DISSERTATION ON

A DESIGN PATTERN FOR STORING RELATIONAL DATA IN A KEY/VALUE STORE

Submitted by

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Enrollment no: 010-544-047

in partial fulfillment for the award of the degree of

M.Tech (Computer Science)

Under Supervision of

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DECLARATION

I certify that,

a. The work contained in this thesis is original and has been done by myself under the general supervision of my supervisor.
b. The work has not been submitted to any other Institute for any degree or diploma.
c. I have followed the guidelines provided by the Institute in writing the thesis.
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e. Whenever I have used materials (data, theoretical analysis, and text) from other sources, I have given due credit to them by citing them in the text of the thesis and giving their details in the references.
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Place: Jamia Hamdard, New Delhi

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CERTIFICATE

This is to certify that the Dissertation Part – II (MT 601) entitled **"A Design Pattern for Storing Relational Database in a Key/Value Store"** done by Shamail Tayyab, Enrollment No. 2010-544-047, is an authentic work carried out by him at Department of Computer Science, FMIT under my guidance. The matter embodied in this project has not been submitted earlier for the award of any degree or diploma to the best of my knowledge.

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ABSTRACT

Relational database are very popular since 1970s and are extremely useful for writing a data storage solution when the queries are unknown and the questions are asked at the run time, but relational databases scale very poorly when the data grows to a large scale.

To overcome this problem, we tend to use key/value stores and start denormalizing data. This thesis reveals on how can one store a data which can be represented in a key/value store, but still looks very relational and support the operations that relational algebra can do.

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