



PES University, Bengaluru

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Department of Computer Science & Engineering
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UE19CS353 – Object Oriented Analysis and Design with Java
Theory ISA (Mini Project)

Report on
SKYWAY CABS

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6th Semester 'E'

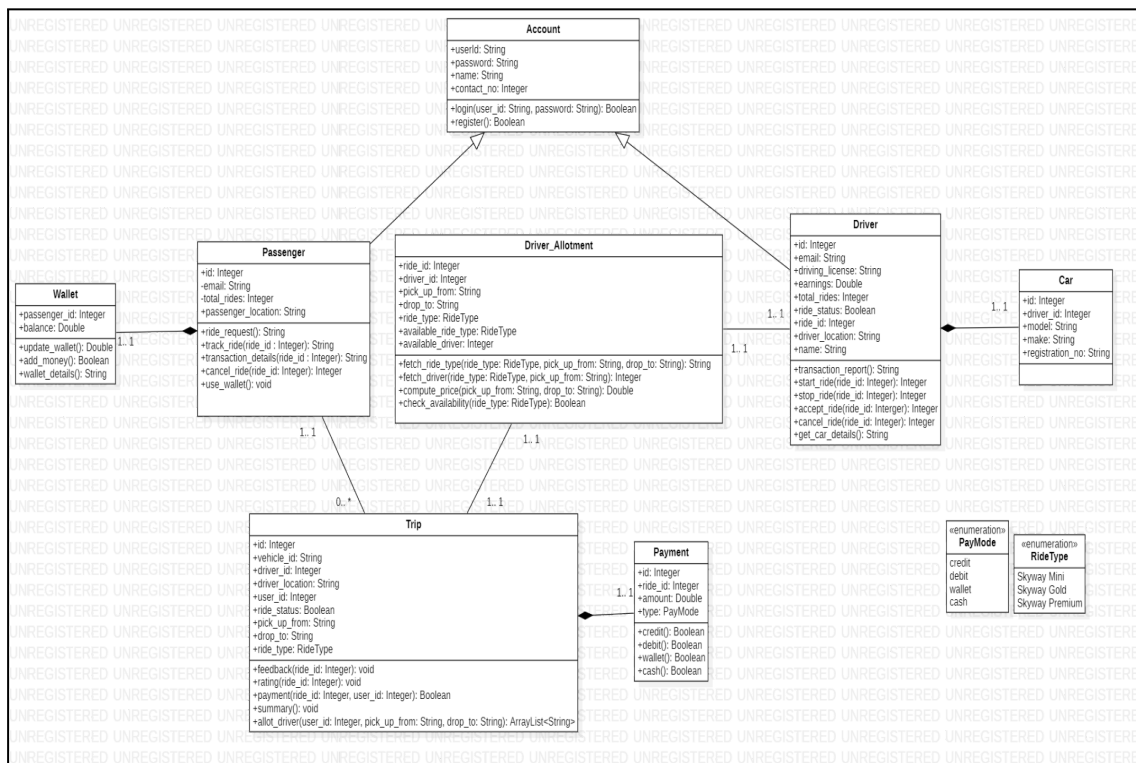
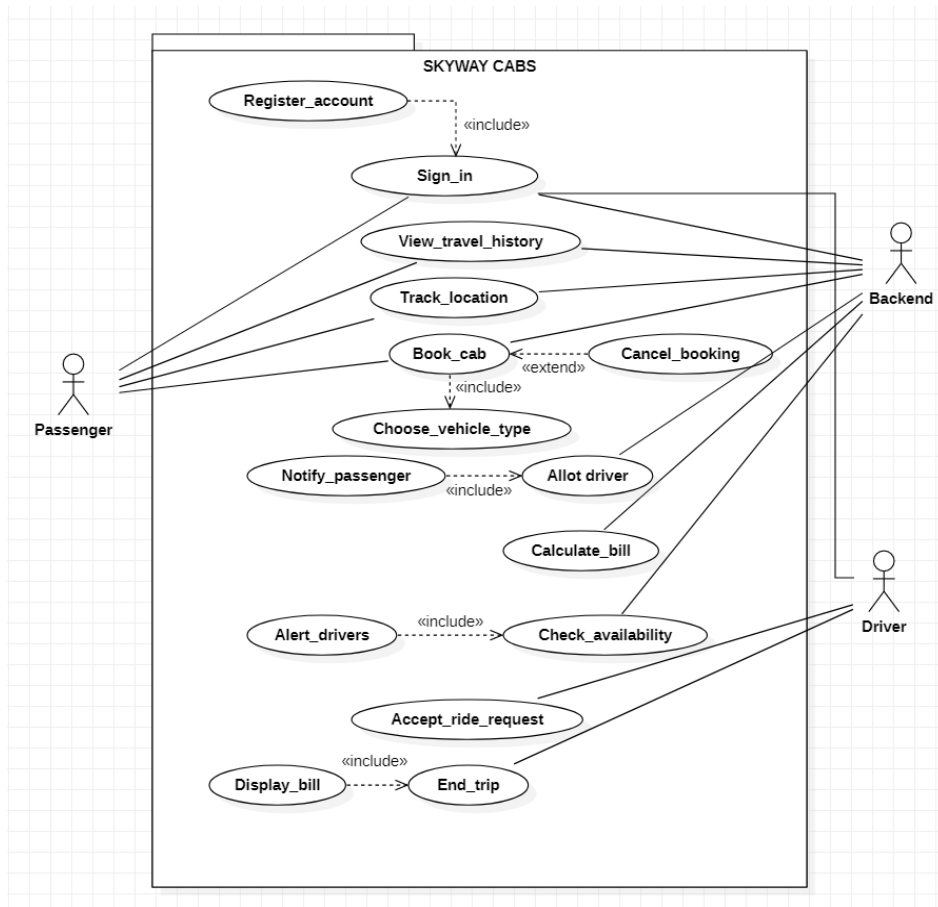
1. Project Description

