THE DIFFERENCE BETWEEN THE CONCEPTS OF DATABASE (DB) AND DATABASE MANAGEMENT SYSTEM (DBMS)

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Many companies and organizations today, whether it is a form of public or private ownership - use personal computers to store and process any information. This information is included in a specific "Database". Databases (DBs) play an important role in the modern world of information technology, where their management systems are evolving.

A database is a software system designed to store data. Provides automation of the work of the (DBs) - Database Management System (DBMS), which manipulates the exact model of data organization at the source. In the construction of a logical model, three approaches to modeling - hierarchical, network, relational networks are selected and obtained.

The hierarchical model has a tree-like structure and reflects the vertical connection of the subordination of the lower stage to the upper stage. This makes it easier to access the information you need only when all queries have a tree-like structure.

The network model is complex and differs from the hierarchical model by the presence of horizontal connections. This will not be a directional sign of communication, which complicates the model and the (DBMS).

Relational model is given in the form of a set of tables on which operations are formed, which are formed in terms of relational algebra. The advantage of the model is the relative simplicity, compactness of modern armed means of supporting it - the sharpness of the data structure and the speed of operation depends on the size of the database. Relational models are now widespread. In them, all the components are connected by a mutually defined relationship.

Each type of model has its advantages and disadvantages. Ease of understanding its structure is one of the main advantages of the relational model. Database modeling is performed step by step, with several levels of abstraction, each of which corresponds to its own version of the model.

The need to separate multiple levels of abstraction is determined by the complexity of the process of reflecting the problem area in the database. The connection of a logical model to software and hardware is called a physical model of a database. It allows the process of creating a database to be embodied in the final material. After selecting the final Ludel of the logical model, the necessary set of indicators and the whole set of requisites to solve a certain range of tasks are determined, files are formed, in which the main area (requisites) for interaction with other files is allocated. Then the type of data and the discharge of each field, the number of entries in the files, and other definitions are determined.

A database management system (DBMS) is a system that creates, processes, and retrieves a database. In short, (DBMS) performs all the processes. The database only stores data, all other work is done by (DBMS). Working with databases and their management system is a very important science today, and the demand for specialists in this field is growing.

The main ideas of the existing information system methodology are based on the presentation of the necessary information, according to which it should be formed with the task of reflecting the dynamically changing world in databases and meeting all information needs of users.

Databases are created and run using special software tools called database management systems.

In view of the above, we create a database system of the organization directly using Microsoft Office Access in our research topic, make changes to it, enter data and present this system to the user. From this database, government agencies, hospitals, representatives of various sectors, the population will be able to get information.

References:

1. Haigh, Thomas. "" A veritable bucket of facts" origins of the data base management system." *ACM SIGMOD Record* 35.2 (2006): 33-49.
2. Frank, Andrew U. "Multiple inheritance and genericity for the integration of a database management system in an object-oriented approach." *International Workshop on Object-Oriented Database Systems*. Springer, Berlin, Heidelberg, 1988.
3. Lamb, Charles, et al. "The ObjectStore database system." *Communications of the ACM* 34.10 (1991): 50-63.