

Method for developing unique database identifiers

Galiullin L.A., Valiev R.A.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© International Research Publication House At the stage of analyzing the application for the implementation of the structure allowing to optimize this task, the following tasks were performed: the analysis of the system's business processes was carried out; analysis of the system architecture; the problem is posed. At the next stage, the architecture of the structure of a unique identifier and its mathematical model were designed, and its uniqueness was tested and proved. At the last stage, the implementation, generator and application were described as a web service of the system. All the tasks and development requirements were met, the work was completed in full and on time. The unique identifier has surpassed the one in the .Net platform in performance, is compatible with all CLI languages, allows you to optimize the search not only for a specific relational database, but also for many other databases that use the principle of balancing unique values on the left N bytes in B-Tree, such bases are: MySQL, SQLite, MariaDB. The possibility of fast work with strings of one register and one encoding is revealed, due to the fast hashing algorithm.

Keywords

Analyzing, Information, Logic, Modification, Structure

References

- [1] Galiullin L, Khaziev E. Automation of ICE production planning. Journal of Advanced Research in Dynamical and Control Systems. 2019;11:1771-1774.
- [2] Khamadeev SA, Galiullin LA. Automation of computer technology analysis. Journal of Advanced Research in Dynamical and Control Systems. 2019;11(8):1767-1770.
- [3] Zubkov EV, Galiullin LA. Automation of testing for internal combustion engine under real conditions of driving. Journal of Advanced Research in Dynamical and Control Systems. 2019;11(8):1775-1778.
- [4] Khaziev E, Galiullin L. Algorithm for modeling the technological process of ICE production. Journal of Advanced Research in Dynamical and Control Systems. 2019;11(8):1754-1757.
- [5] Galiullin LA, Galiullin IA. Modeling of ic engines. Journal of Advanced Research in Dynamical and Control Systems. 2019;11(8):425-431.
- [6] Yarullin MG, Mingazov MR, Galiullin IA. Historical review of studies of spatial nR linkages. International Review of Mechanical Engineering. 2016;10(5):348-56.
- [7] Yarullin MG, Galiullin IA. Kinematic Research of Bricard Linkage Modifications. InAdvances in Mechanical Engineering 2016 (pp. 17-29). Springer, Cham.
- [8] Khaziev EL. Control of Linear Servo Pneumatic Drive Based on Fuzzy Controller and Knowledge Base. InInternational Russian Automation Conference 2019 Sep 8 (pp. 17-25). Springer, Cham.

- [9] Khaziev EL, Khaziev ML. Intelligent diagnostic system for hydraulic actuator. In 2019 International Conference on Industrial Engineering, Applications and Manufacturing (ICIEAM) 2019 Mar 25 (pp. 1-6). IEEE.
- [10] Galiullin IA, Galiullin LA. Fault diagnostic method for Ic engines. Journal of Advanced Research in Dynamical and Control Systems. 2019;11(8):2273-2279.