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AI BASED CHATBOT

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Abstract :- Chatbots are software agents that interact with the user in a conversation. The main goal of their creation was to resemble a human being in the way they perform said interaction, trying to make the user think he/she is writing to another human being. This has been implemented with varying degrees of success. One of the most popular languages for the definition of a chatbot knowledge base is artificial Intelligence Markup Language(AIML).This thesis focuses on the implementation of an AIML interpreter written in javascript to allow for a web-based client-side specific usage of AIML chatbots.The interpreter must guarantee the compliance of properly formed AIML documents, perform all the necessary pre-processing duties for the correct usage of the chatbot and ensure the correctness of both pattern matching of user input and chatbot response. The interpreter fully exploits the Document Object Model(DOM) tree manipulation functions of the jQuery library to achieve said goals,treating AIML files as if they were normal XML files The result is a well performing,fully functional AIML interpreter tailored around AIML 1.0 specification.Achatbot is software that is used to interact between a computer and a human in natural language. Naturally, it can extend daily life, such as help desk tools, automatic telephone answering systems, to aid in education, business and e-commerce.

Keywords:- Chatboat, AIML, DOM

I. INTRODUCTION

1.1Basic of Chatbot

Chatbots (also known as Chatterbots or chatter robots) are software agents that simulate an entity, usually a human counterpart of vague or specifically defined characteristics, with whom the user can interact in a conversation (either written, oral, or mixed). One of the first and main goals of chatbots has always been to resemble an intelligent human person and make it hard or impossible for the other party of the conversation to understand their real nature (as in artificial). With the development of more and more chatbots of various architecture and capabilities the purposes for their usage has widely broadened.

These chatbots can prove sufficient to fool the user into believing they are "talking" to a human being, but are very limited in improving their knowledge base at runtime, and have usually little to no means of keeping track of all the conversation data .

Chatbots, which are software agents with an artificial intelligence that allows them to understand the user input and provide a meaningful response according to pre-compiled knowledge. The chatbots can be pedagogical agents or personifications of historical figures who will be able to talk about their life and work. The chatbots are developed with the Artificial Intelligence Markup Language (AIML2) since the group has previous experience with that.
Project mainly consist one software which will be made up using Artificial Intelligence and will enable user to chat with system.A Chat-bot is a conversational agent that interacts with users using natural language. Numerous applications of Chat-bots such as Customer Service, call centers etc

If a person is new in the town and want to roam the malls in town he will face many difficulties.He have to ask many people to guide him to the mall.many of them will take advantage and mislead him as he is new.He will waste his time as well as more money as he will be misguided.In this project we are using Artificial Intelligence to make robot which will help him/her to guide to the mall.It will help to find ways to the outlets he want to

visit,show the movie's show timings in the mall,show the discounts on a particular item in entire mall.This will be done in verbal and textual form[2].

1.2 VERBOT ENGINE

Currently Verbot only works in Microsoft Windows Verbot is coded almost in C# language and requires Microsoft .Net 1.1 or higher to execute. The main process which makes all these happens is verbot4engine.exe (VERBOT) and agentsvr.exe (Microsoft Agent). Whenever a knowledge base is clicked or added it will be loaded into the verbot player's memory now when you type (chat) with verbot your inputs will be compared to the inputs in the VKB or CKB files, if the searching founds a match the programs returns the output from the rule where that particular input was found, if the input wasn't found then the engine returns the default outputs from the '*' (wildcard) provided it was already scripted, if not then verbot won't say anything now the output string is parsed with the agentsvr.exe and is converted into voice (if the output contains msagent tags it will also parsed by agentsvr.exe to reproduce the animations or special functions) in the same way advanced features like 'learn', 'mem', C# commands are also parsed by the verbot engine[3].

1.3FILE TYPES WHICH MAKES VERBOT WORKS

1.3.1 CKB (Compiled Knowledge Base)

The standalone knowledge base, usually is a compiled version of the VKB (source) file and will be smaller in size related to VKB, but holds every things which is in the VKB's.

1.3.2 VKB (Verbot Knowledge Base)

An XML based File, which holds the rules, inputs, outputs. This is actually the source of the knowledge base which verbot uses and this is the file, which we open via the verbot editor.[4]

II. EXSISTING WAYS IN WHICH MALL GUIDES THE CUSTOMER

Many times we go for shopping and to a mall to watch a movie. We have so much of time and we waste our time to decide to buy from which shop. Our application works as a virtual robot. As soon as we enter the shop name we come to know which shop has the most discount and it utilizes our time. we can do shopping according to the latest or biggest sale and can save our money and time.We can also do chatting with robot in verbal and textual form. It will help us to give navigation of the shop and we can reach to the shop without wasting our time. The robot will guide us with the perfect direction and we can reach to the shop easily. Thus it saves our time and money[1].

