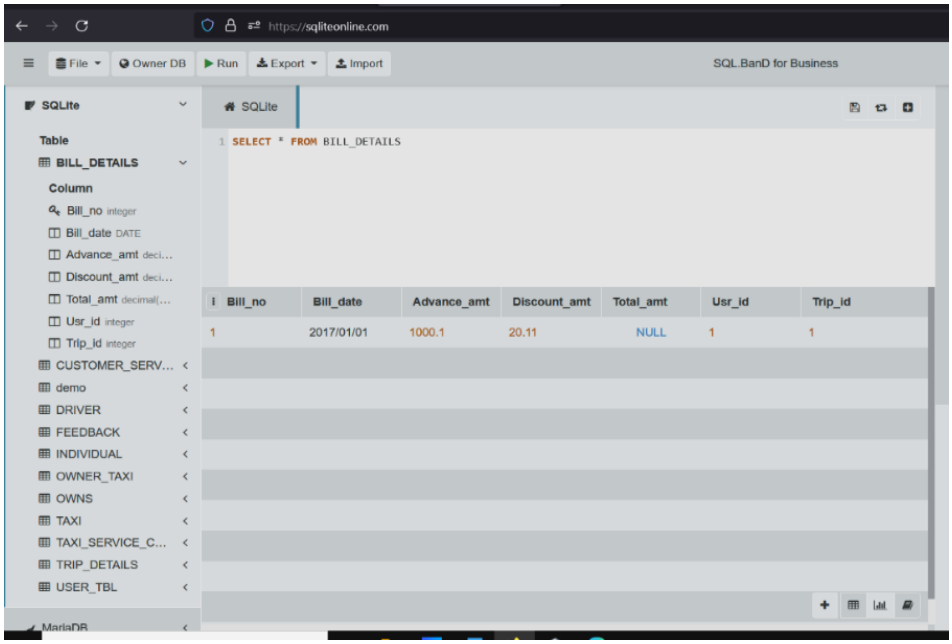


**FIGURE 5**

### 6. FEEDBACK

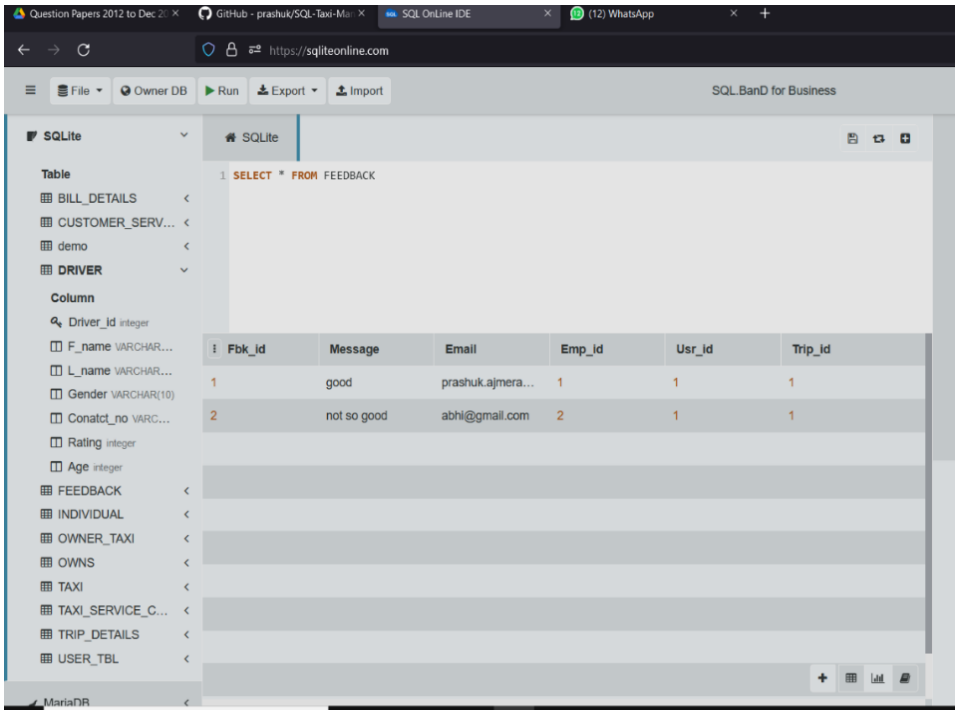


**FIGURE 6**

Thus, in this way the customer can get the details of taxi , the charges And get the automatically generated bill, further he can also give feedback to the driver and the ride with a message or the rating out of 5 star.

## 6.2 CONCLUSION

Car rental business has emerged with a new goodies compared to the past experience where every activity concerning car rental business is limited to a physical location only. Even though the physical location has not been totally eradicated; the nature of functions and how these functions are achieved has been reshaped by the power of internet. Nowadays, customers can reserve cars online, rent car online, and have the car brought to their door step once the customer is a registered member or go to the office to pick the car. The web based car rental system has offered an advantage to both customers as well as Car Rental Company to efficiently and effectively manage the business and satisfies customers' need at the click of a button.Of course, it is essential to insert, modify and query the above data. In addition ,the system can use the real time data for billing and booking taxi.

# REFERENCES:

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