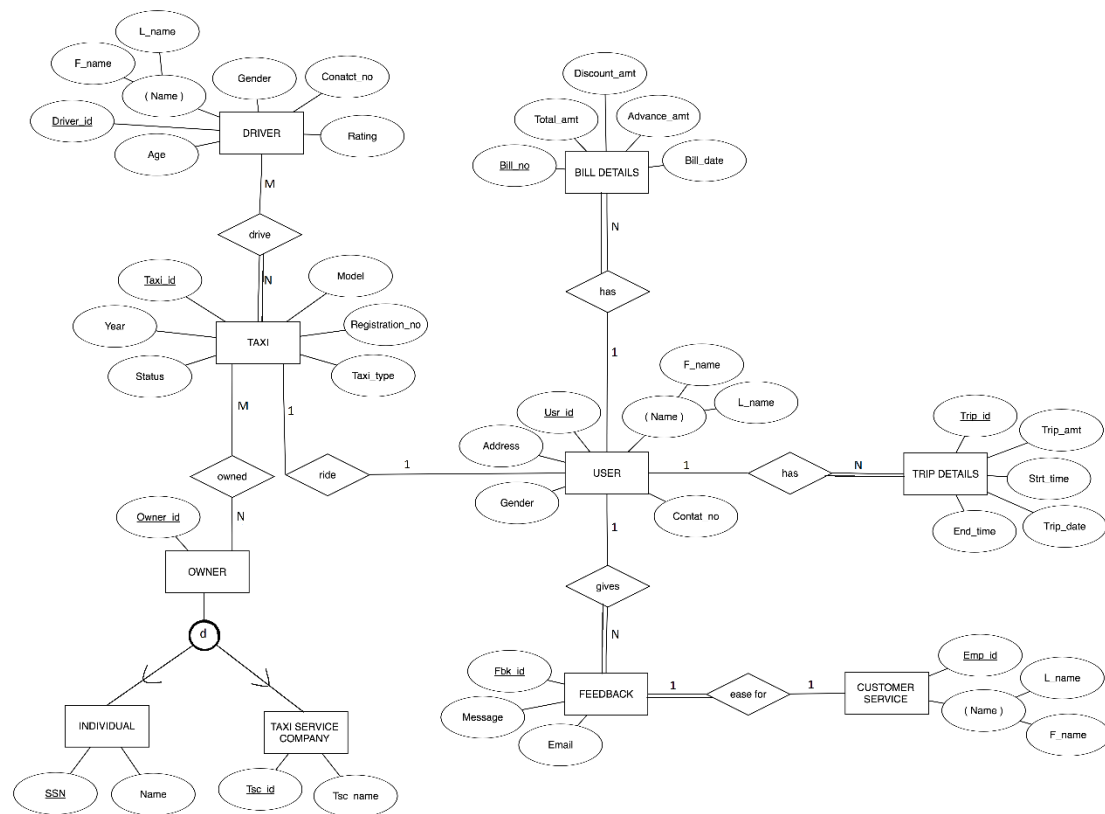# Taxi Management System Database

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ID : 211004273

Overview

This documentation provides a detailed description of the database schema for a taxi management system. The schema includes tables for managing taxis, users, drivers, trips, billing, feedback, ownership, and customer service.

ER Diagram :

L_name
F_name
(Name)
Gender
Conatct_no
Driver_id
DRIVER
Rating
Age

M

drive

N

Taxi_id
Model
Year
TAXI
Registration_no
Status
Taxi_type

M   1

owned   ride

Owner_id   N

OWNER

d

INDIVIDUAL   TAXI SERVICE COMPANY

SSN   Name   Tsc_id   Tsc_name

Discount_amt
Total_amt   Advance_amt
Bill_no   BILL DETAILS   Bill_date

N

has

1

F_name
Usr_id   (Name)   L_name
Address
USER   1   has   N   TRIP DETAILS
Gender   Contat_no

