CRITICAL STUDY ON DATABASE AND PROMINENTPROGRAMES

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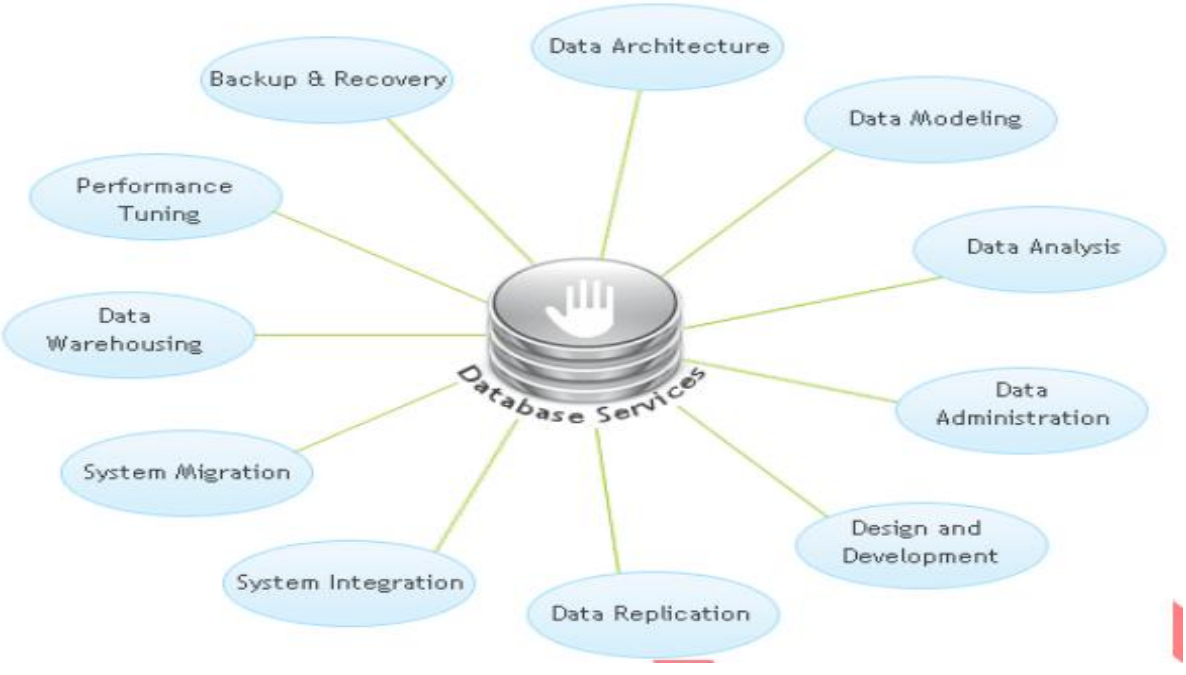
ABSTRACT

The people who work with computers, the programmers, analysts, and operators who seem to live by rules of their own and seldom leave their own environment, tend to be very cynical towards the stories of electronic brains. This attitude will appear hardly surprising when one eventually learns that the computer is a very simple device and is as far removed from an electronic brain as a bicycle from a spaceship. Programmers in particular are the people most aware that computers are no substitute for the human brain; in fact, the preparation of work to be run on a computer can be one of the most mind-bending exercises encountered in everyday life. Databases and database systems have become an essential component of everyday life in modern society. In the course of a day, most of us encounter several activities that involve some interaction with a database. So in this paper we will talk about how to manage the different type of data involved in any form in the database.

INTRODUCTION

Databases and database systems have become an essential component of everyday life in modern society. In the course of a day, most of us encounter several activities that involve some interaction with a database. For example, if we go the bank to deposit or withdraw funds, if we make a hotel or airline reservation, if we access a computerized library catalog to search for a bibliographic item, or if we buy some item such as a book, toy, or computer- form an internet vendor through it web page, chances that our activities will involve someone or some computer program accessing a database, even purchasing items from a supermarket nowadays in many cases involves an automatic update of the database that keeps the inventory of supermarket items.



