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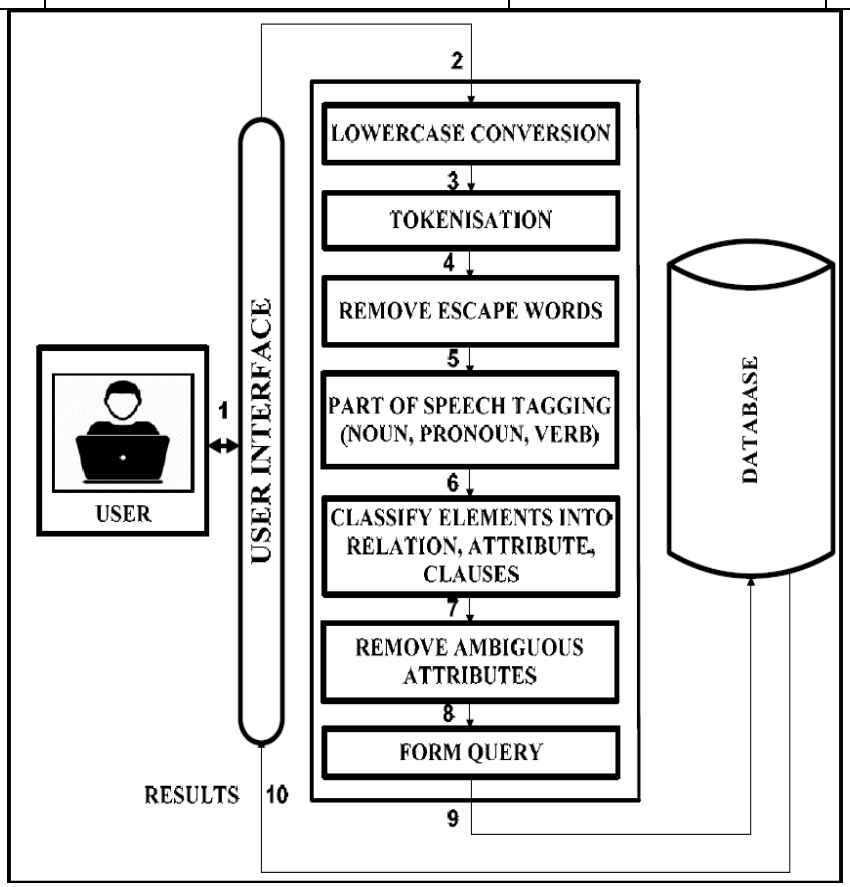
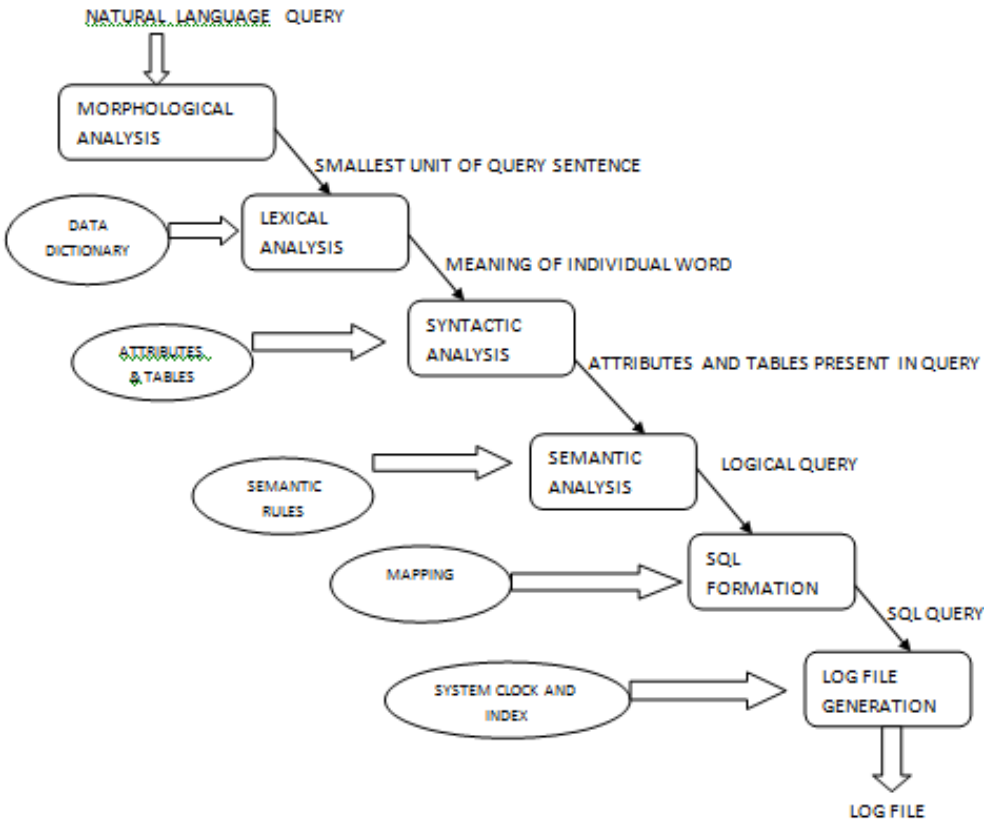
Introduction	Methodology	Results & Conclusions	Advantages & Disadvantages
Intelligent interface, to enhance efficient interactions between user and databases, is the need of the database applications	**1.** A series of steps like **lower case conversion, tokenization, speech tagging, database element and SQL element extraction** is used to convert Natural Language Query (NLQ) to SQL Query **2.** In this approach, some predefined structures are employed and the system is trained accordingly. The primary advantage of these structures is that they can be expanded whenever some new knowledge is discovered	To assess the old and new systems, question set consisting of 28 NLQ questions and 50 NLQ questions were fired. Based on the type of queries, confusion matrix is created and based on its values various performance factors are evaluated	The results show that the system had improved Recall, FNR (proportion of positives case queries which are incorrectly classified as negative.), error rate and Accuracy. However, There was minimal change in precision; TNR (proportion of negatives case queries which are classified correctly.) and FPR (proportion of negatives case queries which are incorrectly classified as positive.)which can be resolved in the future work.



Ghosh, P. K., Dey, S., & Sengupta, S. Automatic SQL Query Formation from Natural Language Query. In *International Journal of Computer Applications (0975–8887) International Conference on Microelectronics, Circuits and Systems (MICRO-2014)*.

Introduction	Methodology	Results & Conclusions	Advantages & Disadvantages
