It163 bd unit 2

FUNDAMENTAL ASPECTS OF DATABASE DESIGN AND PLANNING [School] Number] September 8, Fundamental Aspects of Database Design and Planning

The first step in designing a database is to simply brainstorm on paper concerning what the database will need to store and what the site will need out of it. The individual fields, tables and other branches are not considered at this point because the specific planning can take place later. The aim is to start with general and the complete view will follow. It can often be difficult to add items later, rather than get them right away on the first time.

The first and most important step for the successful operation of a distributed relational database is through proper planning. The objectives and needs of the enterprise must be considered when making decision on what to use in a distributed relational database. How the application program is going to be coded, where it resides in regard to the data and the network design that merges or connects the application program are all very important design considerations. Database design in a distributed relational database is more complex than when dealing with the I series relational database.

It is important to understand the purpose of the business or the organization for which the database is to belong and the relational database technology. Operations that necessitate particular attentions when forming your strategy include general operations, networking protocols, system security, accounting, problem analysis and backup and recovery processes involved. Of great importance is to avoid replica of rows of the same data available in a database. This is referred to as data redundancy.

Data redundancy gives problems to IT departments responsible for database

management. Redundancy can be avoided by the use of keys in tables. For example, in the database of an organization for accessing and storing employees' data, then for each employee we have a defined primary key condition for employee number. If an attempt is made to enter a second row of the same data for the employee the system should rejects.

References

Taylor, B. M. (2011). Database Management. A Fundamental Approach to Database Design. Retrieved from http://it. toolbox. com/blogs/programming-life/a-fundamental-approach-to-database-design-7827