UE19CS353 : Object Oriented Analysis and Design with Java

Project Title : Skyway Cabs (Cab booking Service)

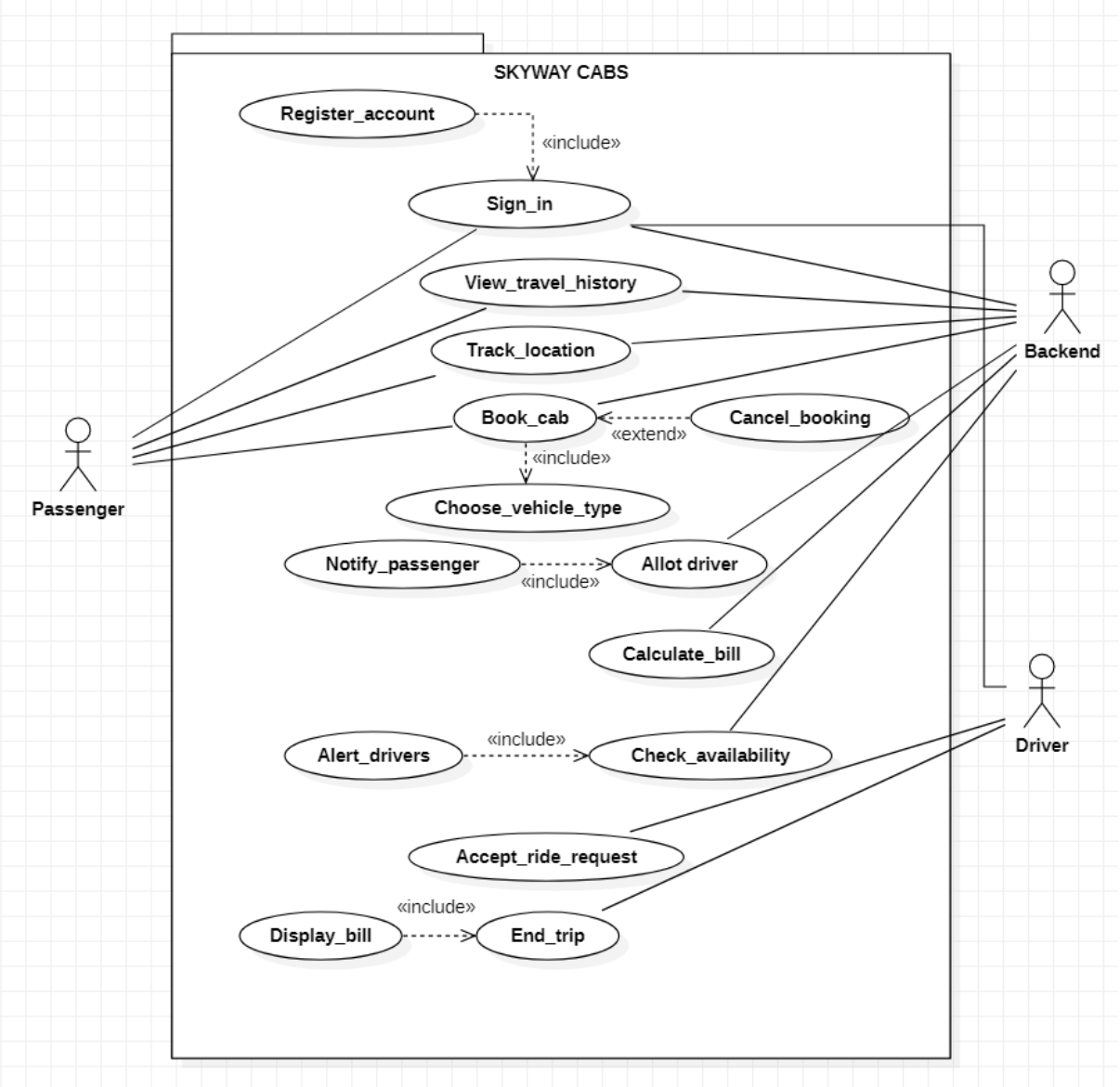
Project Description :