This system focuses on the solution of the problems arising in the analysis or generation of Natural language text or speech, such as syntactic and semantic analysis or compilation of dictionaries and grammars necessary for such analysis. It proposes the architecture for translating English Query into SQL using Semantic Grammar.	The objective is to parse the query and with the help of the dictionary, carry out different phases **like morphological analysis, syntactic analysis, semantic analysis and finally generate the SQL query.**	Accept the input from the user either in the form of speech and convert it to text or directly in the form of text.	This system is currently capable of handling simple queries along with some complex queries. Because not all forms of SQL queries are supported, further development would be required. Future improvements can be, Standard dictionaries like the Oxford dictionary can be added to the system to enhance its efficiency.



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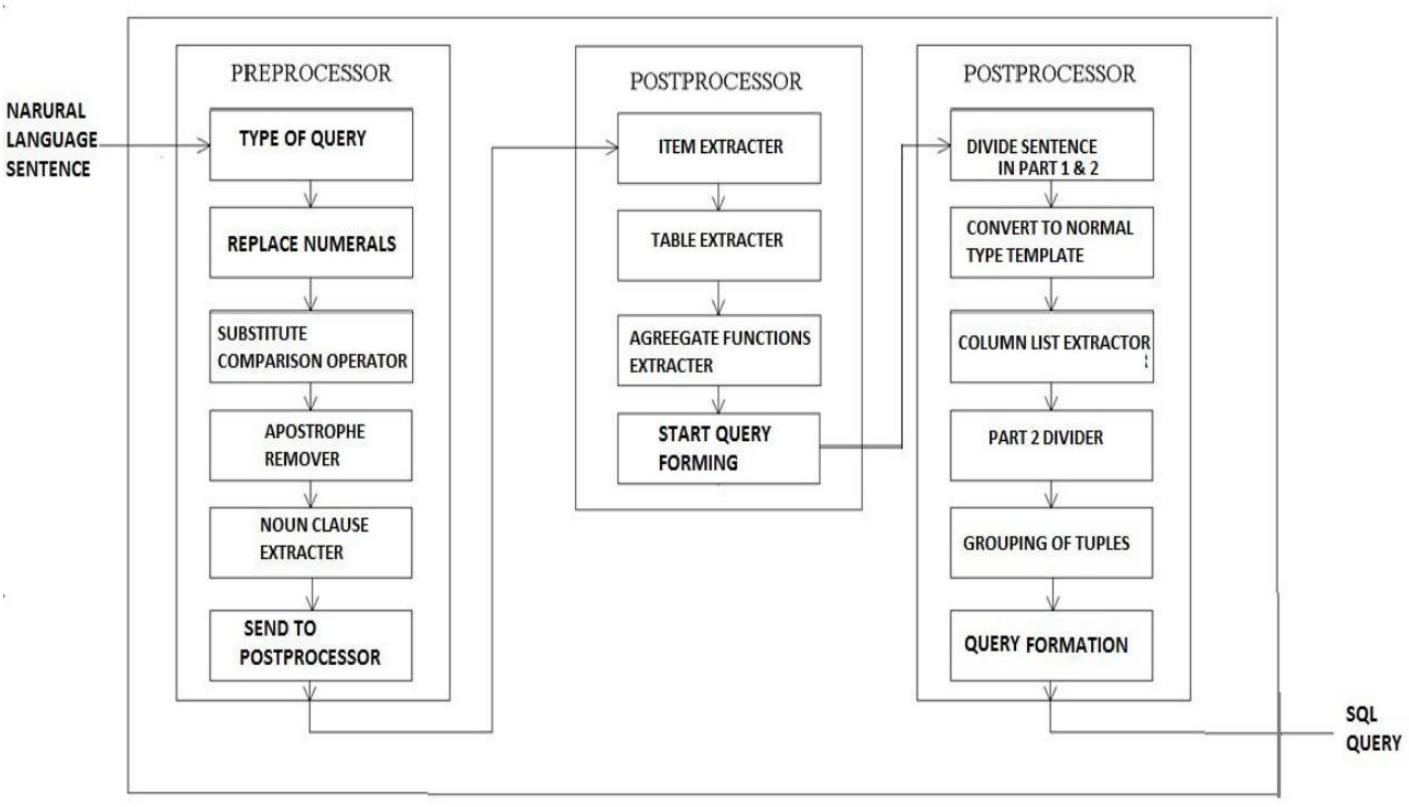
Introduction	Methodology	Results & Conclusions	Advantages & Disadvantages
Natural Language to SQL translator (NLS-to-SQL) is aimed at reducing this complexity of database querying. First it is necessary to use a language that is understood by anybody, whether an expert database programmer or person with no computer knowledge.	In NLS-to-SQL, input is the natural language statement which is the requirement specified by the user in terms of questions, which is given to the system. Internal system is divided into pre-processor and postprocessor and input is given to the pre-processor For implementation purpose the system is divided into three modules: **1. Pre-Processor** **2. Post-Processor** **3. Generation of SQL queries**	Mainly **the select clause is focused** rather than other DML clauses. Also the system is capable of translating the queries consisting of two conditions, having Apostrophe, aggregate functions etc.	There is a provision of converting numbers into words and vice versa Provision of updating a dictionary is also provided for the synonyms of words that are not being considered The system can be further enhanced to support multiple tables for the formation of SQL query. Also some mechanism of query optimization can also be used for better performance.



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Introduction	Methodology	Results & Conclusions	Advantages & Disadvantages
This project aims at developing a system which will accept English query from user and convert it into SQL. This helps novice user who can easily get required contents without knowing any complex details of SQL languages	There are 5 modules in this project. They are - • **User Interface** • **Process Query** • **Generate Intermediate** • **Formation of SQL** • **Formation of Output**	This system works fine with JOIN condition. This system also responds to complex queries. We can add more synonyms for column names and table names so that system is able to handle more queries. This system also provides some recommendations so that it is helpful for user.	This system **uses static database** so if we want to add any other table in database we also have to add grammar to handle queries for that table as grammar is hard coded but we can also remove this problem by constructing a dynamic framework in which user can dynamically add new tables and remove older ones. In this architecture we have to generate grammar dynamically which can be future enhancement for this system.