

“Zaman”: An approach to a Temporal DBMS

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Abstract

There was within the last 50 years a lot of database applications in which time plays an important role. These applications revealed a lack in time support within the current DBMSs as the application should give the data the temporal semantics related to it, also to check the temporal constraints. Therefore, researches were made in order to embed this temporal semantics and constraints in the DBMS itself, also to provide a new query language that can be tagged as “temporal”.

This research is suggesting an approach in which we depend on encapsulating an existing RDBMS with a software layer that supports the temporal semantics and constraints and provides an interface to communicate with temporal applications, using a temporal query language similar to and temporally compatible with SQL-92 which we called zSQL, to eventually have a temporal DBMS we called “Zaman”

Keywords: Databases, time constraints

For the abstract in Arabic see pages (407-419).

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