Services provided by the database to the users

A data management system (DBMS) is a collection of program that enables users to create and maintain a database. The DBMS is hence a general-purpose software system that facilitates the process of defining, constructing, manipulating, and sharing database among various users and application. Defining a database involves specifying the data types, structures, and constraints for the data to be stored in the database. Constructing the database is the process of storing the data itself on some storage medium that is controlled by the DBMS. Manipulating a database includes such functions as querying the database to retrieve specific data, updating the database to reflect changes in the mini world, and generating reports from the data. Sharing a database allows multiple users and programs to access the database concurrently.

THE DATABASE APPLICATION SYSTEM LIFE CYCLE

Activities related to the database application System (micro) life cycle include the following:

1- System definition: The scope of the database system, its users, and its application are defined. The interfaces for various categories of users, the response time constraints, and storage and processing needs are identified.

2- Database design: At the end of this phase, a complete logical and physical design of the database system on the chosen DBMS is ready.

3- Database implementation: This comprises the process of specifying the conceptual, external, and internal database definitions, creating empty database files, and implementing the software application.

4- Loading or data conversion: The database is populated either by loading the data directly or by converting existing files into the database system format.

5- Application conversion: Any software application form a previous system is converted to the new system.

6- Testing and validation: The new system is tested and validated.

7- Operation: The database system and its application are put into operation. Usually, the old and the new systems are operated in parallel for some time.

8- Monitoring and maintenance: During the operational phase, the system is constantly monitored and maintained. Growth and expansion can occur in both data content and software applications. Major modifications and reorganizations may be needed from time to time.

Life Cycle of the Database

COBOL LANGUAGE

COBOL is a high level programming language of the procedural type. That is, it is not a functional, logic-oriented or object-oriented language. It is used primarily in the implementation phase of software development, like most programming languages. In 1959, the U. S. Defense Department created a group called The Short-range Committee, which, over a period of a few months, defined the COBOL language. The committee was organized by the Conference on Data System Languages (CODASYL). A midrange committee was also organized and a long-range committee was defined but never created. The Short- range committee consisted of representatives from: National Bureau of Standards, US Air Force, RCA, Burroughs, the Navy, Sylvania and Sperry Rand.

COBOL was designed to be as much like ordinary English language as possible while containing those elements required by the computer system in use like English. Then COBOL has grammar, punctuation, a character set and words and names.

BASIC LANGUAGE

The word BASIC is an acronym of 'Beginners All-purpose Symbolic Instruction Code' and although less elegant and less powerful than other among languages does still fulfill its two main objectives. BASIC is for people who are not, and who do not wish to be, computer professionals, can use beginners-it quite quickly. BASIC is also all-purpose: it can be used for simple computational work, for problem solving, for small business applications and, increasingly, for home computing.

BASIC began life in 1964 at Dartmouth College, America, where it tilled a need for a simple computer language for beginners. BASIC has proved to be very popular since then. This is particularly so in the Case of time-sharing computer systems and personal, or home, computers where the language has been universally adopted. BASIC is also available on most mainframe computer systems. The most recent development of the language has been in home computing.

CONCLUSION

The study of databases is a battleground of ideas. The database community is one of the oldest in the computer world, and it is almost as famous as the application programming community for the diversity of its ideas and the sharpness of the debates between its gurus. Lately events have conspired to expose these concerns to a wider audience. For instance, the seemingly inexhaustible march of the web revolution has exposed more and more developers to database issues because of the desire for ever more dynamic web sites. And the crown prince of web technologies, XML, has had the effect of increasing awareness of data design in general. This means that more and more developers find themselves choosing between database management systems (DBMSes). This can be a daunting choice considering the many available DBMSes, both open and closed source, and the broad spectrum of differences between them. This article provides some guidance through the maze of available DBMS features and methodologies, to help the developer quickly narrow the choices to the best candidate.

REFERENCES

en.wikipedia.org/wiki/Database_management_system

pages.cs.wisc.edu/~dbbook/openAccess/thirdEdition/.../slides3ed.htm...ABS

PUBLICATION'S "INTRODUCTION TO DBMS"