Trip_id   Trip_amt
Strt_time
End_time   Trip_date

1

gives

N

Fbk_id
FEEDBACK   1   ease for   1   CUSTOMER SERVICE
Message
Email

Emp_id   L_name
(Name)
F_name

ASSUMPTIONS:
• Many drivers can drive many taxis (M:N)
• Many owners can give many taxis at a time (M:N)
• One customer service representative can take one feedback at a time (1:1)
• Single user can have multiple trips details (1:N)
• Single user can have multiple bills details (1:N)
• Single user can give many feedbacks (1:N)
• Single user can ride in one taxi at a time (1:1)

TAXI

Taxi_id	Registration_no	Taxi_Model	Taxi_Year	Taxi_type	Status	Driver_id

- Primary Key: Taxi_id
- Foreign Keys: Driver_id

USER_TBL

Usr_id	F_name	L_name	Contat_no	Gender	Address	Taxi_id

- Primary Key: Usr_id
- Foreign Keys: Taxi_id

DRIVER

Driver_id	F_name	L_name	Gender	Conatct_no	Rating	Age

- Primary Key: Driver_id
- Foreign Keys: NA

TRIP_DETAILS

Trip_id	Trip_date	Trip_amt	Driver_id	Usr_id

Taxi_id	Strt_time	End_time

- Primary Key: Trip_id
- Foreign Keys: Taxi_id, Usr_id, Driver_id

BILL_DETAILS

Bill_no	Bill_date	Advance_amt	Discount_amt	Total_amt	Usr_id	Trip_id

- Primary Key: Bill_no
- Foreign Keys: Usr_id, Trip_id

CUSTOMER_SERVICE

Emp_id	F_name	L_name

- Primary Key: Emp_id
- Foreign Keys: NA

FEEDBACK

Fbk_id	Message	Email	Emp_id	Usr_id	Trip_id

- Primary Key: Fbk_id
- Foreign Keys: Usr_id, Emp_id, Trip_id

OWNER_TAXI

Owner_id	Taxi_id

- Primary Key: Owner_id, Taxi_id
- Foreign Keys: Owner_id, Taxi_id

OWNS

Owner_id	No_Cars

- Primary Key: Owner_id
- Foreign Keys: NA

INDIVIDUAL

Ssn	Name	Owner_id

- Primary Key: Ssn
- Foreign Keys: Owner_id

TAXI_SERVICE_COMPANY

Tsc_id	Tsc_name	Owner_id

- Primary Key: Tsc_id
- Foreign Keys: Owner_id

SQL Queries

1. Table Creation

```
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)
);
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)
          );
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)
);
CREATE TABLE TRIP_DETAILS (
```
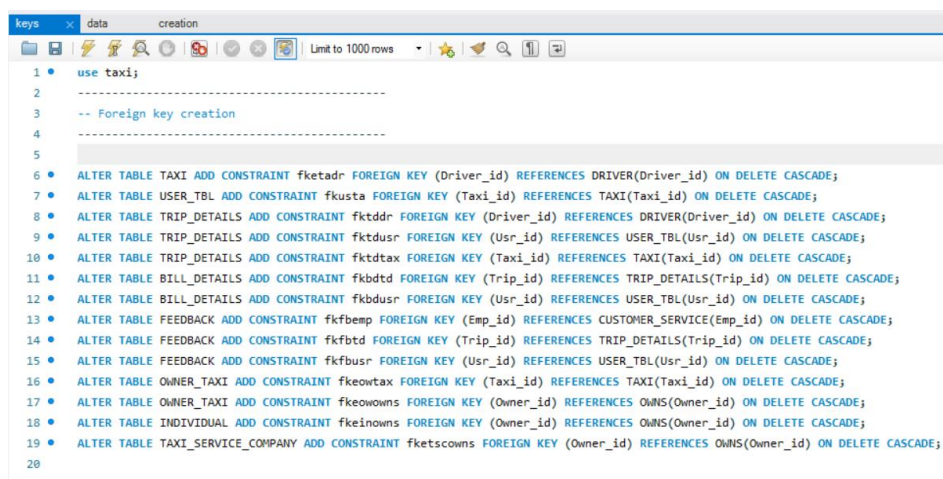
```
Trip_id integer NOT NULL,
Trip_date DATE,
Trip_amt decimal(10,2),
Driver_id integer,
Usr_id integer,
Taxi_id integer,