- Register as a new user with information such as user name, a user id (unique across the system), phone number, and email id.
- An existing customer should log in into the system with user id and password.
- A customer has options to book a cab by entering details like pick-up point and drop-off point.
- After the customer has requested a cab, the cab driver located nearest to the customer will be assigned to him/her and a booking confirmation containing the details of the driver like name, phone number and rating will be shown to the customer.
- Also, the estimated fare and an approximate duration of the trip will be displayed to the customer.
- If more than one driver gets matched with a customer, then the driver with the maximum rating will be assigned to the customer.
- A request timed out message will be shown to the customer if there are no drivers available. Soon after, a driver from another location will be allotted to the customer from the location that has the maximum available drivers.
- Once the trip is complete the necessary money will be deducted from the customer's wallet. A wallet is associated with a customer that contains money that the customer can use to pay for his/her ride. Here, it is assumed that a customer's digital wallet associated with the cab booking portal is the only acceptable mode of payment.
- There is also an option to add more money to the digital wallet.
- A customer will have to maintain a minimum of 300 INR for making a booking request. If the balance in the wallet is not sufficient, then the customer will have to first add money to the wallet and then proceed with the booking.
- Once a trip is booked both the driver and the user will be busy for the duration of the trip and will not participate in any booking.

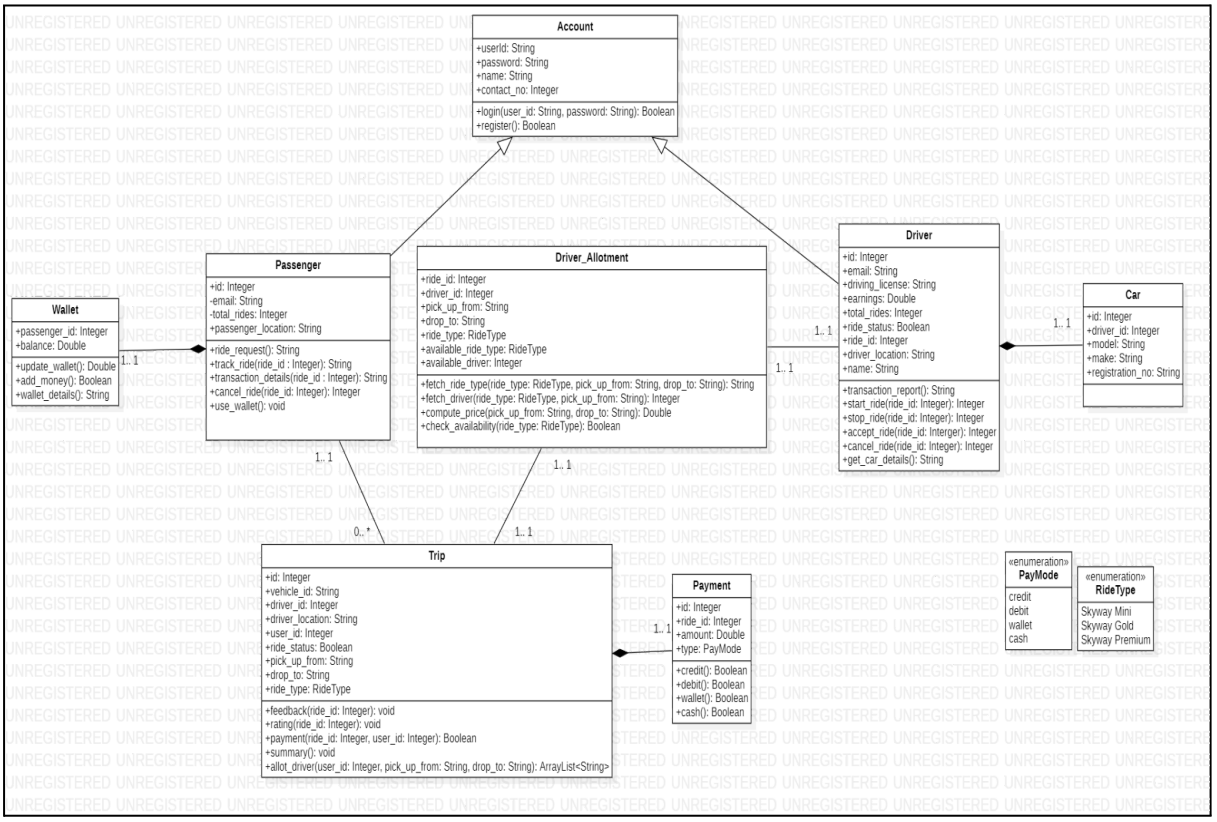
Team members' details and Division of work :

1. Neha : PES1UG19CS294 — Use case diagram, State diagram for Driver
2. Michelle : PES1UG19CS271 — Activity diagram, State diagram for Passenger
3. Nandana : PES1UG19CS289 — Class diagram, State diagram for Backend