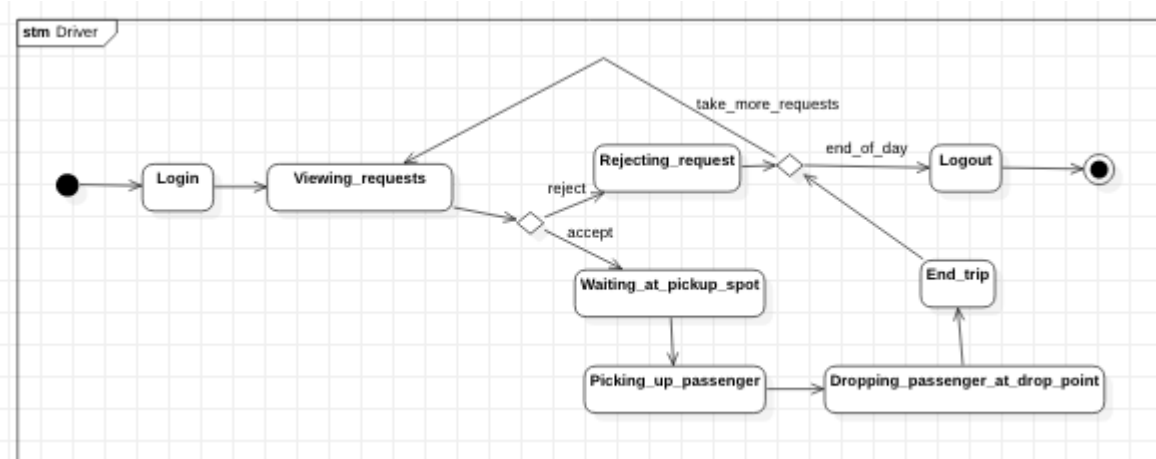
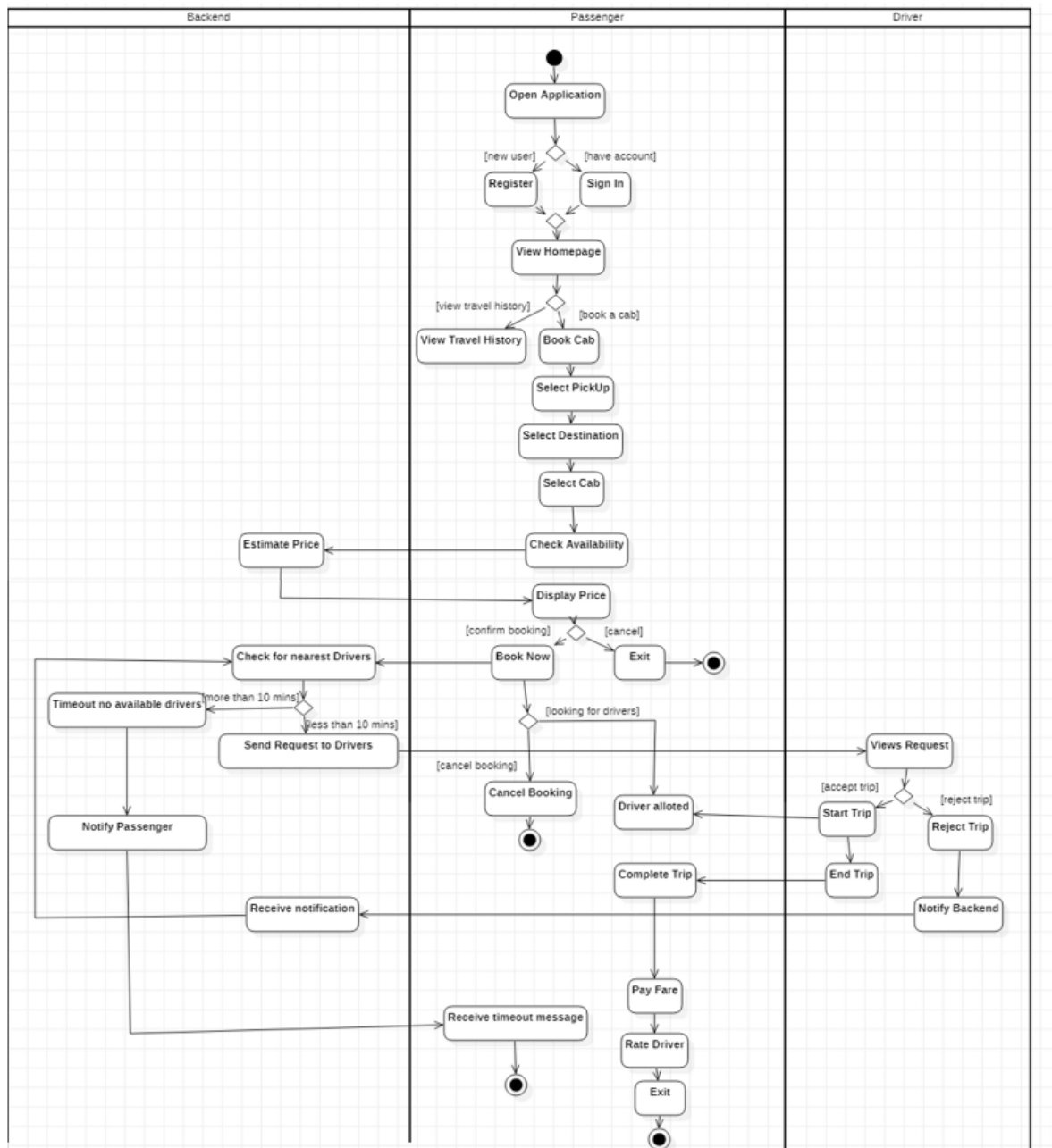
- A. Create a new user account by providing information such as a user name, a user id (which is unique across the system), a phone number, and an email address.
- B. An existing customer should use their user id and password to access the system.
- C. A customer books a cab by providing information such as pick-up and drop-off locations.
- D. Following the customer's request for a cab, the nearest cab driver will be assigned to him/her, and the customer will be given a booking confirmation that includes the driver's name, phone number, and rating.
- E. The customer will also see an estimate of the fare and the projected length of the trip.
- F. If more than one driver is matched with a customer, the customer will be allocated to the driver with the highest rating.
- G. If no drivers are available, the customer will receive a request timed out notice. Soon after, a driver from another location, the one with the most available drivers, will be assigned to the customer.