Strt_time TIMESTAMP,
End_time TIMESTAMP,
PRIMARY KEY (Trip_id)
);
TAXI SERVICE SYSTEM
8
CREATE TABLE BILL_DETAILS (
Bill_no integer NOT NULL,
Bill_date DATE,
Advance_amt decimal(10,2),
Discount_amt decimal(10,2),
Total_amt decimal(10,2),
Usr_id integer,
Trip_id integer,
PRIMARY KEY (Bill_no),
);
CREATE TABLE CUSTOMER_SERVICE (
Emp_id integer NOT NULL,
F_name VARCHAR(20),
L_name VARCHAR(20),
PRIMARY KEY (Emp_id)
);
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),
);
CREATE TABLE OWNS (
Owner_id integer NOT NULL,
No_Cars integer,
PRIMARY KEY (Owner_id)
);
CREATE TABLE OWNER_TAXI (
Owner_id integer NOT NULL,
Taxi_id integer,
PRIMARY KEY (Owner_id, Taxi_id)
);
CREATE TABLE INDIVIDUAL (
Ssn integer NOT NULL,
Name VARCHAR(20),
Owner_id integer,
PRIMARY KEY (Ssn) );

CREATE TABLE TAXI_SERVICE_COMPANY (
Tsc_id integer NOT NULL,
Tsc_name VARCHAR(20),
Owner_id integer,
PRIMARY KEY (Tsc_id)
);
```

2.Forign Key Creation

Screenshots of Resulting Tables & Queries

Employee

Emp_id	F_name	L_name
1	prashuk	ajmera
6	Steven	Davis
7	Olivia	Wilson
8	David	Taylor
9	Andrew	Brown
10	Isabella	Anderson
11	Matthew	Thomas
12	Sophia	Martinez
13	William	Harris
14	Amelia	Clark
15	Ethan	Jackson
16	Madison	White
17	Emma	Lewis
18	Alexander	Lee
19	Mia	Garcia
20	Joseph	Rodriguez
NULL	NULL	NULL

Driver

Driver_id	F_name	L_name	Gender	Conatct_no	Rating	Age
1	Abhi	Gowda	Male	4693805870	5	25
2	John	Doe	Male	1234567890	4	30
3	Emma	Johnson	Female	1234567890	4	28
4	Daniel	Smith	Male	1234567890	5	35
5	Sophia	Williams	Female	1234567890	4	32
6	Michael	Brown	Male	1234567890	4	30
7	William	Wilson	Male	1234567890	5	35
8	Elizabeth	Taylor	Female	1234567890	4	32
9	David	Martinez	Male	1234567890	4	28
10	Jennifer	Anderson	Female	1234567890	5	29
11	Christ	Thomas	Male	1234567890	5	34
12	Linda	White	Female	1234567890	4	31
13	Matthew	Clark	Male	1234567890	4	27
14	Karen	Jackson	Female	1234567890	5	33
15	Joshua	Harris	Male	1234567890	5	30
16	Susan	Martin	Female	1234567890	4	29
17	Kevin	Thompson	Male	1234567890	4	26
18	Amanda	Lewis	Female	1234567890	5	32
19	Ryan	Lee	Male	1234567890	5	31
20	Patricia	Walker	Female	1234567890	4	28
NULL	NULL	NULL	NULL	NULL	NULL	NULL

