

Ask Me Queries Counter

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Abstract- The field of artificial intelligence (AI) has shown an upward trend of growth in 21st century. The evolution in AI has advanced the development of human society in our own time with dramatic revolution shaped by both theories and techniques. However, the multidisciplinary and fast growing features make AI a field in which it is difficult to be well understood. Existing systems such as websites for colleges has information about college (department, faculties, placements etc.) which needs to be searched by traversing through website which becomes time consuming. Our proposed system "Ask me queries counter" which typically provide a text or voice based user interface, allowing the user to type commands or queries and will get replies using an effective graphical interface, if real person is copying to the user.

Keywords- Chatbot, text or voice based agent..

I-INTRODUCTION

Chat bots are virtual agents which will converse like humans are interacting. They will try to answer your questions or doubts through chatting medium as if human is interacting with you. This project deals with creation of a chatter bot which will answer College related queries quickly as possible .As a fresher or unaware person we need basic information to know about college ,this application will help in providing such enquiry information through chatting medium. The system will use bigram and sentence similarity algorithms to give appropriate answer to the user. If the answer is found invalid , then there is a system to declare the answer invalid. This invalid answer can be deleted or modified by the administrator of the system.

II-LITERATURE SURVEY

The paper describes a novel method is proposed where bigram is applied to quantify the text and improved information gain algorithm are used to create appropriate feature during text categorization . The paper illustrates the implementation and semantic enhancement of domain oriented question answer system based on pattern matching chatbot technology developed within industrial project FRASI . In this paper a modular knowledge base is equipped with the conventional architecture. It helps in building a specific module that deals with a particular feature of the conversation. This enhances agent's interaction capabilities . In this paper conversation of agent based on modular knowledge representation is proposed. It has a dynamic and flexible behaviour . Because of the modularity of the architecture it allows a concurrent and synergic use of different techniques making it possible to adapt to the specific characteristics of the domain. It has set of modules which is automatically triggered through a component .chat Bots uses appropriate mapping techniques to transform ontologies and knowledge into relational database and then use that knowledge to drive its chat. Uses rule matching to match the sentence . Here the growing problem of malicious Chabot are taken into consideration and provide a supporting evidence to distinguish between human and chat bot processing.

III- PROPOSED SYSTEM

This system helps the student to be updated about the college activities and for new students all information related to our college. User does not have to go personally to college office for the enquiry instead he has virtual agent our system helping him through his queries. Hence it saves time and is time efficient system. In modern era , generation has keen interest in texting rather than using mails, engaging them through

chat bots will be a good option for our proposed system. User of the chatbot will input with queries i.e. will ask question to our virtual agent in form of text or voice. All user interaction is built in unity platform. Further this information depending on whether it is text or voice will be taken into consideration. If it is voice then first it will convert into text form and if it is text then directly Keywords of our questions will be matched using String and Pattern matching algorithms. The data from where matching of algorithm will take places comes from our database which is dialog flow here. It uses string matching and pattern matching algorithms. Dialog flow contains intents which are developer defined data initially fed into database. Final step involves fetching output on screen which is possible only after connectivity is established between Unity engine and Dialog flow. Hence result will be displayed on screen.

Speech analysis can be divided into three stages: (i) voice recognition and conversion to text, (ii) text processing, and (iii) response and action taking. These stages are explained as follows:

Firstly, speaker independent speech passes through a microphone to a digital signal processing package built in the computer to convert it into a stream of pulses that contain speech information. Specific instructions can be used to read input speech then to convert it into text. This stage provides speech text for processing in the next stage. The diagram which illustrates this stage is shown in following fig.

