National University of Computer & Emerging Sciences (FAST – NUCES)

Assignment #1

CS203 Database Systems

Maximum Marks: 20

Deadline: 14th September, 2017.

- 1. **(5 Marks)** Visit your Neon Account and make ER Diagram according to your best exploration and analysis of Database.
- 2. (5 Marks) Enlist top 5 largest databases of recent era with following specifications
 - Platform description (Window/Linux etc.)
 - Size of Database
 - Data Model
 - Infrastructure (Centralized/Distributed)
- 3. (10 Marks) Consider the following scenario modeling project management activities in an organization.

A car sales company offers to its customers the option of purchasing a car using repayment schemes of over 1 year, 2 years, 3 years, 4 years or 5 years.

A customer may purchase one or more cars under the scheme. When a customer purchases a car, he or she gets to choose one of the repayment scheme options for each purchase or may pay the whole amount in one go, meaning a repayment scheme option may be selected by one or more customers or may not be selected at all. A customer will have a unique customer number, a name, an address, and a phone number. A repayment scheme option will have a unique repayment scheme number, a name and the number of years for repayment. A car will have a unique car code, a make, a model, year of manufacture and a price.

The company pays commission on sales of cars to its salespeople and therefore it will also keep information about each sale which will include a unique sales ID and commission to be paid on that sale. The company will also want to know who made the sales and the car involved in that transaction so that the commission can be determined. A salesperson will have a unique salesperson ID, a name, a phone number and an email address.