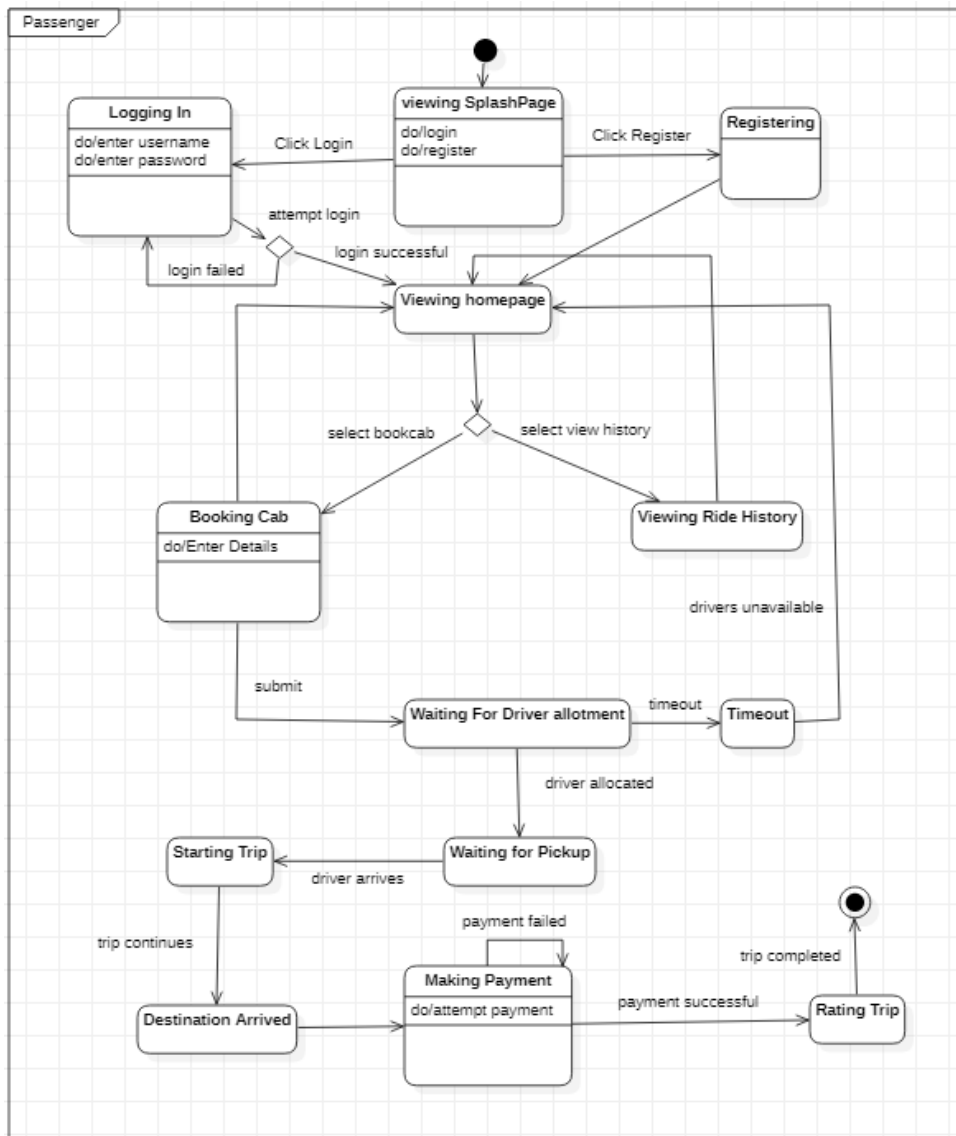
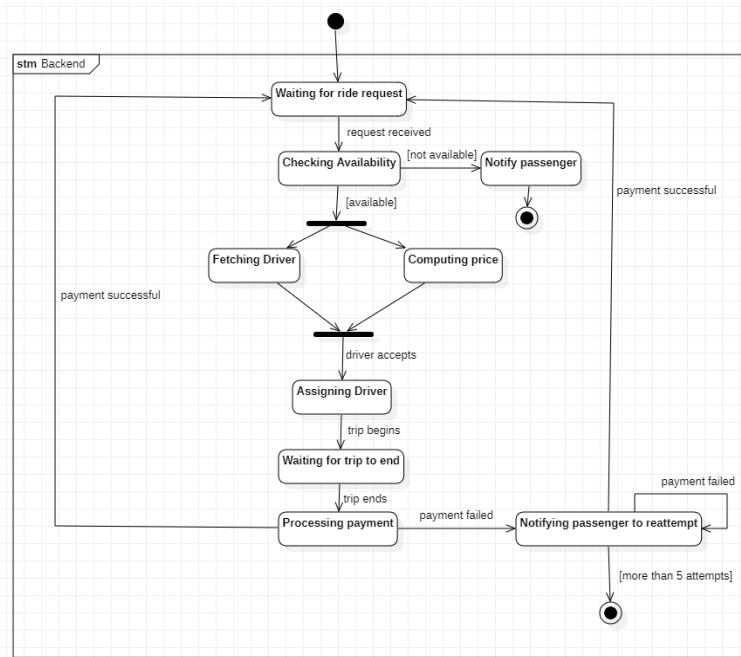
a. Link to Github repository