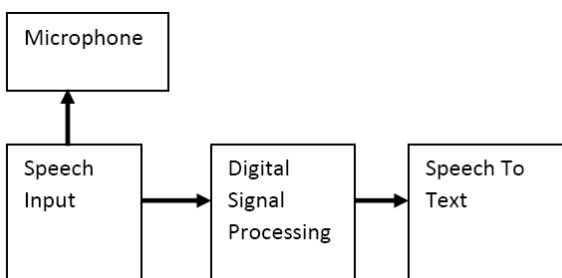


Fig 1- The stage of speech recognition and converting to text

Secondly, the resulting text is split into separate words for tagging with parts-of-speech labels according to their positions and neighbors in the sentence. Different types of grammar can be used in this stage to chunk the individual tagged words in order to form phrases. Keywords can be extracted from these phrases by eliminating unwanted words in chunking operations. These keywords can be checked and corrected if they are not right. Finally, a Chatbot can be built to give the

desired intelligent response to a natural language speech conversation. The input to this Chatbot is keywords released from the speech text processing; the output is the programmed response, which will be, for example, an application running .

Conversation techniques between a human and a computer can be either chatting by typing text or speech dialogue using the voice. The processing of the information in both techniques is the same after converting speech to text in the case of speech dialogue. A diagram showing the main steps of analysis and processing required to perform human computer conversation .

The main parameters which affect human computer interaction quality in conversational systems design are: (i) the techniques used to analyse the text using different grammar sets to produce keywords, (ii) pattern matching techniques used inside the Chatbot and depend on a variety of data base access techniques and (iii) the type of response according to the specific application. The focus in this survey is mainly on Chatbot design techniques and a comparison is made between them in terms of the software used, the contribution to the research field in new techniques, and the breadth and depth of the knowledge base used.

Our Approach :

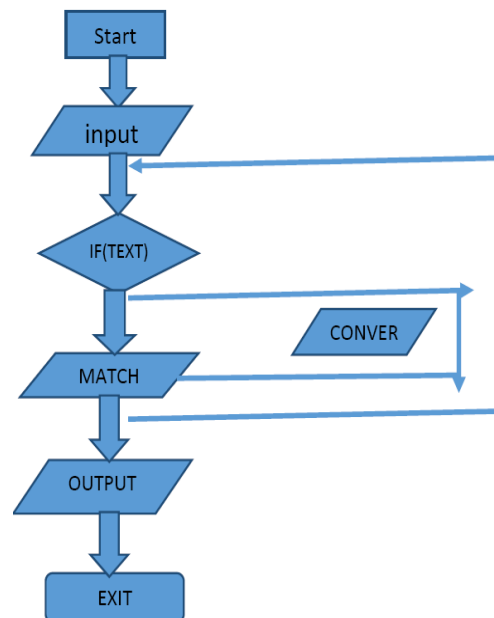


Table 1-Performance and functionality of our system

Category	Quality Attribute	Reference
Performance	<ul style="list-style-type: none"> ● Graceful degradation ● Robustness to manipulation ● Robustness to unexpected input ● Avoid inappropriate utterances and be able to perform damage control ● Effective function allocation, provides appropriate escalation channels to humans 	<ul style="list-style-type: none"> ● Cohen & Lane (2016) ● Thieltges (2016) ● Kluwer (2011) ● Morrissey and Kirakowski (2013) ● Staven (2017)
Functionality	<ul style="list-style-type: none"> ● Accurate speech synthesis ● Interprets commands accurately ● Use appropriate degrees of formality, linguistic register ● Linguistic accuracy of outputs ● Execute requested tasks ● Facilitate transactions and follows up with status reports ● General ease of use ● Engage in on-the-fly problem solving ● Contains breadth of knowledge, is flexible in interpreting it 	<ul style="list-style-type: none"> ● Kuligowska (2015) ● Eeuwen (2017) ● Morrissey & Kirakowski (2013) ● Wallace (2003) ● Ramos (2017) ● Eeuwen (2017) ● Solomon (2017) ● Cohen & Lane (2016) <p>Humanity</p>

IV- CONCLUSION

This paper provides with information on building an effective College enquiry system. By using the information on use of database and application platform it becomes easier to built any application. It was a successful attempt in building a ask me queries counter, which provided basic information about college. Our system has worked like a agent answering all question and making task easier.

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