User

Usr_id	F_name	L_name	Contat_no	Gender	Address	Taxi_id
1	USER1	LNAME	123456	Male	MCCAllum	1
2	John	Doe	123456789	Male	123 Main St	2
3	Emma	Johnson	123456789	Female	123 Elm St	3
4	Daniel	Smith	123456789	Male	123 Oak St	4
5	Sophia	Williams	123456789	Female	123 Pine St	5
6	James	Wilson	123456789	Male	123 Maple St	6
7	Mary	Anderson	123456789	Female	123 Oak St	7
8	Robert	Taylor	123456789	Male	123 Pine St	8
9	Barbara	Thomas	123456789	Female	123 Elm St	9
10	Michael	Jackson	123456789	Male	123 Cedar St	10
11	Linda	Harris	123456789	Female	123 Birch St	11
12	David	Young	123456789	Male	123 Walnut St	12
13	Susan	Clark	123456789	Female	123 Willow St	13
14	William	Lewis	123456789	Male	123 Hickory St	14
15	Karen	Lee	123456789	Female	123 Ash St	15
16	Jessica	Walker	123456789	Female	123 Chestn...	16
17	Richard	Martin	123456789	Male	123 Spruce St	17
18	Ashley	Thompson	123456789	Female	123 Juniper St	18
19	John	Garcia	123456789	Male	123 Laurel St	19
20	Deborah	Rodriguez	123456789	Female	123 Magnoli...	20
NULL	NULL	NULL	NULL	NULL	NULL	NULL

Taxi

Taxi_id	Registration_no	Taxi_Model	Taxi_Year	Taxi_type	Status	Driver_id
1	KA-15R-3367	BENZE 300	2017-01-01	SUV	Unavailable	1
2	KA-16R-3367	Toyota Camry	2018-01-01	Sedan	Available	2
3	KA-17R-3367	Honda Civic	2019-02-01	Sedan	Available	3
4	KA-18R-3367	Chevrolet Malibu	2020-03-01	Sedan	Available	4
5	KA-19R-3367	Ford Focus	2021-04-01	Sedan	Available	5
6	KA-19R-8217	Mercedes G500	2024-04-01	SUV	Available	5
7	KA-20R-8217	Audi A6	2024-05-01	Sedan	Available	4
8	KA-21R-8217	BMW X5	2024-06-01	SUV	Available	3
9	KA-22R-8217	Lexus RX350	2024-07-01	SUV	Available	2
10	KA-23R-8217	Toyota Prius	2024-08-01	Hatchback	Available	1
11	KA-24R-8217	Ford Mustang	2024-09-01	Coupe	Available	5
12	KA-25R-8217	Chevrolet Tahoe	2024-10-01	SUV	Available	4
13	KA-26R-8217	Hyundai Elantra	2024-11-01	Sedan	Available	3
14	KA-27R-8217	Honda Accord	2024-12-01	Sedan	Available	2
15	KA-28R-8217	Nissan Altima	2025-01-01	Sedan	Available	1
16	KA-29R-8217	Mazda CX-5	2025-02-01	SUV	Available	5
17	KA-30R-8217	Kia Optima	2025-03-01	Sedan	Available	4
18	KA-31R-8217	Volkswagen Jetta	2025-04-01	Sedan	Available	3
19	KA-32R-8217	Subaru Outback	2025-05-01	SUV	Available	2
20	KA-33R-8217	Tesla Model 3	2025-06-01	Electric	Available	1
NULL	NULL	NULL	NULL	NULL	NULL	NULL

