**Database Management System – cs422 DE**

**Assignment 1 – Week 1**

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**This assignment is based on lecture 1 (chapter 1).**

* Submit your *own work* on time. No credit will be given if the assignment is submitted after the due date.
* Note that the completed assignment should be submitted in .doc, .docx, .rtf or .pdf format only.
* In MCQs, if you think that your answer needs explanation to get credit then please write it down.
* You are encouraged to discuss these questions in the Sakai forum.

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1. **List two examples of database systems other than those listed in Section 1.1 of the book.**  
   ANS:
   * Human Resource Management System
   * Electronic Medical Records (EMR)
2. **Explain what is meant by a database management system, and contrast it with a File Management System.**

ANS:

A database is a collection of logically related data that is usually in a single repository and is often supported by a database management system. A database management system (DBMS) is an application that allows users to define, create, maintain (insert, edit, and delete), share, and control access to a database. In file management systems, each application defines and manages its data. However, contrary to a file management system, a DBMS manages the interrelated data in a centralized manner preventing data redundancy and inconsistency, data isolation, and data integrity issues. It allows the sharing of data across various applications and application modules, concurrent access to data, improve backup and recovery services, and secure a database.

1. **Discuss advantages and disadvantages of DBMSs in short.**

ANS:

Advantages of a DBMS

* Control of data redundancy
* Data consistency
* Sharing of data
* Improved security
* Balance of conflicting requirements
* Increased productivity

Disadvantages

* Complexity
* Size
* Cost of DBMS
* Additional hardware costs
* Performance
* Central point of failure

1. **What are the 5 major components of the DBMS environment?**

ANS:

Hardware, Software, Data, Procedures, and People

1. **A database management System (DBMS) is**
2. Collection of interrelated data
3. Collection of programs to access data
4. Collection of data describing one particular enterprise
5. All of the above

ANS: B

1. **The DBMS provides uncontrolled access to the database.**
2. True
3. False

ANS: B

1. **Disadvantages of File systems to store data is:**
2. Data redundancy and inconsistency
3. Difficulty in accessing data
4. Data isolation
5. All of the above

ANS: D

1. **The Database Administrator (DBA) is responsible for the management of the data resource including database planning, development and maintenance of standards, policies and procedures, and conceptual/logical database design.**
2. True
3. False

ANS: B

1. **Data Manipulation language enables users to**
2. Retrieval of information stored in database
3. Insertion of new information into the database
4. Deletion of information from the database
5. All of the above

ANS: D

1. **Which of the following is Database language?**
2. Data Definition Language
3. Data Manipulation Language
4. Query Language
5. All of the above

ANS: D