



Efficient User Interface for Testing SQL

Background

Testing interfaces such as APIs and user interfaces is important part of software testing. In many DBMSs SQL is the main interface to manipulate with databases and data. Thus SQL tests cover all main functionalities of a DMBS. However, writing SQL tests is time consuming and existing user interfaces need to be improved to provide better productivity for testers and developers. A new user interface is needed to be developed for Starcounter SQL test framework. Starcounter provides the fastest high performance database for real-time transactional applications. Its In-memory, ACID-compliant technology reduces hardware costs by orders of magnitude. Starcounter is integrated with .NET.

Purpose and Scope

The purpose of this project is to develop an easy-to-use interface to specify tests with user queries and other input data, which vary between tests.

The following tasks are included in the project:

- Research on user interfaces in existing SQL test frameworks
- Analyze usability requirement for the interface
- Design a user interface to specify SQL tests
- Implement the interface in the SQL test framework of Starcounter
- Analyze usability of the implementation

The project is intended for one or two students.

Experience and Knowledge requirements

- Deep program development experience
- Experience in designing user interfaces: graphical, command line and text file based
- Experience in .NET
- Experience from using SQL
- Knowledge needed to perform thesis work

Presentation of results

The project should result in a working prototype and a report including the prerequisites, assumptions, individual performance result and conclusions.

Contacts for application and questions:

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