**IT6005 Lesson 3-Practice Exercise**

1. Create a Context and Fully Attributed ERD which shows the relationships between the following entities in a Car Rental Agency: Customer, Salesperson, Car, Reservation, Accessory (e.g. Satnav, Child Seat, etc). Will any additional entities be required?
2. A college wishes to have a system which can track class scheduling data. Define what entities are required and create a Context and Fully Attibuted ERD.
3. The Country Basketball Conference is an amateur basketball association. Each city in the country has one team that represents it. Each team has a maximum of 12 players and a minimum of nine players. Each team also has up to three coaches (offensive, defensive, and PT coaches.) Each team plays two games (home and visitor) against each of the other teams during the season. Given these conditions, do the following:

* Identify the connectivity of each relationship.
* Identify the cardinality between teams and players, and between teams and city.

1. Consider the following information about a college database:
2. • Each student has an id (sid), a name (sname), a major study direction (major) and an age (age).
3. • Each course has a name (cname), a time at which the course takes place (meets\_at) and a room in which the course takes place (room).
4. • Each faculty has an id (fid) and a name (fname).
5. • Students can be enrolled in several courses and for each course there exists at least one student who is enrolled in that course.
6. • Each course belongs to one faculty and for each faculty exists at least one course which belongs to this faculty.

Create a Context ERD and identify the relationships between entities