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Implementing a Database from a Requirement Specification

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Abstract : Creating a database scheme is essentially a manual process. From a requirement specification, the information contained within has to be analyzed and reduced into a set of tables, attributes and relationships. This is a time-consuming process that has to go through several stages before an acceptable database schema is achieved. The purpose of this paper is to implement a Natural Language Processing (NLP) based tool to produce a from a requirement specification. The Stanford CoreNLP version 3.3.1 and the Java programming were used to implement the proposed model. The outcome of this study indicates that the first draft of a relational database schema can be extracted from a requirement specification by using NLP tools and techniques with minimum user intervention. Therefore, this method is a step forward in finding a solution that requires little or no user intervention.

Keywords: information extraction, natural language processing, relation extraction

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