

Data Flow Diagram (DFD) - of Cab Booking System.

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2K22/CO/133

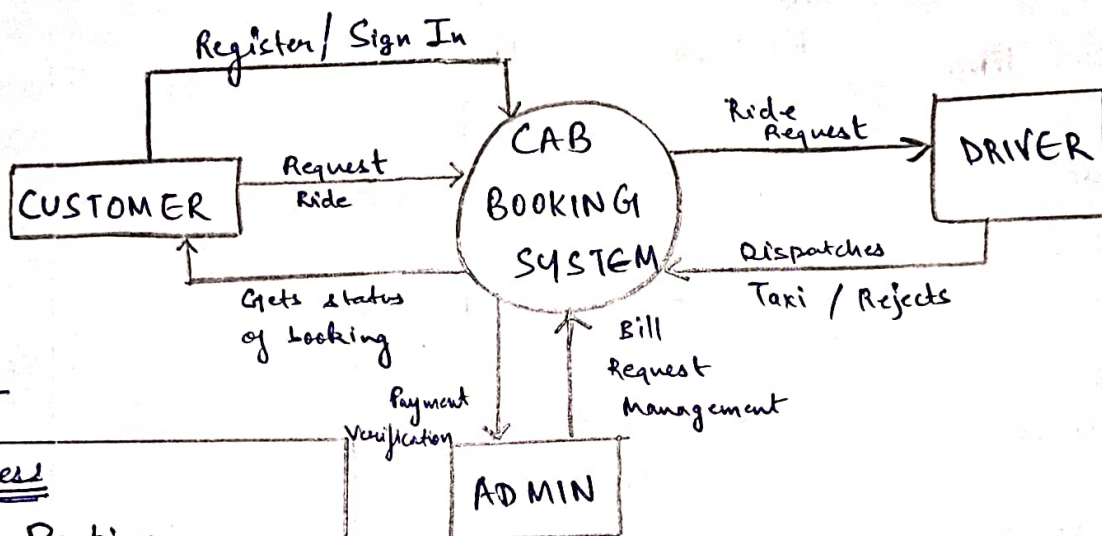
• Context Diagram

Level 0

* Entities