Trip

Trip_id	Trip_date	Trip_amt	Driver_id	Usr_id	Taxi_id	Strt_time	End_time
1	2017-01-01	123.00	1	1	1	2017-01-01 06:14:00	2017-01-01 08:14:00
2	2018-01-01	150.00	2	2	2	2018-01-01 10:00:00	2018-01-01 12:00:00
3	2019-02-01	200.00	3	3	3	2019-02-01 12:00:00	2019-02-01 14:00:00
4	2020-03-01	180.00	4	4	4	2020-03-01 14:00:00	2020-03-01 16:00:00
5	2021-04-01	160.00	5	5	5	2021-04-01 16:00:00	2021-04-01 18:00:00
6	2024-07-01	200.00	6	6	6	2024-07-01 08:00:00	2024-07-01 10:00:00
7	2024-08-01	150.00	7	7	7	2024-08-01 10:00:00	2024-08-01 12:00:00
8	2024-09-01	180.00	8	8	8	2024-09-01 12:00:00	2024-09-01 14:00:00
9	2024-10-01	220.00	9	9	9	2024-10-01 14:00:00	2024-10-01 16:00:00
10	2024-11-01	190.00	10	10	10	2024-11-01 16:00:00	2024-11-01 18:00:00
11	2024-12-01	160.00	11	11	11	2024-12-01 18:00:00	2024-12-01 20:00:00
12	2025-01-01	210.00	12	12	12	2025-01-01 08:00:00	2025-01-01 10:00:00
13	2025-02-01	175.00	13	13	13	2025-02-01 10:00:00	2025-02-01 12:00:00
14	2025-03-01	185.00	14	14	14	2025-03-01 12:00:00	2025-03-01 14:00:00
15	2025-04-01	230.00	15	15	15	2025-04-01 14:00:00	2025-04-01 16:00:00
16	2025-05-01	170.00	16	16	16	2025-05-01 16:00:00	2025-05-01 18:00:00
17	2025-06-01	240.00	17	17	17	2025-06-01 18:00:00	2025-06-01 20:00:00
18	2025-07-01	200.00	18	18	18	2025-07-01 08:00:00	2025-07-01 10:00:00
19	2025-08-01	155.00	19	19	19	2025-08-01 10:00:00	2025-08-01 12:00:00
20	2025-09-01	195.00	20	20	20	2025-09-01 12:00:00	2025-09-01 14:00:00
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Feedback
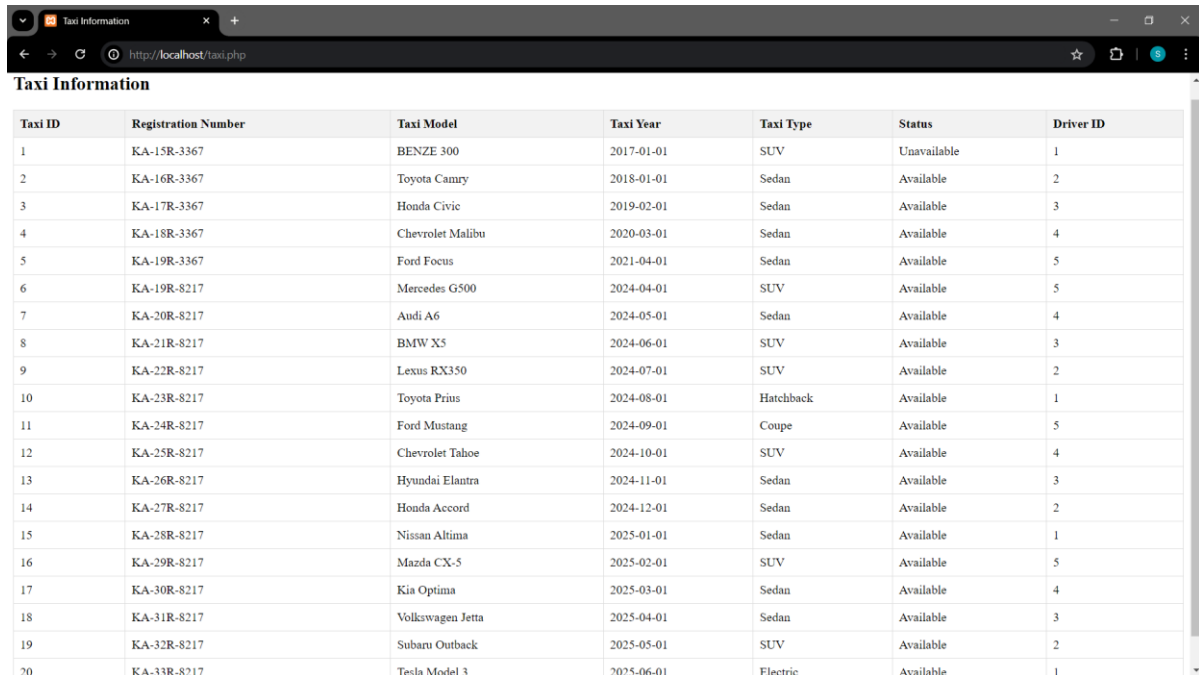
Fbk_id	Message	Email	Emp_id	Usr_id	Trip_id
1	Good service!	user1@example.com	1	1	1
2	Could be better.	user2@example.com	NULL	2	2
3	Excellent experience!	user3@example.com	NULL	3	3
4	Satisfactory.	user4@example.com	NULL	2	2
5	Smooth ride, thank you!	user5@example.com	NULL	5	5
6	Great service!	steven@example.com	6	6	6
7	Driver was friendly.	olivia@example.com	7	7	7
8	Smooth ride, thank you!	david@example.com	8	8	8
9	Excellent driver!	andrew@example.com	9	9	9
10	Fantastic experience!	isabella@example.com	10	10	10
11	Pleasant journey.	matthew@example.com	11	11	11
12	Driver was professional.	sophia@example.com	12	12	12
13	Highly recommended!	william@example.com	13	13	13
14	Driver arrived on time.	amelia@example.com	14	14	14
15	Great communication.	ethan@example.com	15	15	15
16	Smooth transaction.	madison@example.com	16	16	16
17	Friendly service.	emma@example.com	17	17	17
18	Quick response.	alexander@example....	18	18	18
19	Efficient service.	mia@example.com	19	19	19
20	Driver was courteous.	joseph@example.com	20	20	20
NULL	NULL	NULL	NULL	NULL	NULL

