DATABASE MANAGEMENT: DATA REDUNDANCY

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        In a typical file processing system, permanent records are stored in various files. A number of different application programs are written to extract records from and add records to the appropriate files. But this method has a number of disadvantages, such as Data Redundancy, Difficulty in access, Data Isolation, Concurrent Access, Security Problems, and Integrity Problems.A Database Management System (DBMS) consists of a collection of interrelated data and a set of programs to access this data. This collection of Data is called Database. The Primary goal of a DBMS is to provide a convenient environment to retrieve and store database information. The scope of Database management system is not hidden from any organisation. Everyone knows that how important database management system is if they want to manage their precious data securely. When developing your database execution administration abilities, every one of the three sorts of instruments that are accessible ought to be viewed as: ones that can guarantee most extreme execution of a DBMS at the framework level, ones that deal with the execution of database structures to help keep up the proficiency of information in your databases, and ones that screen SQL and application execution and distinguish approaches to enhance the productivity of use code.

        The record framework’s structure makes it hard to join information from different sources, and its absence of security renders the document framework helpless against security breaks. The authoritative structure advances the capacity of a similar essential information in various areas. (Database experts utilize the term islands of data for such scattered information areas). The scattering of information is exacerbated by the utilization of spreadsheets to store information. In a document framework, the whole deals office would share access to the SALES information record through the information administration and detailing programs made by the DP master. With the utilization of spreadsheets, every individual from the business division can make his or her own particular duplicate of the business information. Since information put away in various areas will presumably not be refreshed reliably, the islands of data frequently contain diverse renditions of similar information. Data redundancy exists when similar information are put away superfluously at better places. There are a few phases for uncontrolled information excess. Right off the bat, poor data security. Having various duplicates of information expands the odds for a duplicate of the information to be vulnerable to unapproved get to. In Database Administration and Security, investigates the issues and systems related with securing information. Furthermore, data inconsistency. Data inconsistency exists when extraordinary and clashing renditions of similar information show up in better places. For instance, assume you change a specialist’s telephone number in the AGENT document. On the off chance that you neglect to roll out the relating improvement in the CUSTOMER record, the documents contain distinctive information for a similar specialist. Reports will yield conflicting outcomes that rely upon which form of the information is utilized. Data that show data inconsistency are additionally alluded to as information that need information respectability. Data integrity is characterized as the condition in which the greater part of the information in the database are reliable with this present reality occasions and conditions. At the end of the day, data integrity implies that data are precise, there are no information irregularities. Likewise data are verifiable which implies the information will dependably yield steady outcomes. Next, data-entry errors will probably happen when complex passages are made in a few unique records or repeat as often as possible in at least one documents. It conceivable to enter a nonexistence deals operator’s name and telephone number into the CUSTOMER document yet client are not prone to be awed if the protection office supplies the name and telephone number of a specialist who does not exist. Should the staff chief enable a nonexistent specialist to collect rewards and advantages? Actually, data-entry error, for example, an inaccurately spelled name or an off base telephone number yields a similar sort of information honesty issues. Furthermore, data anomalies. The word reference characterizes anomaly as “an abnormality”. In a perfect world, a field esteem change ought to be made in just a solitary place. Data redundancy, however encourages an unusual condition by driving field esteem changes in a wide range of areas. You could be looked with the possibility of making several remedies, one for every one of the clients served by that operator. A similar issue happens when an operator chooses to stop. Every client served by that operator must be relegated another specialist. Any adjustment in any field esteem must be accurately made in numerous spots to keep up data integrity. An data anomaly creates when not the greater part of the required changes in the excess information are made effectively. The information irregularities are update anomalies, insertion anomalies, and deletion anomalies.

        For the conclusion, data redundancy is the existence of data that is additional to the actual data and permits correction of errors in stored or transmitted data. The additional data can simply be a complete copy of the actual data, or only select pieces of data that allow detection of errors and reconstruction of lost or damaged data up to a certain level.

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