Driver, Passenger || Booking, Payment, Bill Generation, Location selection
Admin

Process



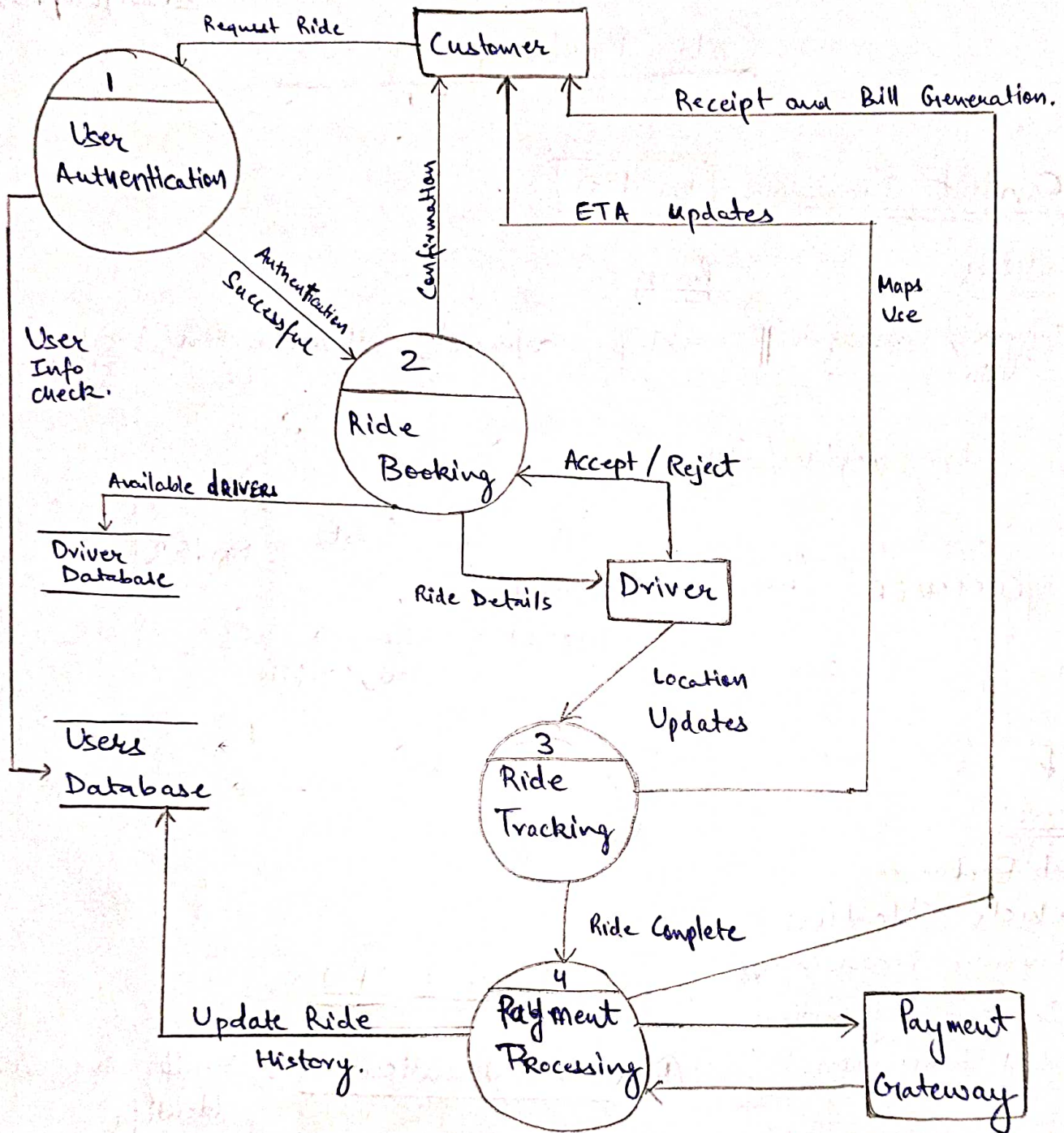
Process

- Cab Booking
- Vehicle Selection
- Payment Processing
- Driver Confirmation
- Bill Generation.

