

SEMI INTELLIGENT SQL FRAMEWORK FOR RELATIONAL DATABASE MANAGEMENT SYSTEMS

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Structured Query Language (SQL) for Relational Database Management Systems has certain limitations. One of the most significant barriers is that the SQL is forced to make arbitrary determinations about what does and what does not fit the criteria the programmer has in mind. This means that how well the criteria fulfills the semantic meaning of what developer has in his mind. Selection of “good “students according to the marks they obtained for subjects is such an example. In recent years, researchers realize the need of new technologies to overcome the limitations of the SQL.

In this work, we propose a flexible and extensible semi-intelligent SQL framework for Relational Database Management Systems. The framework based on Statistics and Fuzzy Logic and works on the SQL layer of relational database management systems (RDBMs). An algorithm with two filters to extract and to filter data is developed. These two filters are taken from the SQL layer of RDBMs and are called Statistical Filter and Fuzzy Filter. Our framework facilitates retrieval of records for a given SQL statement in a meaningful way rather than retrieving records that just satisfy the given criteria. Experimental results confirm that the retrieved records match the semantic meaning of SQL statements.