III. PROPOSED SYSTEM

Inorder to provide a proper guidance to the visiter of a mall therean virtual robot who guides us with the navigation and according to the latest discount going on in the shop. Another advantage concerning the path is solved as we can search for the shop and get the path. In addition, it will provide us accurate path without wasting our time.

The main objective of the system is to utilize our time and do not waste it. This is practical, reliable and eliminates time loss. A further objective is to present a system that can accurately evaluate where we can go for shopping and which path to follow.

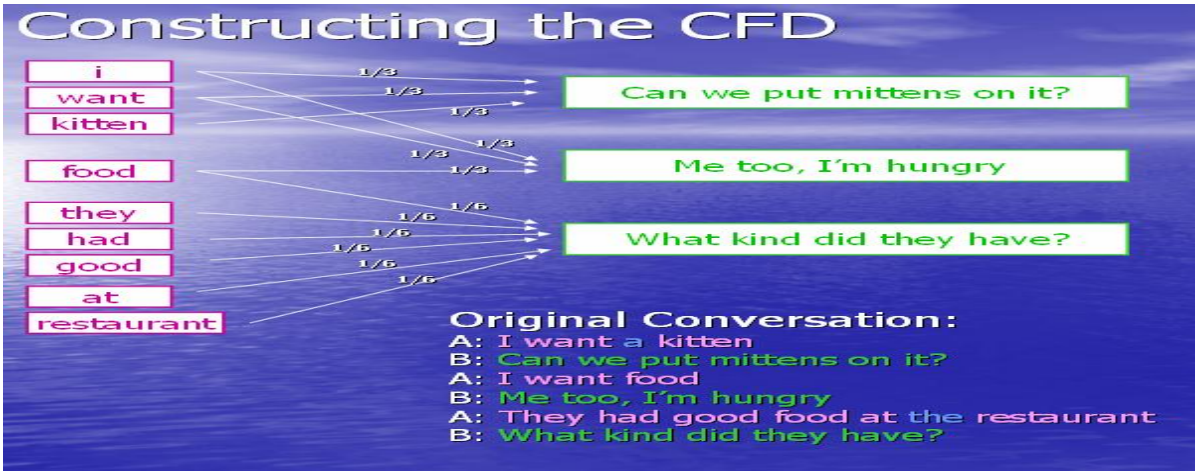
3.1procedure

If the chatbot was trained on real conversations, rather than just using generalized forms ofthe most common sentence types, I hypothesize the chatbot could generate more interestingconversation. This would still be Case Based Reasoning but rather than using generalized data, theprogram would store past conversation explicitly, and mimic a given screen name personality. Thechatbot would only reply using responses learned from the training corpus, and would thus havemore emotional and personality content than other chatbots[3][4].

Steps:-
1. Composing the Training Corpus
2. Parsing the Training Corpus
3. Constructing the Conditional Frequency Distribution

```
# for each prompt words list 'sentMessageWords' and corresponding response:
    weight = 1.0 / len(sentMessageWords)

    for word in sentMessageWords:
        cfd[word].inc(response, weight)
```



4. Using the Conditional Frequency Distribution
5. Handling Cases Without Good Statistical Responses
6. Putting it on The Web

IV. CONCLUSION

We have surveyed several chatbot systems which succeed in practical domains like education, information retrieval, business, e-commerce, as well as for amusement. In the future, you could "imagine Chatterbots acting as talking books for children, Chatter- bots for foreign language instruction, and teaching Chatterbots in general". However, in theeduation domain concluded that "the teacher is the backbone in the teaching process. Technology like computer algebra systems, multimedia presentations or chatbots can serve as amplifiers but not replace a good guide". In general, the aim of chatbot designers is to build tools that help people, facilitate their work, and their interaction with computers using natural language; but not to replace the human role totally, or imitate human conversation perfectly."We need not take human-human conversation as the gold standard for conversational exchanges. If one had a perfect simulation of a human conversant, then it would be human-human conversation and not human- computer conversation with its sometimes odd but pertinent properties.

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