Level 1 DFD

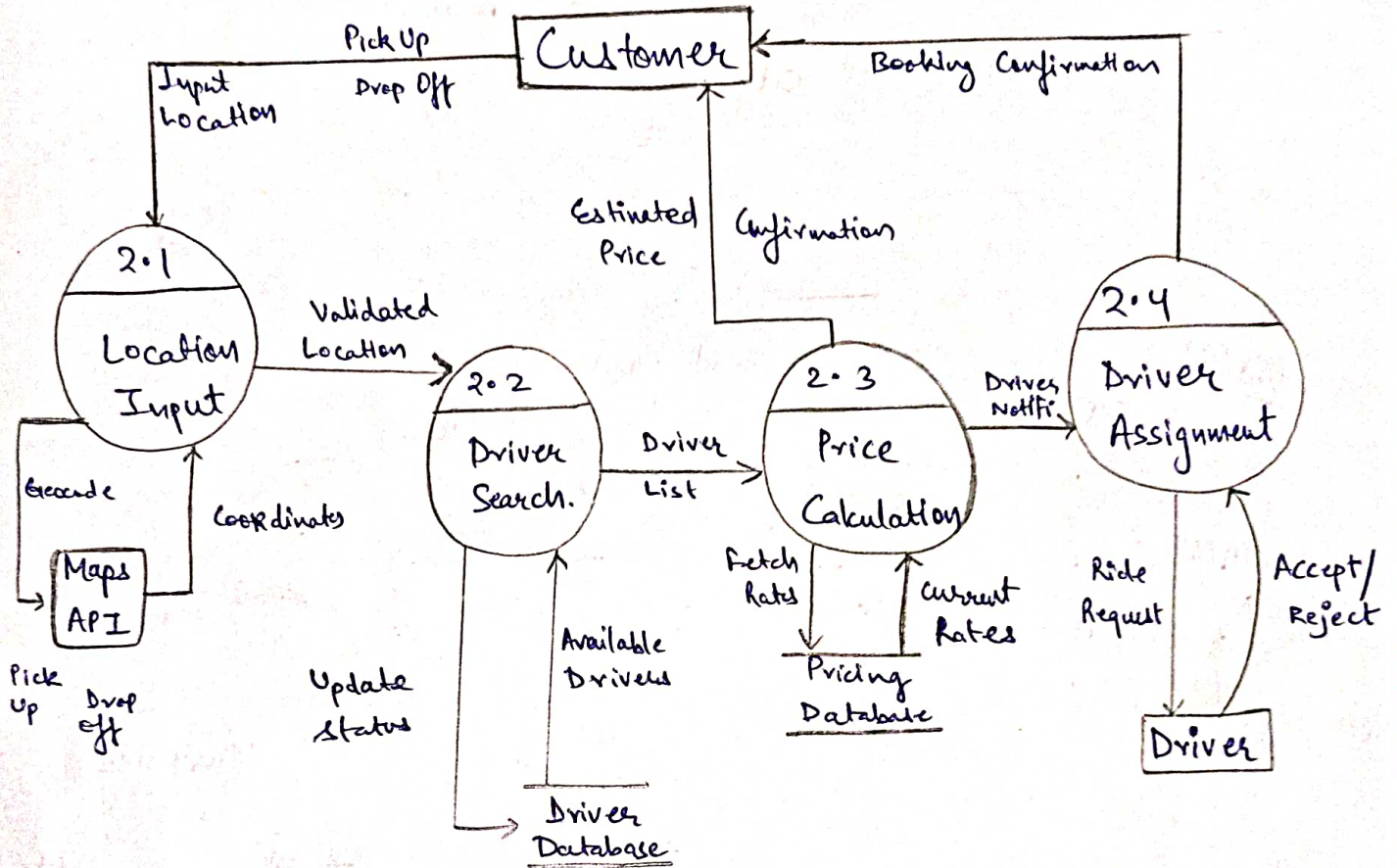
- ① User Authentication : Verify the customer's identity.
- ② Ride Booking : Handles ride requests and driver assignment.
- ③ Ride Tracking : Monitors ride progress and provides updates.
- ④ Payment processing : Manages payment transaction after the ride.

