GENERAL UNDERSTANDING OF DATABASE

ANDRY ANDARU

155100006

Faculty of computer, 448757303

andryandaru.student@umitra.ac.id

Abstract

Database or database is a collection of information stored on a computer systematically so that it can be checked using a computer program to obtain information from the database.

The main use of a database system is for the user to be able to compile a view of data abstraction. This aims to simplify the interaction between users and the system and the database can present different views to users, programmers, and administrators.

Keywords: general understanding of database.

A. INTRODUCTION

Database or database is a collection of information stored on a computer systematically so that it can be checked using a computer program to obtain information from the database. The software used to manage and call database queries is called a database management system

(DBMS). The database system can be learned in information science.

The term "database" starts from computer science. Even though it means more and more broadly, including things outside the electronics field, this article deals with computer databases. Records similar to databases actually existed before the industrial revolution, namely in the

form of ledgers, receipts and data collections related to business.

The basic concept of the database is a collection of notes, or pieces of knowledge. A database has a structured explanation of the types of facts stored in it: this explanation is called a schema. The schema describes the object represented by a database, and the relationship between the objects. There are many ways to organize schemas, or model database structures: these are known as database models or data models. The model commonly used now is the relational model, which according to the term layman represents all information in the form of interconnected tables where each table consists of rows and columns (the actual definition uses mathematical terminology). In this model, relationships between tables are represented by using the same values between tables. Other models such as the Hierarchical model and network models use more explicit ways to represent relationships between tables.

The term database refers to collections of interconnected data, and the software should refer to as a database management system (DBMS). If the context is clear, many administrators and programmers use the term database for these two meanings.

So the concept of a database or database is a collection of data that forms a file (file) that are interconnected (relations) with certain procedures to form new data or information. Or a database (database) is a collection of interconnected data

(relations) between one and the other organized according to a particular scheme or structure. On a computer, the database is stored in the storage hardware device, and with certain software manipulated by certain interests or interests. Relationships or data relations are usually indicated by a key (key) from each file that exists. Data is a fact or value (value) that is recorded or represents a description of an object. Data which is a fact that is recorded and then is processed (process) into a form that is useful or useful for the wearer will form what is called information. The form of complex information and integration and processing of a database with a computer will be used for the decision making process for management to form a Management Information System (SIM), the data in the database is the smallest and most important item to build a good and valid database. Data in the database is integrated and shared:

- Integrated (integrated), data files that are in the database are interrelated (data dependencies occur);
- Sharing data (shared), the same data can be used by a number of users at the same time. Often called a multiuser system

Data is a very useful source for almost all organizations. With the availability of abundant data, the problem of managing data effectively becomes a very important thing in the development of management information systems. Therefore, the purpose of holding data arrangements is as follows:

- Provide data storage to be used by organizations now and in the future.
- As a way of entering data so that it facilitates the task of the operator and also involves the time needed by the user to obtain data and the rights held to the data handled
- Data control for each cycle so that data is always up to date and can reflect specific changes that occur in each system.
- Securing data against possible additions, modifications, theft, and other disturbances.

A database building has the following levels:

- Character, is the smallest part of data in the form of numbers, letters, or special characters that form a data item or field.
- Field / item, is a representation of an attribute and record (recording / tuple) of a kind that shows an item from the data.
- Record / record / tuple: Collection of fields form a record or record. Records represent a particular individual data unit.
- File, is a collection of records that describe a similar data unit. representing each data.
- Database, is the number of files or tables that make up a database.

B. CONCLUSION

The main use of a database system is for the user to be able to compile a view of data abstraction. This aims to simplify the interaction between users and the system and the database can present different views to users, programmers, and administrators. Because not all database users are well trained and users are divided into various levels, the complexity of the database will be hidden from the users through several levels of data abstraction. When looking at the database, users can be grouped into 3 levels, namely:

- Physical level (physical view / internal view). It is the lowest level in data abstraction that shows how data is stored in actual conditions. This level is the most complex form, where the lowest level data structure is described at this level.
- Conceptual level. Is a level that describes what data is actually (functionally) stored in the database, along with the relationships that occur between data. This level describes the entire database, where the database administrator (DBA) builds and processes the database, while the user does not care about the complexity in the structure of the physical level

anymore. For example: users will know that sales are stored in the table of goods, production, finance, marketing.

- User View Level. Is a level with the highest level, which describes only one part of the entire database. Some database users do not need all the contents of the database, for example, the personnel section only requires employee file data and salary, does not require warehouse file data, incoming goods transactions.

C. ACKNOWLEDGEMENT

University Of Indonesia
University Of Mitra Indonesia
Telkom University
University Of Melbourne
Saitama University

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