[Github Link](#)

2. Analysis and Design Models







3. Tools and Frameworks Used

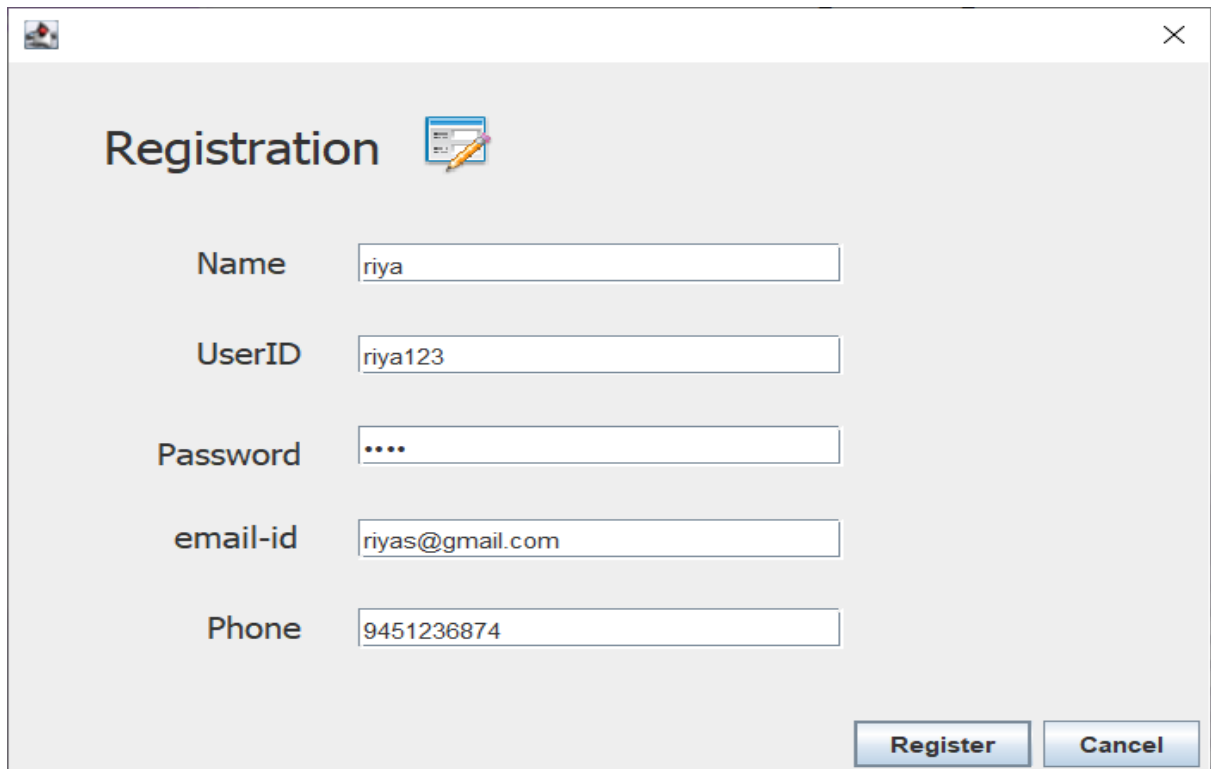
- MVC framework
- Java Swing UI
- MySQL database

4. Design Principles and Design Patterns Applied

- Builder design pattern

5. Application Screenshots

User Registration Window



A screenshot of a Java Swing window titled "Registration". The window has a standard title bar with a close button (X) in the top right corner. The main content area has a light gray background. At the top left, the word "Registration" is displayed in a large, bold, black font, followed by a small icon of a document with a pencil. Below this, there are five labeled text input fields arranged vertically: "Name" with the value "riya", "UserID" with the value "riya123", "Password" with masked characters "....", "email-id" with the value "riyas@gmail.com", and "Phone" with the value "9451236874". At the bottom right of the window, there are two buttons: "Register" and "Cancel", both with blue backgrounds and white text.

Field	Value
Name	riya
UserID	riya123
Password
email-id	riyas@gmail.com
Phone	9451236874


Login Window


Skyway Cabs

skyway

Welcome to Skyway Cabs

Sign...

