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Create SQL Query Using Natural Language Processing

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Abstract — *Databases and info technology area unit having major impact on the growing use of computers since info is that the major supply of data. To retrieve data from info needs the data of info languages like SQL. However, nobody is in a position to jot down SQL queries as they may not bear in mind of the structure of the info[1]. Therefore this has crystal rectifier to the development of interface that processes question through tongue. To design such a question processor, we tend to provide tongue[2][3] question to the query processor taken from the user. The processor parses the given question in tokens then it will linguistics analysis on question and converts it into equivalent SQL question[4]. We tend to area unit coming up with such processor that processes multiple databases (especially school connected information like TP dept., teaching dept., and so on.). It is step towards the event of intelligent info system to enhance the users in acting exible querying within the databases.*

Keywords- Initial state, Encryption, Context Provider (CP), Natural language processing, Ambiguity.

I. INTRODUCTION

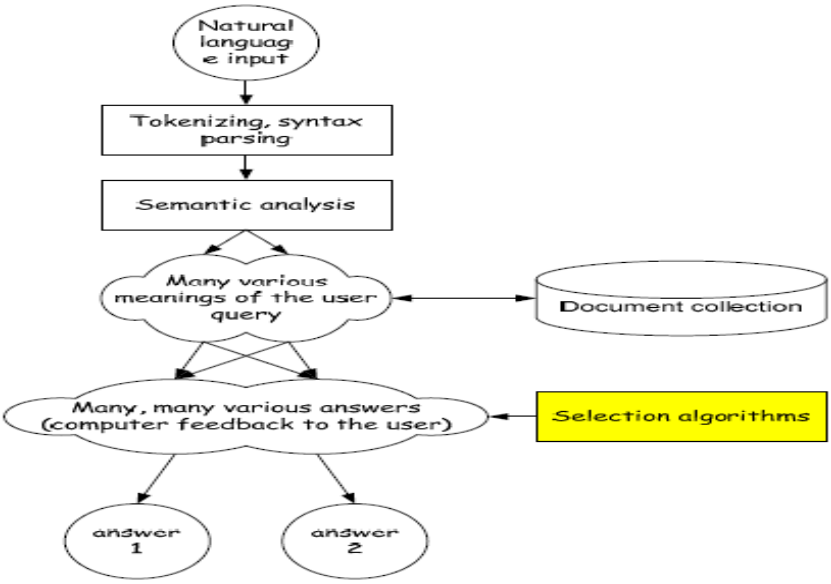
Nowadays there are too several information that maintain in organizations, firms and universities databases, but solely the people United Nations agency are at home with information query ways will directly use these information. It's clear that if folks will raise their question in tongue then the specified information prepare, the method can continue faster and with higher quality. Some ways and software like question by example software are designed, but these software don't have the flexibility to form a posh query.

To solve this downside, some industrial software have been represented[5] that execute lexical pars and semantic analysis on tongue sentences with natural language process then remodel them to SQL command language commands, that it will turn out the user's information from information. The most downside of the prior ways and software was within the linguistics analysis once they emit over one output for a single input. This downside has been resolved by considering an professional system[6][7].

II. PROPOSED SYSTEM

By providing an knowledgeable system, we have a tendency to area unit coding hidden mystery of natural language; the actual fact that common words tend to possess multiple meanings will lead to ambiguity, the knowledgeable system will maintains database that represents the state of the globe by looking at the context close the sentences and receives the most effective recognized from the text. We collect the required data for this method from an individual United Nations agency is tough in linguistic communication analysis, and enter this data into an knowledgeable system as a content. It finds the foremost similar entity name to the terms of input sentence supported searching this data base. This paper is presenting the results of mistreatment AN knowledgeable system beside common existing solutions for reworking natural language expressions to SQL search language. Result shows this method will be fully machine-driven.