Owner - Taxi

Owner_id	Taxi_id
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
NULL	NULL
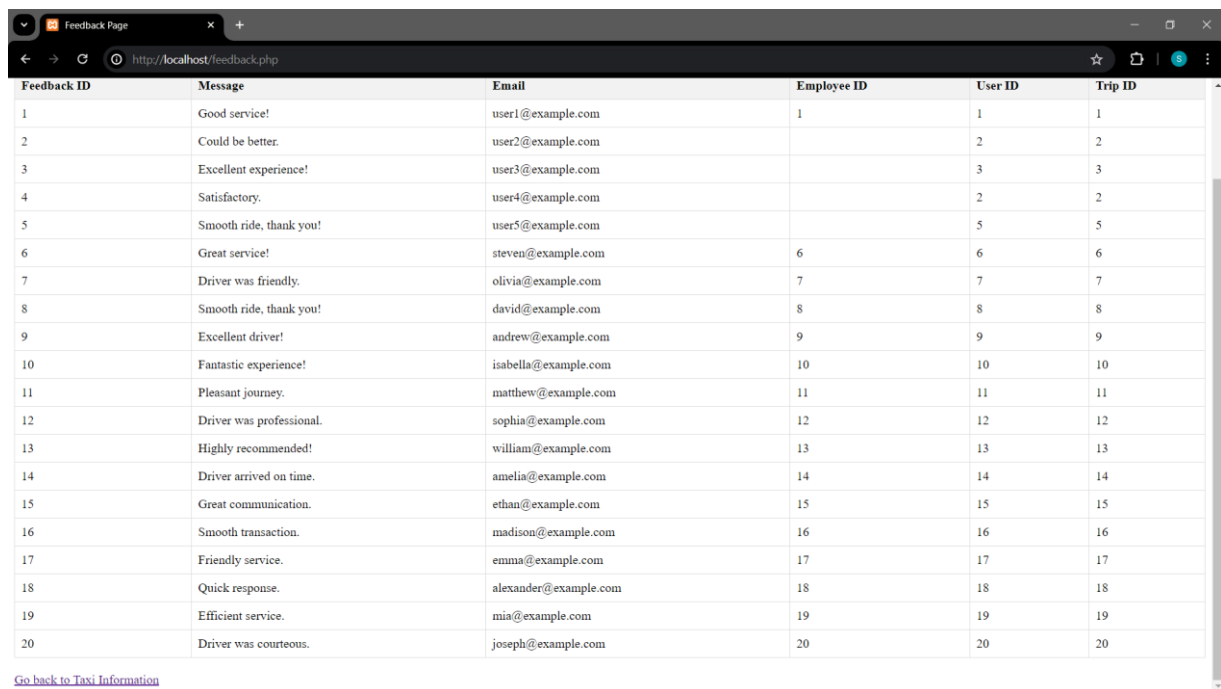
Owner - No_Cars