 **UserID**


 **Password**

LOGIN

New User? Register here

Booking Portal showing the estimated fare and time


Skyway Cabs

Book a Ride 

Pickup :

Destination :

My Wallet

Trip Details 

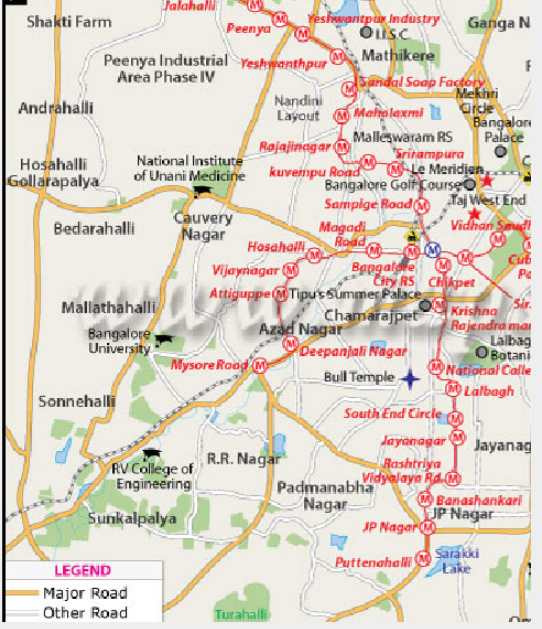
Distance: 10.0 Km

Estimated Time: 30.0 min

Estimated Fare: Rs. 200.0

Confirm Booking


Cancel



Allocated driver details after booking confirmation/completing ride

Skyway Cabs

Driver Details



Name :

Lilly

Vehicle ID :

KA12HS532

Phone No. :

9478652135

Rating :

4.5

Thanks For Riding with us!!!

Please Select Driver Rati...

4


▼

OK

User wallet

Skyway Cabs

My Wallet



Wallet Balanc...

580

Select Amoun...

100

▼

Add Money

MySQL Database information

```
MySQL 8.0 Command Line Client - Unicode
mysql> select * from cabbooking.user;
```

userid	name	password	emailid	wallet	phone	riding
nan	nan	nan	nan@gmail.com	2160	9591492178	Yes
van	Van	van	van@gmail.com	780	9591492178	No
anna1	anna	anna	anna@gmail.com	1100	9876543218	No
michelle1	michelle	abcd	michelle@gmail.com	3060	9548763214	No
kate1	Kate	kate	kate@gmai.com	0	9547812364	No

5 rows in set (0.00 sec)

```
mysql> select * from cabbooking.driver;
```

name	rating	tripcount	vehicleno	presentloc	phone	availability
Ram	4.10	20	KA19EC289	Whitefield	9125863144	Yes
Maria	3.28	18	KA05MN271	Nagarbhavi	9125863234	Yes
Shona	4.00	5	KA02HH2215	Jaynagar	9641235874	Yes
Alex	4.31	7	KA03LM2416	Jp Nagar	9641568743	No
Jonas	4.44	9	KA02LM4132	Jaynagar	9641235874	No
Lilly	4.50	20	KA12HS532	Hebba1	9478652135	Yes
Mani	4.26	17	KA03MN541	Banashankari	7854123694	Yes
Anil	4.09	13	KA02BN623	Jp Nagar	8213654971	Yes

8 rows in set (0.00 sec)

```
mysql> select * from cabbooking.city;
```

name	X	Y	drivercount
Jp Nagar	12.90694051078213	77.58706376677813	1
Hebba1	13.03562538103262	77.59843064974984	1
Nagarbhavi	12.97204828919929	77.51402410733105	1
Jaynagar	12.93029922452940	77.58406492464017	1
Whitefield	12.97042184051593	77.75060876325038	1
Banashankari	12.92618263509378	77.54674870039150	1

6. Team member contributions

NAME	WORK DONE
Michelle Mary Varghese	User : Involves login, database updation based on user interactions User wallet : Updation of user wallet status Login : User login and validating password Registration : New user registration
Nandana C	Booking portal : Booking a cab, cover all edge cases for booking cancellation

	Driver : Builder for driver object construction Driver allotment : Allot and cancel drivers accordingly
Neha Arun Angadi	SQL connector : Database connection, access database Action listeners and database updation accordingly Trip : Cab ride trip calculation