Abstract

Normalization is an important technique for the analysis of relational databases. It aims to create a set of relational tables with minimum data redundancy that preserve consistency and facilitate correct insertion, deletion, and modification. It is very much time consuming to do this data analysis manually. Thus in this paper, a system is proposed which aims to automate the most complex phase of the database design normalization. It will help to achieve a good database design and eliminate the drawbacks of manual normalization process. This system is suitable to eliminate redundancy and inconsistent dependency automatically. It aims to handle the normalization process up to fifth normal. This includes creating tables and establishing relationships between those tables by using their general definitions in a step-by-step feature on the set of functional dependencies to remove redundant data. Then this system is tested on many examples with multiple candidate keys taken from different sources.

References

Automating the Lower and Higher Normal Form Process for the Database Systems

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Index Terms

Computer Science
Databases

Keywords
Functional Dependency    Keys    Redundancy    Normal Forms.