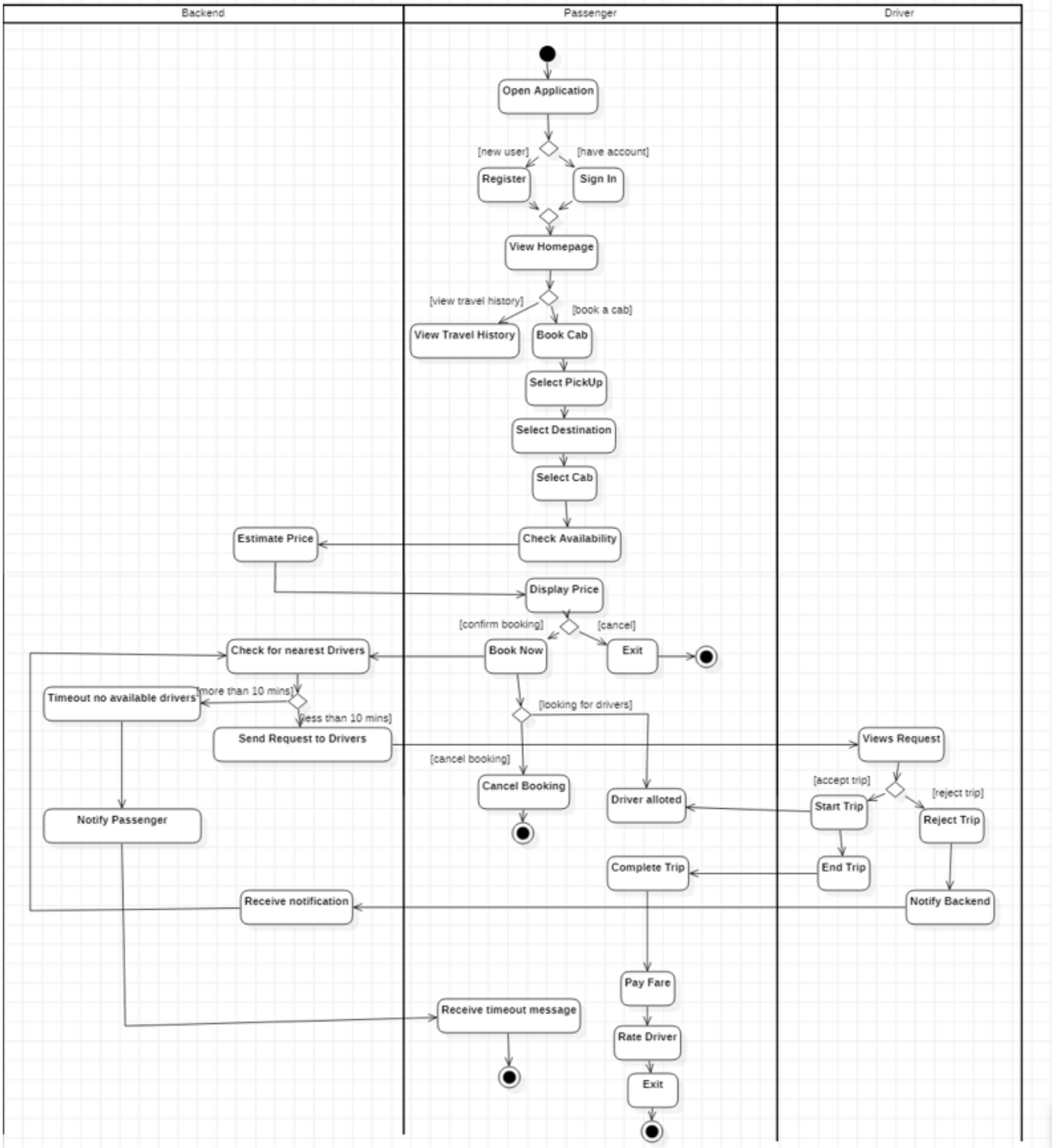
Use case diagram :