III. SYSTEM ARCHITECTURE

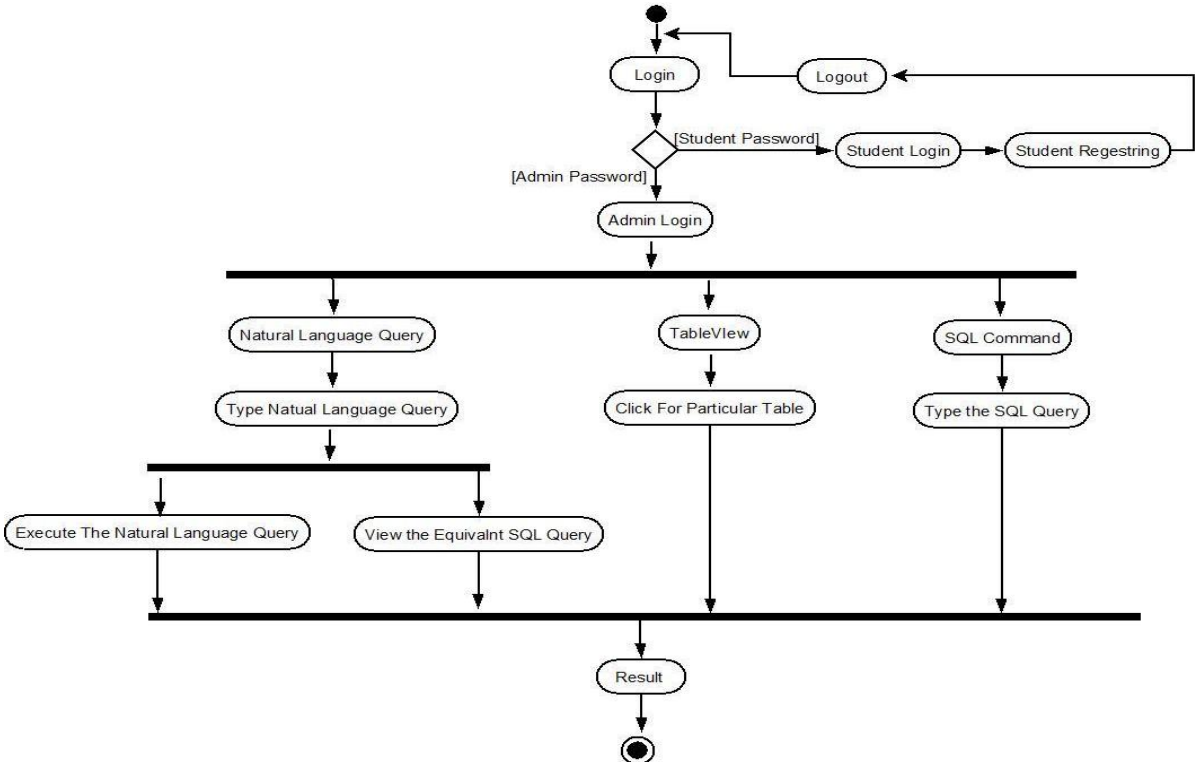


IV ACTIVITY DIAGRAM

Activity diagram shows the flow from activity to activity. Associate activity is associate ongoing non-atomic execution among a state machine. Activity ultimately result in some action that is created of workable atomic computation that end in a modification in state of system or the come of import. The activity diagram may be a assortment of vertices and arcs. It additionally contains FORKING and JOINING as shown in gure. Activity diagram ordinarily contains activity states and action states, transitions and objects.

The figure shows the activity diagram for question process system. There are three choices from admin login therefore the fork is shown and in nal state the result's generated therefore the be a part of operation is shown.

1. The Activity diagram represents the steps taken.



V. LITERATURE SURVEY

1. Individual words area unit analyzed into their elements and non word tokens like punctuation area unit separated from the words.

2. Syntactical Analysis Linear sequences of words area unit remodeled into structures that show however the words re-late to every different. Some word sequences is also rejected if they violate the language rules for the way words is also combined. as an example an English linguistics instrument would reject the sentence "Boy the go the to store ".

3. Linguistics Analysis The structures created by the syntactical instrument area unit assigned meanings. In different word mapping is formed between syntactical structure and objects within the task domain. Structures that no such mapping is feasible is also rejected. As an example In most universes the sentence "Colorless inexperienced concepts sleep furiously" would be rejected as semantically abnormal.

4. Discourse Integration that means of a personal sentence might de- pend on the sentences that precede it and should in uence the meanings of the sentences that follow it. As an example the word "it" within the sentence "John needed it" depends on the previous discourse context, while the word "John" might in uence that means of later sentence (such as "he continuously had").

5. Pragmatic Analysis The structure representing what was aforementioned is reinterpreted to see what was ac-tually meant. As an example The sentence "Do you recognize what time it is?" ought to be taken as request to be told the time.

V MATHEMATICAL MODEL

S={s, e, X, Fma, DD, NDD}
Where
s- Initial State: no user login
e- End state: by generating SQL query give output again natural language.
X- Input in natural language , user's info.
Fma- Geo encryption algorithm.
DD- Deterministic Data: group information.
NDD- Non Deterministic Data: data which we want to convert.
I = {username, Encryption key}
O = { success, out of region error}
Failure condition : Transaction fail due to encryption key or due to the going out of TD region.
Success condition : Successful transaction.

VI. ADVANTAGES

Logic server is an interface for the programs that square measure designed in prolog, and build them respectable and usable in different environments and different programming languages. In result we will produce applications, that they use advantages of prolog's logic rules.

VII. CONCLUSION AND FUTURE SCOPE

By providing associate degree knowledgeable system, we tend to area unit coding hidden mystery of natural language; the actual fact that common words tend to possess multiple meanings will lead to ambiguity, the knowledgeable system will maintains database that represents the state of the planet by looking at the context close the sentences and receives the most effective recognized from the text. We collect the required information for this technique from associate degree individual who is toughened in linguistic communication analysis, associate degreed insert this data into an knowledgeable system as a mental object. It finds the foremost similar entity name to the terms of input sentence

supported searching this data base. This paper is presenting the results of exploitation associate degree knowledgeable system beside common existing solutions for reworking natural language expressions to SQL search language. Result shows this method is fully machine-driven. In the future, to complete this method, an image processing system are going to be wont to notice queries and sentences mechanically. Another mental object can be made likewise to handle Persian language.

VIII. Applications

1. University Database.
2. College Database.
3. Company Database
4. Bank Database

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