OBJECT ORIENTED ANALYSIS AND DESIGN

<u>Vehicle Renting System</u>
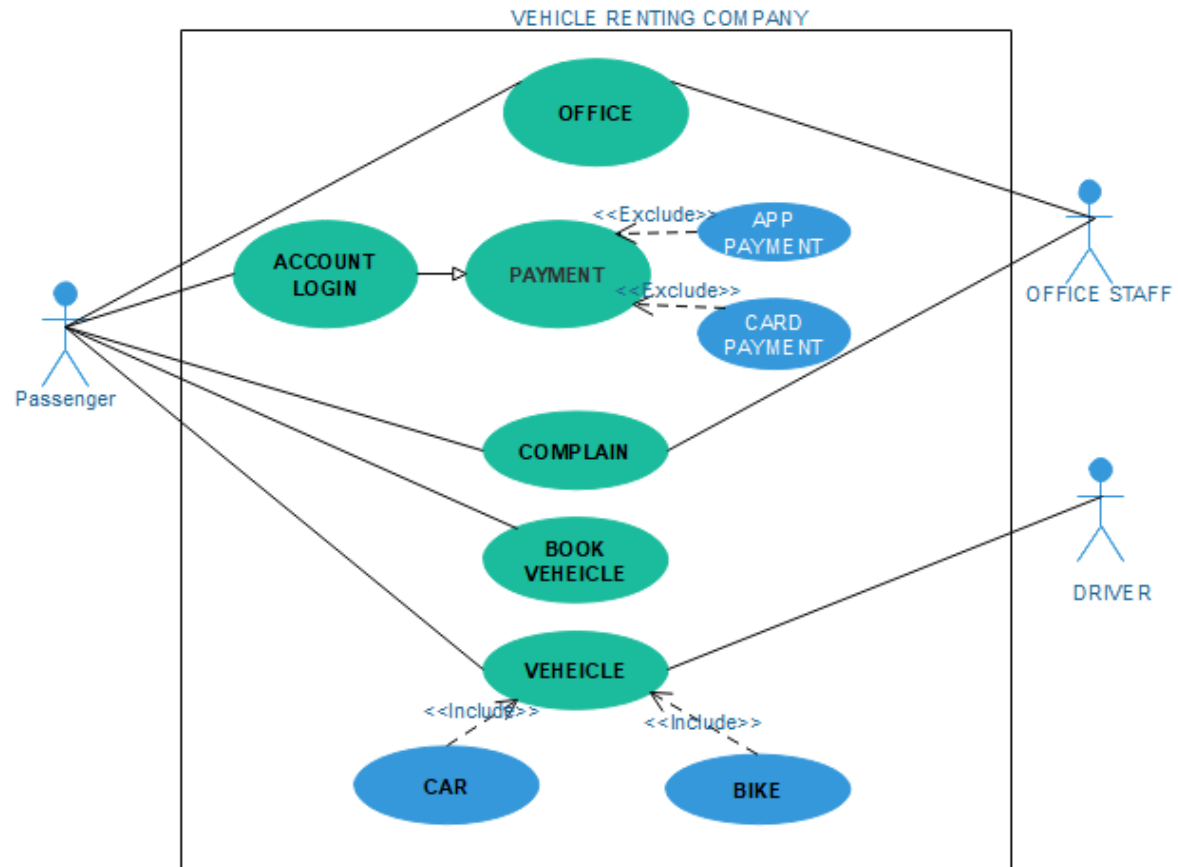
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BRIEF DESCRIPTION

This is a vehicle renting system. There are three types of users. If the passenger asked for a ride through app, employee will collect passengers account id, phone number and current location/address and pass to the driver who will receive the passenger and take him to his/her desired location. The car must have a car insurance. The passengers are identified by their id. The passengers called for trip to riders. The riders are identified by their id. Every rider's driving license number must be 17digit. Every rider can drive a vehicle. The vehicles are identified by their serial number. Every vehicle is managed by an employee. An employee can manage more than one vehicle. The employees are identified by their id. Every employee can work for an office, but an office can have more than one employee. The offices deal with riders and contact with passengers.

VEHICLE RENTING COMPANY

- OFFICE
- ACCOUNT LOGIN
- PAYMENT
  - <<Exclude>> APP PAYMENT
  - <<Exclude>> CARD PAYMENT
- COMPLAIN
- BOOK VEHEICLE
- VEHEICLE
  - <<Include>> CAR
  - <<Include>> BIKE

Passenger

OFFICE STAFF

DRIVER

Use Case Diagram

Class Diagram

Class Design

Passenger

- Passenger ID: Integer {Assigned by system}
- Passenger Name: String {Maximum 30 character}
- Passenger Address: String
- Passenger Phone: Integer {Maximum 11 character}
- Passenger Date of Birth: Integer

+ getPassenger ID (): Integer
+ setPassenger Name (Name: String)
+ getPassenger Address (): String
+ setPassenger Phone (): Integer
+ getPassenger Date of Birth (): Integer

Rider

- Rider ID: Integer {Assigned by system}
- Rider Name: String {Maximum 30 character}
- Rider License no: Integer
- Rider Phone: Integer {Maximum 11 character}

+ getRider ID (): Integer
+ setRider Name (Name: String)
+ getRider License no (): Integer
+ setRider Phone (): Integer

Vehicle

- Vehicle Type: String
- Vehicle Number: Integer {Maximum 17 character}
- Vehicle Brand: String
- Vehicle Model: Integer

+ getVehicle Type (): String
+ setVehicle Numbe (): Integer
+ getVehicle Brand (): String
+ setVehicle Model (): Integer

CRC CARD

Class Name: PASSENGER	
Sub class: ACCOUNT	
Super class: USER	
login in the app	access
pay taka with card or through app	pays fair

Class Name: RIDER	
Sub class: ACCOUNT	
Super class: USER	
drives a car or bike	drives
get paid by the company	pays

Class Name: VEHICLE	
Sub class:	
Super class: RIDER	
checks car number, id, owner	checks car doc.
check car ac or non ac	condition
check car location and availability	hires