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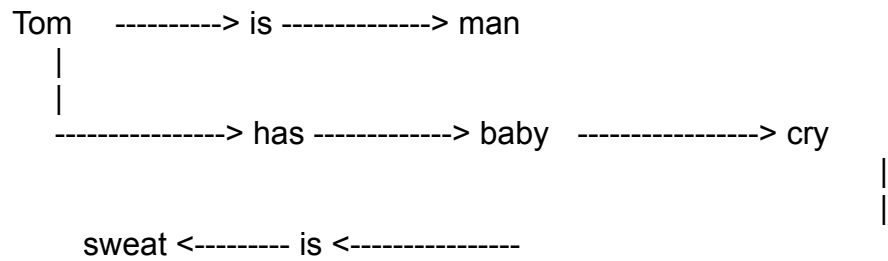
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Auto Mind

Auto Mind is a software product which takes natural language as input and creates semantic nets and saves in a file as knowledge base. It is capable of retrieving the given information in natural language format.

Semantic Net

Semantic nets are set of linked nets that represent meaning under a certain convention . A semantic net consists of elements pointing to each other and the logical interrelation of the elements represent the meaning. The following is an example of semantic net:



Semantic nets are represented by data structures saved in a file.

Knowledge Base

Knowledge base is set of rules and facts given represented by semantic nets saved in a file.

Open New Knowledge Base

To open a new knowledge base you should close all the open files and then select the following:

- 1 - Select File option at the top
- 2 - Select New option
- 3 - Enter the file name
- 4 - Click Ok

Auto Mind will create two windows, read in window and output panel . The newly opened knowledge base does not have any information and you should teach Auto Mind now.

Open Knowledge Base

To open an existing knowledge base do the following:

- 1 - Select file
- 2 - Select open
- 3 - select the file name
- 4 - Click Ok

Auto Mind will create two windows, read in window and output panel

Delete Knowledge Base

To delete a knowledge base do the following

- 1 - Select file
- 2 - Select delete option
- 3 - Enter file name
- 4 - Click Ok

Exit

To exit Auto Mind do the following

- 1 - Select file
- 2 - Select exit

Define A Word

As the word is defined, Auto Mind will respond "I got the definition" at the output Auto Mind should recognize every word in a given sentence, so before a sentence is given you should make sure all the words of that sentence is defined. To define a word you should use the following sentence and then click the process button in the input window.

<word> is noun

<word> is name

<word> is verb

Example

We would like to tell that car has engine. We know "has" is already known to Auto mind as a verb, but "car" and "engine" are not. So we should give the following sentences.

car is noun

engine is noun

car has engine

Teach

Auto Mind can learn. It remembers the information given. The information is in the form of sentences and should be given from read in window . The given information will stay in the knowledge base currently open.

You can teach Auto Mind many things. So you can use Auto Mind as:

Telephone Directory

Dictionary

Notepad

Helpdesk

The user version can process a text file containing sentences after another. This is called Batch Processing . So you can create a file with all factual sentences and enter them into the knowledge base.

Read in Window

Read in window is a window that takes the input and processes. This window is created when a knowledge base is open. So in order to use this window to give input to Auto Mind you should open knowledge base or open new knowledge base

Ask Question

Auto Mind can answer when you ask a question. If the answer is known, it will be printed in the output panel, if not an appropriate message will be printed.

Example 1

Lets say Auto Mind knows that "car has engine". The following table represents the response for any possible question regarding that fact.

	Question	Answer
car	who has engine	
engine	what has car	

Output Panel

Output panel is a window that displays the answer of the questions, or any possible comment on informative sentences. This window is created when a knowledge base is open. So in order to use this window to give input to Auto Mind you should open knowledge base or open new knowledge base

Use As Phone Directory

Auto Mind can take a sentence which informs of someones phone number and remembers. It can answer when it is asked about it. Remember all the words in the sentence should be known to the knowledge bases currently open .

Example 1

We would like to tell that "Tom's phone number is 555-1212 ". We should make sure that all the words are known and issue the sentence. Later on if you ask what is "Tom's phone number " or " what is phone number" or " what is number " Auto Mind will give any category of answer that matches the question.

The following is the sequence of the sentences given to Auto Mind in read in window.

Tom is name
phone is noun
number is noun

Tom's phone number is 555-1212

what is Tom's phone number
what is phone number
what is number

As you make the scope of the answer big more will be covered and more answer you might get.

Use As Dictionary

Auto Mind can take a sentence which gives a meaning to a word so it can be used as dictionary.

Example 1

We would like to tell that big means large. In this case the sentence should be big means large. But we should make sure that "big" and "large" are known as noun and "mean" is known as verb.

big is noun
large is noun
mean is verb
big means large

Note Pad

Auto Mind can take a sentence which represents a fact and can answer when asked about it.

Example 1

We would like to tell that car has engine. We know "has" is already known to Auto mind as a verb, but "car" and "engine" are not. So we should give the following sentences.

car is noun

engine is noun

car has engine

Use As Helpdesk

Auto Mind can be specialized in knowing a certain science such as history, geography, computer programming, etc.

Batch Processing

Batch processing is putting all the sentences in a file and input them at once. To do batch processing do the following:

- 1 - Have your text file ready with all the sentences. You can use any editor.
- 2 - The extension of the text file should be txt.
- 3 - Have the knowledge base open.
- 4 - At the menu bar select Tool
- 5 - Then select Batch
- 6 - Give the file name, then click Ok button

You will see that each sentence of that file is being processed.

Grammar

Auto Mind takes subset of English as the grammar. The following is the grammar in effect.

```
Sentence -----> Dsent.
Sentence -----> Qsent.
Dsent -----> Subject Predicate
Subject -----> CxNounProp
Subject -----> name
Subject -----> NameAp CxNounProp .

CxNounProp -----> noun MoreNoun
MoreNoun -----> noun MoreNoun
MoreNoun ----->
Predicate -----> verb3 SubjC
IPredicate -----> verb3 SubjC
SubjC -----> Subject
SubjC -----> (any data)

Qsent -----> IntExpa Predicate
Qsent -----> IntExpb IPredicate
Qsent -----> IntExpb DoesPhrase
DoesPhrase -----> DoesEx Subject verb
IntExpb -----> IntExpa CxNounProp
IntExpPr -----> IntExp
NameAp -----> name + 's
verb3 -----> verb + s
verb3 -----> verb
```

