**Data Structure and Entities**

**1. Data Structure and Tables**

* **MemberProfile**
  + MID INT Not NULL, Auto\_increment
  + memberName VChar(30)
  + prefixMobile VChar(4)
  + phoneNum VChar(15)
  + email VChar(30)
  + password VChar(15)
  + dateOfRegister Date

For driver only

* + VehicleNo VChar(10)
  + VehicleModel VChar(20)
  + VehicleBrand VChar(20)
  + VehicleDesc VChar(300)
* **DriverRating (rating given to Driver)**
  + SID INT
  + TID INT
  + rating Int // value 1-5
  + comment VChar(100)
  + SID Char(8) FK(SID-RideShare)
* **PassengerRating (rating given to Passenger)**
  + TID INT
  + SID INT
  + rating Int // value 1-5
  + comment VChar(300)
  + Foreign Key(SID) references RideShare(SID)
  + Foreign Key(TID) references RideTrip(TID)
* **RideShare**
  + SID INT not NULL, auto\_increment
  + MID INT
  + Date Date
  + Status INT
  + Time Time
  + StartLocation VChar(200)
  + StartLaCoordinate decimal(11,8)
  + StartLoCoordinate decimal(11,8)
  + Destination VChar(200)
  + DestLaCoordinate decimal(11,8)
  + DestLoCoordinate decimal(11,8)
  + Distance Vchar(20)
  + TravelTime Vchar(20)
  + NoOfSeats Int
  + NoOfOccupiedSeats Int
  + FarePerSeat INT
  + RemarksToPassenger VChar(300)
  + Foreign key(MID) references MemberProfile(MID)

* **RideTrip**
  + TID INT Not N ULL, auto\_increment
  + MID INT
  + Date Date
  + Time Time
  + StartLocation VChar(200)
  + StartLaCoordinate decimal(11,8)
  + StartLoCoordinate decimal(11,8)
  + Destination VChar(200)
  + DestLaCoordinate decimal(11,8)
  + DestLoCoordinate decimal(11,8)
  + NoOfPassengers INT
  + Fare INT
  + RemarksToPassengerRemarks VChar(300)
  + Foreign key(MID) references MemberProfile(MID)
* PendingRequest
  + SID INT
  + TID INT
  + RequestStatus Int
  + SendBy Int
  + Foreign Key(SID) references RideShare(SID)
  + Foreign Key(TID) references RideTrip(TID)
  + Foreign Key(RequestStatus) references RequestStatus(RequestStatus)

SendBy

1 – SendBy Driver  
2 – SendBy Passenger

* AcceptedRequest
  + SID INT
  + TID INT
  + RideStatus int
  + TripStatus int
  + NotesToDriver VChar(300)
  + NotesToPassenger VChar(300)
  + Foreign Key(SID) references RideShare(SID)
  + Foreign Key(TID) references RideTrip(TID)
  + Foreign key(RideStatus) references RideStatus(RideStatus)
  + Foreign key(RideTrip) references RideTrip(RideTrip)
* RideStatus (status given by Driver)
  + RideStatus Int
  + Desc VChar(20)

RideStatus

1. Active (Default)
2. Completed
3. Failed
4. Cancelled

* TripStatus (Status given by Passenger)
  + TripStatus Int
  + Desc VChar(20)

TripStatus

1. Active (Default)
2. Completed
3. Failed
4. Cancelled

* RequestStatus
  + RequestStatus Int
  + Desc VChar(20)

1. Pending (Default)
2. Accepted
3. Rejected