TUTORIAL 1 SOLUTION

Tutorial Questions

1. List 4 examples of databases other than those in Chapter 1, Section 1.1 and the lecture notes.

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   Infinite possibilities !- just try and encourage the students to speak!
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2. Describe each of the following terms:
   a. data

      For end users, this constitutes all the different values connected with the various objects/entities that are of concern to them.

   b. database

      Various definitions provided in the lecture ... the formal definition provided in textbook: "A shared collection of logically related data and a description of this data, designed to meet the information needs of an organization".

   c. database management system

      The software system that enables the manipulation of the database eg. Creation, deletion, maintenance and control access to the database.

   d. database application program

      This is the software that actually does the interaction with the database usually by using a structured query language (SQL) command.

   e. data independence

      This is essentially the separation of underlying file structures from the programs that operate on them, also called program-data independence.

3. What are the advantages of using a database system instead of simply storing data in operating system files?
   - Controlling redundancy in data storage.
   - Sharing of data among multiple users.
   - Better access control.
   - Providing multiple interfaces to different classes of users.
   - Flexibility to change data structures.
   - Reduced application development time.

Once these tutorial questions have been discussed the tutor will direct students to completing practical exercises. The same will appy to all the future practical classes unless otherwise specified.

Practical Questions

Solutions to practical questions should be developed during the tutorial/practical session. It is essential that any practical questions not completed in the scheduled tutorial/practical time are completed in the students own time prior to the tutorial/practical session in the following week.

The aim of this week's practical session is to ensure that you can gain access to the SQL Server DBMS environment and to begin the Microsoft Access activities.

1. Read through the document titled SQL Server Instructions. If there is a problem with your SQL Server login send an email to the SQL Server Administrator (DBA) and ask for his assistance. All such relevant details are contained in the document.

   It is each student's individual responsibility to ensure that they have access to SQL Server. You may also download a free version from Microsoft web site If you have been unsuccessful logging in today you will need to return to the computer lab well ahead of your next Database Design and Development practical to check that your access is setup. In the past students have quickly fallen behind in their Practical work due to issues surrounding their SQL Server access.

2. Complete the **Activity 1**, and part of **Activity 2**, as specified in the Introduction to MS ACCESS. The remaining activities need to be completed during the next week.

   RENTAL.accdb solution

Attendance Marks

o There are 10 marks associated with the student attendance of the weekly tutorial/practical sessions. The first 10 sessions will each count for 1 mark. A student will not be given the 1 full mark if he or she is 10 minutes late or leaves earlier unless approved by the respective tutor. A student could lose up to half of the mark even if he or she is just 10 minutes late - the decision is at the individual tutor's discretion.

Exercise Marks

o Some questions from the tutorial/practicals are selected for the students to submit formally. They are in the form of addtional exercises, see also the link at the main schedule page. They are composed of three parts due at three different dates.