
DATA BASE IMPORTANT QUESTION AND VUCAB

STUDENT ID : MC180402118

MIT DEPARTMENT 2ND SEMESTER

CS403

What are major differences between traditional file processing system and database?

Answer: The main differences are of data sharing, data independence, data integrity and controlled redundancy.

Question: What is the difference between data and information?

Answer: Data is raw collection of facts and figures collected from a specific environment. Once we process the data using different methods the data is converted into useful information.

Question: What is data consistency?

Answer: Data consistency means that the changes made to different occurrence of data should be controlled and managed in such a way that all the occurrences have same value for any specific data item.

Data : Data can be describe as "Collection of raw facts and figures".

Data Definition Language (DDL) : A descriptive language that allows the DBA or user to describe and name the entities required

for the application and the relationships that may exist between the different entities.

Data dictionary : The description of data is known as data dictionary."Centralized repository of information about data such as meaning, relationships to other data, origin, usage, and format".

Data Independence : Data Independence means that upper levels are unaffected by changes to lower levels.

Data Model : An integrated collection of concepts for describing data, relationships between data and constraints on the data in an organization.

Data warehouse : A repository where data from multiple databases is brought together for more complex analysis.

Database : A shared collection of logically related data(and a description of this data), designed to meet the information needs of an organization.

Database Schema : The overall description of the database is called database schema.

DBMS : A software system that enables users to define, create and maintain the database and provides controlled access to this database.

Degree : The Degree of a relation is the number of attributes it contains.

Domain : A domain is the set of allowable values for one or more attributes.

Durability : Durability ensures that any transaction committed to the database will not be lost. Durability is ensured through the

use of database backups and transaction logs that facilitate the restoration of committed transactions in spite of any subsequent software or hardware failures

Enterprise : An enterprise is an organization that utilizes computers and applications. In general use, enterprises refer to businesses/organizations that operate on a large scale. Applications that are designed for these organizations are often referred to as enterprise applications.

Enterprise constraints : Additional rules specified by the the users or database administrators of a database.

Entity : An entity is a single object about which data can be stored. It is the "subject" of a table. Entities and their interrelationships are modeled through the use of entity-relationship diagrams.

Entity integrity : in base relation, no attribute of a primary key can be null.

Entity-Relationship Diagram : An entity-relationship diagram is a specialized graphic that illustrates the interrelationships between entities in a database.

External View :The User's view of the database. This level describes that part of the database that is relevant to particular user.

File-based System : A collection of application programs that perform services for the end users such as the production of reports. Each program defines and manages its own data.

Foreign Key : An attribute or set of attributes within one relation that matches the candidate key of some (possibly the same) relation.

Functional Dependency : A functional dependency occurs when one attribute in a relation uniquely determines another attribute. This can be written $A \rightarrow B$ which would be the same as stating "B is functionally dependent upon A".

USE FULL LINKS

<http://www.oracle.com/index.html>

Description:

URL: <http://www.sitepoint.com/article/sql-server-2000-database>

Description: A stepwise approach of using SQL server 2000. Good site for

URL: <http://www.sqlcourse.com/>

Description: Interactive Online SQL Training for Beginners

The tools that we will be studying are
a manipulation language (SQL) and a DBMS (SQL Server).

SQL (Structured Query Language)

What is SQL?

SQL (pronounced "ess-que-el") stands for Structured Query Language. SQL is used to communicate with a database. According to ANSI (American National Standards Institute), it is the standard language for relational database management systems. SQL statements are used to perform tasks such as update data on a database, or retrieve data from a database. Some common relational database management systems that use SQL are: Oracle, Sybase, Microsoft SQL Server, Access, Ingres, etc. Although most database systems use SQL, most of them also have their own additional proprietary extensions that are usually only used on their system. However, the standard SQL commands such as "Select", "Insert", "Update", "Delete", "Create", and "Drop" can be used to accomplish almost everything that one needs to do with a database. This tutorial will provide you with the instruction on the basics of each of these commands as well as allow you to put them to practice using the SQL Interpreter.

DEFINITION

WHAT IS DATA BASE ?

data base is a shared collection of logically related data that is stored to meet the requirements of different user of an organization.

Def 1: A shared collection of logically related data, designed to meet the information needs of multiple users in an organization. The term database is often erroneously referred to as a synonym for a “database management system (DBMS)”. They are not equivalent and it will be explained in the next section.

A collection of related information about a subject organized in a useful manner that provides a base or foundation for procedures such as retrieving information, drawing conclusions, and making decisions.

A Computerized representation of any organizations flow of information and storage of data.

What is database management system explain?

A **database management system (DBMS)** is **system** software for creating and managing **databases**. The **DBMS** provides users and programmers with a systematic way to create, retrieve, update and manage **data**

What is a database management system and give examples?

Some DBMS examples include **MySQL, PostgreSQL, Microsoft Access, SQL Server, FileMaker, Oracle, RDBMS, dBASE, Clipper,** and **FoxPro**. Since there are so many database management systems available, it is important for there to be a way for them to communicate with each other.

What is difference between DBMS and Rdbms?

Key Difference between DBMS and RDBMS: The key **difference** is that **RDBMS**(**relational database management system**) applications store data **in a** tabular form, while **DBMS** applications store data as files. ... **In a RDBMS**, the tables will have an identifier called primary key. Data values will be stored **in the** form of tables.

What is DBMS advantages and disadvantages?

Although the database system yields considerable **advantages** over previous data management approaches, database systems do carry significant **disadvantages**. For example: 1. Increased costs. one of

the **disadvantages** of **dbms** is Database systems require sophisticated hardware and software and highly skilled personnel.

Is SQL a DBMS?

DBMS means Database Management System, which is a concept and a set of rules that all or major Database Systems follows.

... **DBMS** products like **SQL** Server, Oracle, MySQL, IBM DB2, etc uses **SQL** as a standard language. **SQL** language used in these tools is very common and have similar syntaxes.

What is difference of data and information?

Data are simply facts or figures — bits of **information**, but not **information** itself. When **data** are processed, interpreted, organized, structured or presented so as to make them meaningful or useful, they are called **information**. **Information** provides context for **data**.

What is difference between data and information in DBMS?

Data vs. Information - Differences in Meaning. **Data** are simply facts or figures — bits of **information**, but not **information** itself. When **data** are processed, interpreted, organized, structured or presented so as to make them meaningful or useful, they are called **information**. **Information** provides context for **data**.

What is the importance of database?

A **database** management system is **important** because it manages data efficiently and allows users to perform multiple tasks with ease.

A **database** management system stores, organizes and manages a large amount of information within a single software application

Database : A database management system (DBMS) is a collection of programs that manages the database structure and controls access to the data stored in the database.

The DBMS serves as the intermediary between the user and the database. The database structure itself is stored as a collection of files, So, we can access the data in those files through the DBMS.

The DBMS receives all application requests and translates them into the complex operations required to fulfill those requests. The DBMS hides much of the database's internal complexity from the application programs and users.

Advantages :

1. Improved data sharing
2. Improved data security
3. Better data integration
4. Minimized data inconsistency
5. Improved data access
6. Improved decision making
7. Increased end-user productivity

The advantage of data base are :-

- Reduced data redundancy
- Reduced updating errors and increased consistency
- Greater data integrity and independence from applications programs
- Improved data access to users through use of host and query languages
- Improved data security
- Reduced data entry, storage, and retrieval costs
- Facilitated development of new applications program

Disadvantages :

1. Increased costs
2. Management complexity
3. Maintaining currency
4. Frequent upgrade/replacement cycles.