Level 1 DFD



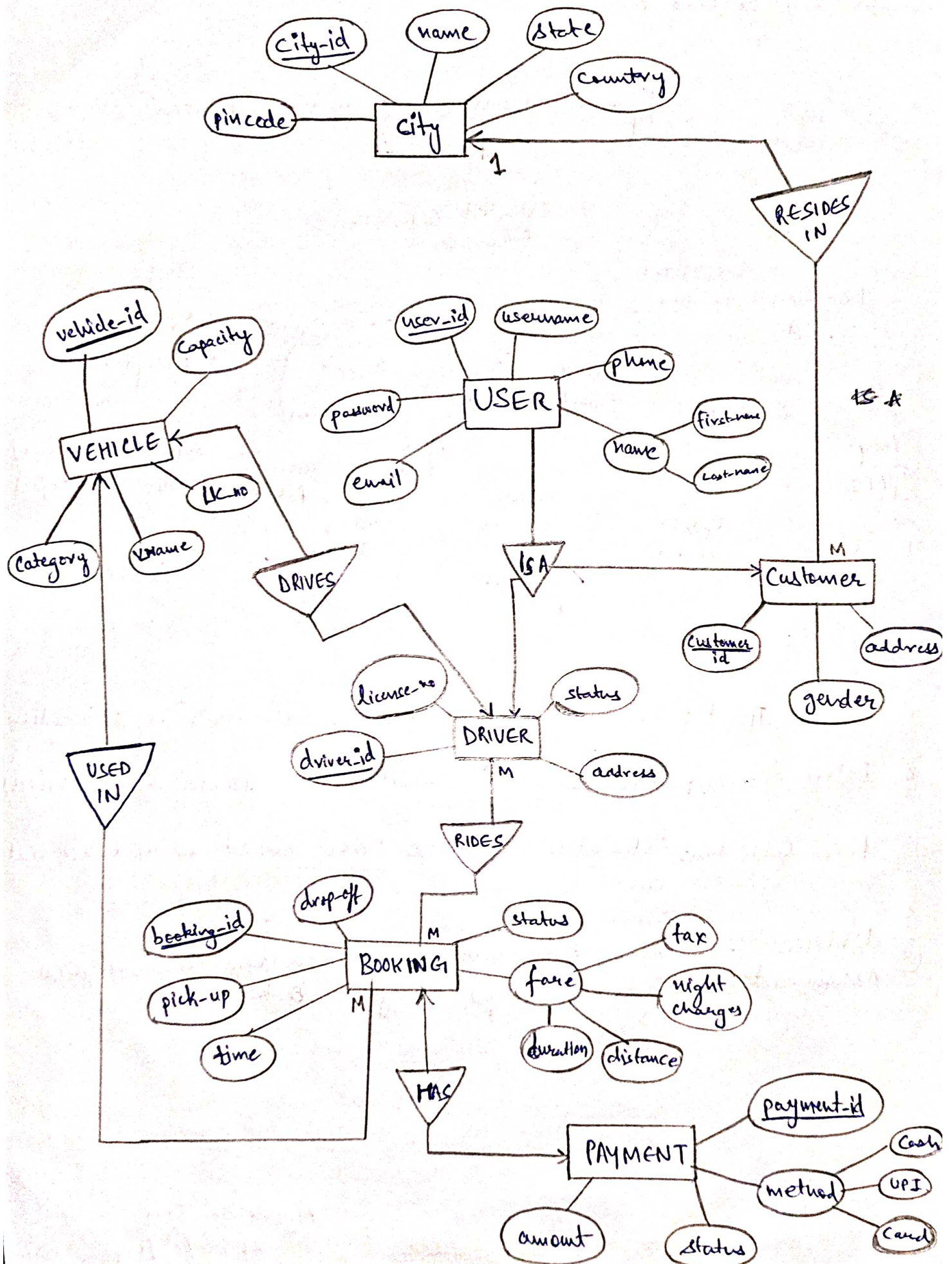
Level 2 DFD

for Ride Booking Process



- ① Location Input: Handles and validates the customer's input location
- ② Driver Search: Queries the database for available nearby drivers
- ③ Price Calculation: Estimates the ride price based on distance and current rate
- ④ Driver Assignment: Driver Assignment means sending ride requests to drivers and confirm booking.