Owner_id	No_Cars
6	5
7	6
8	7
9	8
10	9
11	10
12	11
13	12
14	13
15	14
16	15
17	16
18	17
19	18
20	19
NULL	NULL

Webpage using APACH + PHP

The webpage shows the taxi information and you can go to the feedback page through it

Taxi Information

Taxi ID	Registration Number	Taxi Model	Taxi Year	Taxi Type	Status	Driver ID
1	KA-15R-3367	BENZE 300	2017-01-01	SUV	Unavailable	1
2	KA-16R-3367	Toyota Camry	2018-01-01	Sedan	Available	2
3	KA-17R-3367	Honda Civic	2019-02-01	Sedan	Available	3
4	KA-18R-3367	Chevrolet Malibu	2020-03-01	Sedan	Available	4
5	KA-19R-3367	Ford Focus	2021-04-01	Sedan	Available	5
6	KA-19R-8217	Mercedes G500	2024-04-01	SUV	Available	5
7	KA-20R-8217	Audi A6	2024-05-01	Sedan	Available	4
8	KA-21R-8217	BMW X5	2024-06-01	SUV	Available	3
9	KA-22R-8217	Lexus RX350	2024-07-01	SUV	Available	2
10	KA-23R-8217	Toyota Prius	2024-08-01	Hatchback	Available	1
11	KA-24R-8217	Ford Mustang	2024-09-01	Coupe	Available	5
12	KA-25R-8217	Chevrolet Tahoe	2024-10-01	SUV	Available	4
13	KA-26R-8217	Hyundai Elantra	2024-11-01	Sedan	Available	3
14	KA-27R-8217	Honda Accord	2024-12-01	Sedan	Available	2
15	KA-28R-8217	Nissan Altima	2025-01-01	Sedan	Available	1
16	KA-29R-8217	Mazda CX-5	2025-02-01	SUV	Available	5
17	KA-30R-8217	Kia Optima	2025-03-01	Sedan	Available	4
18	KA-31R-8217	Volkswagen Jetta	2025-04-01	Sedan	Available	3
19	KA-32R-8217	Subaru Outback	2025-05-01	SUV	Available	2
20	KA-33R-8217	Tesla Model 3	2025-06-01	Electric	Available	1

Feedback ID	Message	Email	Employee ID	User ID	Trip ID
1	Good service!	user1@example.com	1	1	1
2	Could be better.	user2@example.com		2	2
3	Excellent experience!	user3@example.com		3	3
4	Satisfactory.	user4@example.com		2	2
5	Smooth ride, thank you!	user5@example.com		5	5
6	Great service!	steven@example.com	6	6	6
7	Driver was friendly.	olivia@example.com	7	7	7
8	Smooth ride, thank you!	david@example.com	8	8	8
9	Excellent driver!	andrew@example.com	9	9	9
10	Fantastic experience!	isabella@example.com	10	10	10
11	Pleasant journey.	matthew@example.com	11	11	11
12	Driver was professional.	sophia@example.com	12	12	12
13	Highly recommended!	william@example.com	13	13	13
14	Driver arrived on time.	amelia@example.com	14	14	14
15	Great communication.	ethan@example.com	15	15	15
16	Smooth transaction.	madison@example.com	16	16	16
17	Friendly service.	emma@example.com	17	17	17
18	Quick response.	alexander@example.com	18	18	18
19	Efficient service.	mia@example.com	19	19	19
20	Driver was courteous.	joseph@example.com	20	20	20

Go back to Taxi Information