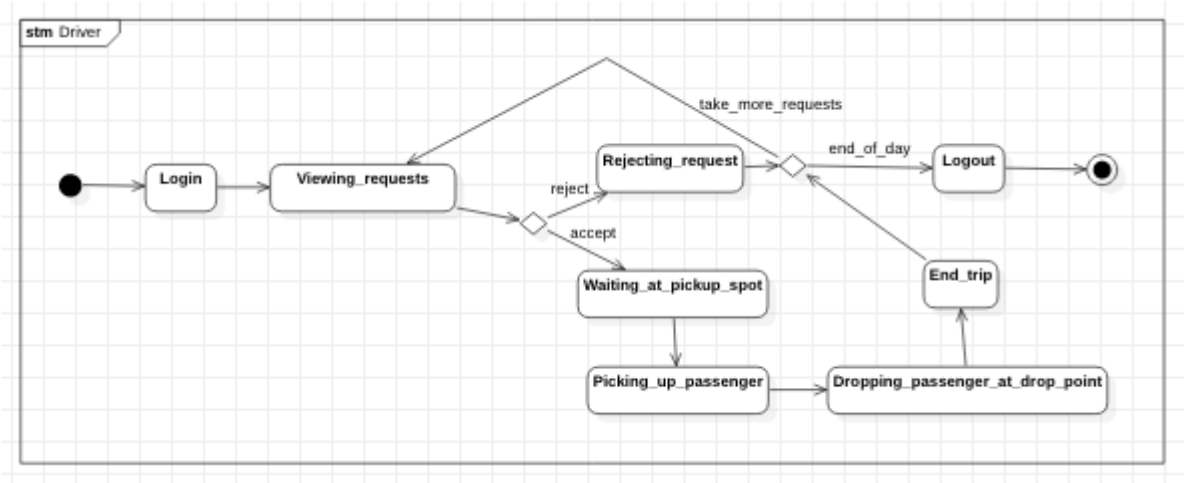
Class Diagram :



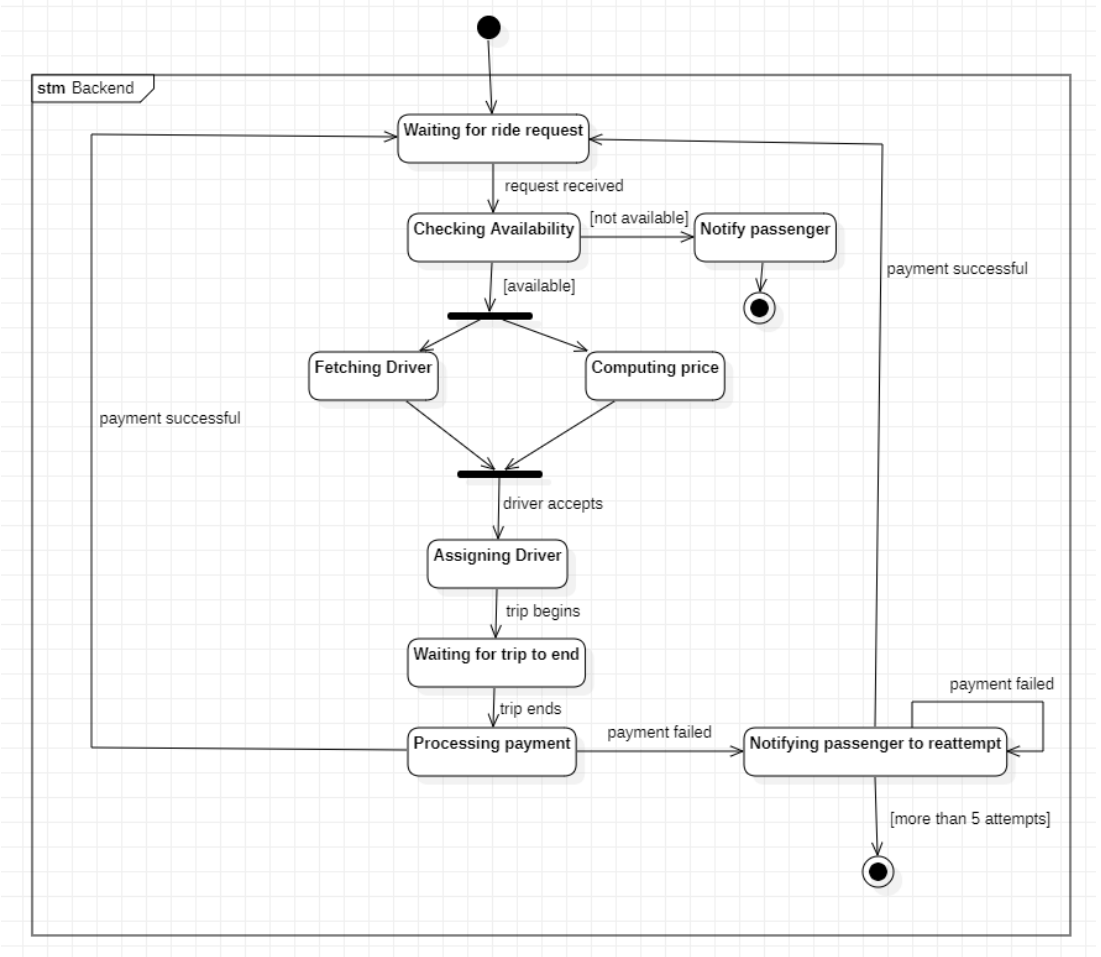
Activity Diagram :



State diagram for Driver :



State diagram for Backend:



State Diagram for Passenger