Information Systems 3 (database 3) Star Schema Draft 1

You must create a Star Schema University Attendance database for the following situation:

The database must record attendance of students in classes, the time of the lecture, the lecturer who taught the class, the room that was used and the subject for that lecture. For each subject you must record the total number of classes timetabled for the semester – this will be used to calculate Student attendance percentage and Lecturer attendance percentage. An attendance fact must always contain a valid lecturer-id; we assume if one lecturer is absent then another will take his/her place.

You may assume maximum room usage is 11 X 5 = 55 periods a week.

You can work out the primary key of the fact table from the above specification.

The following criteria must be met:

1) This is an individual assignment.
2) You must write SQL statements to enter the data; Try not to repeatedly enter the same thing for one class.
3) You will need reports to provide:
    a) % usage of rooms
    b) % attendance of students
    c) % attendance of lecturers
    d) At least 2 other reports of interest
4) You must enter at least 30 fact records (this is a factless fact table); in all 10 students, 5 different lecturers, 3 different rooms, 2 subjects and 10 date/time slots as your initial prototype system.
5) (Optional). You must load your fact table from an operational database in **batch** mode – e.g. a file with values

St No	Lect –Id	Room	Subj	Date	Time
1	1	1	2	20110718	1130
2	1	1	2	20110718	1130
6	1	1	2	20110718	1130

…
Or (1, 2, 6) 1 1 2 110718 1130 - much shorter
etc. showing all students attending a given class

You will be evaluated to check system meets all practical requirements (works properly):

- Check star schema structure (7)
- Check fact table for suitable data (6)
- Check entry of data (14)
- Check reports (13)
- Demonstration (10)
- (Optional) Batch entry of data

Total 50 marks. [Mark schedule may change a little]

After creating you have to make a documentation of the entire project in a PDF and upload it via the link provided in BB not late than midnight 20th June 2014.05.13

Marks will be made available by the end of 3rd Term.

YOU MAY NEED TO COME AND PRESENT YOUR WORK