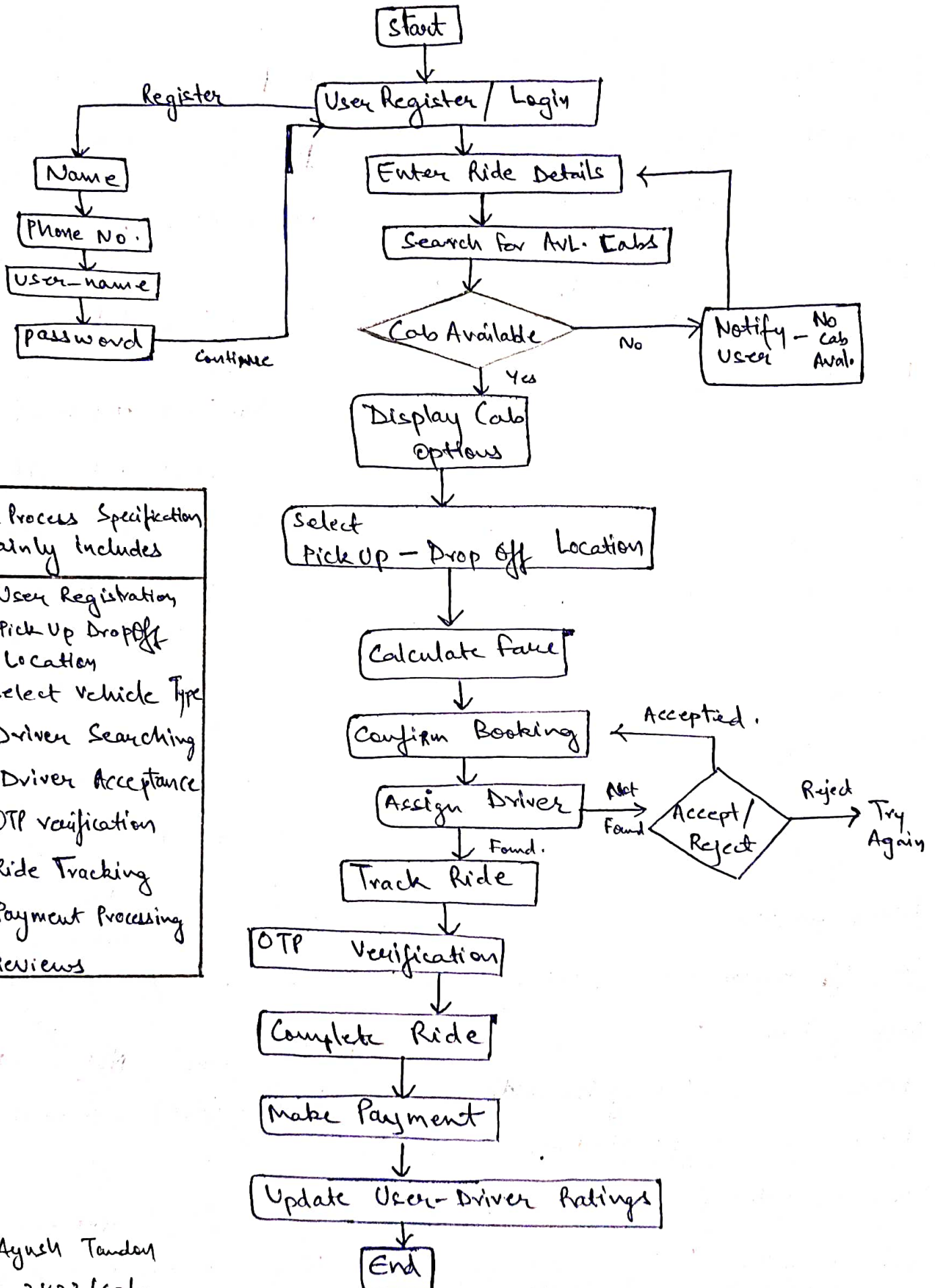
Entity Relationship Diagram of Cab Booking System



