

Server for SQLite Database: Multithreaded HTTP Server with Synchronized Database Access and JSON Data-Interchange

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Abstract—SQLite database engine is small, fast, reliable, and does not need a server to work. And, if needed, multiple applications may work with same SQLite database, optionally, using filesystem sharing services. However, file sharing option is not always available and reliable in certain conditions. In this paper, we propose a server for SQLite database. This server will be using HTTP as communication protocol. To enable multiuser application, this server will be multithreaded. However, access to the database file will be synchronized to help prevent database corruption. And, as data-interchange format, JSON will be used. We also run several tests to make sure that proposed server is usable. Test results show that the database file is not corrupted, while still maintain acceptable performance.

Keyword—Embedded database, database server, HTTP server, concurrent programming, multithreaded application

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