Data Dictionary for Cab Booking System

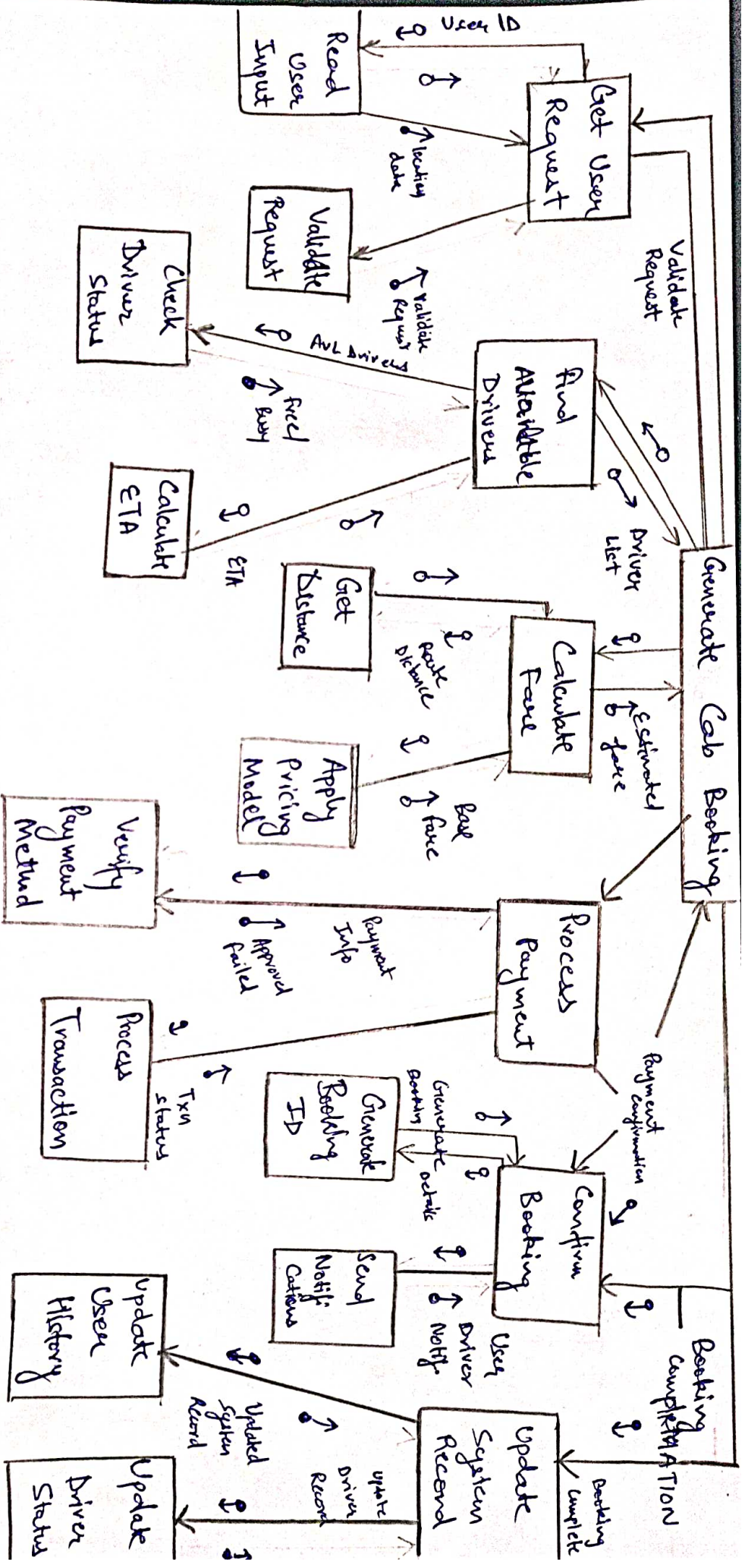
Field Name	Description	Data Type	Constraints
User-id	unique identifier for each user	Integer	Primary Key Auto increment
Username	user name for account	varchar (50)	not null unique
password	encrypted password for user authentication	varchar (20)	Not null
Full Name	User's full name	Varchar (100)	Not null
Email	User's email address	Varchar (100)	not null
Phone Number	User's contact number	Varchar (15)	Not null
Driver ID	unique identifier for each driver	Integer	Primary Key
Driver Name	Driver Full Name	Varchar (100)	not null
Driving License	Driver's License Number	Varchar (20)	not null, unique
Vehicle ID	unique identifier for each vehicle	Integer	PK.
Vehicle Type	Type of vehicle	Varchar (50)	Not null
License Plate	Vehicle license plate no.	Varchar (15)	not null unique
Booking ID	unique identifier for each booking	Integer	PK
Pickup Location	starting point of the ride	Varchar (255)	not null
Drop off Location	ending point of the ride	Varchar (255)	not null
Booking Time	Time when booking was made	Date Time	Not null
Fare	Cost of the ride	Decimal (10, 2)	not null
Payment ID	unique identifier for payment	Integer	PK
Payment Method	method used for payment	Enum (Cash, Card, UPI)	Not null
Payment Status	status of the payment	Enum (Pen, Due, Fail)	Not null
City-ID	city in which booking is made	Integer (12)	PK

PROCESS SPECIFICATION DIAGRAM FOR CAB BOOKING SYSTEM



The Process Specification mainly includes

1. User Registration
2. Pick Up Drop Off Location
3. Select vehicle Type
4. Driver Searching
5. Driver Acceptance
6. OTP verification
7. Ride Tracking
8. Payment Processing
9. Reviews



STRUCTURE CHART FOR CAB BOOKING SYSTEM