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Chatbot Analysis

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Abstract: *Chatbot is broadly popular now-a-days and easily spread speed as an application of computer communiqué. Some programs respond sharply like human. This type of program is called a Chatbot. For this purpose, many open source platforms are available. Artificial Intelligence Markup Language (AIML) is derived from Extensible Markup Language (XML) which is used to build up a conversational agent (chatbot) artificially this paper address the design and execution of a Chatbot system. We will also study another application where Chabot's could be helpful and techniques used while designing a Chatbot.*

Keywords: Chatbot, Communication, Pattern Matching, Request, Response, Designing.

I. INTRODUCTION

A chat bot (in addition experienced as a talk bot, bot, chatterbox, artificial taking pleasure in talk thing) is a computer program which guides a talk via auditory or of, in the wording ways of doing. Such programs are every time designed to work out how a to do with man would do as a taking pleasure in talk person working with others, there by going past, through the Turing test. It is used in talks between persons form and size for different useful purposes including person getting support or goods support or news given property. chat bots are usually got changed into the talks between persons systems of, for example, made automatic on-line helpers, giving them the power of, for example, small talking or making connection in normal conversations without relations to the important of their first expert systems. College question chatbot undertaking will be made using artificial intelligence algorithms that will get at the details of users questions and get through knowledge of users note.

This system will be a net application which will make ready answer to the questions of the learners. Students will just have to select the group for the divisions of an organization questions and then request the question to the bot that will be used for having little talks.

The answer to the question will be answered on the base of the user questions and the knowledge base. The important keywords will be got from the keywords and the answer to those keywords will be looked for in the knowledge base. If the match is discovered, the point answer will be on condition that to the user or the Default note will be made clear to the user that "Answer to this question is not ready (to be used) at the short time, please go back after some time".

The "keyword matching" algorithm will be used to match the keywords from the knowledge base In some examples, user may get out that the answer given to his/her question is not to the point. In such examples, the user can mark this answer as ill, feeble person, and an example of this ill, feeble person answer will be sent to the controlling organization flat square bit at the same time. whenever controlling organization will make record in, he will get to see the answers which are marked ill, feeble person and then he can do the necessary changes to the knowledge base so that user will get the accurate outcome when he will request the same question next time.

The system will have 2 types of users. First of all the user will be the controlling organization, who will grip the complete work system, and the other sort of the user will be learners. Without the number on a list no user can way in system and after the number on a list user will have way of marking out a person or thing and password for login purpose after that learner can request questions to system. Then after with a good outcome the number on a list, the learner can request his questions. If user has a quite good Internet connection, he/she will get the answer to his/her questions in the general time. The general answer time will be around 3-5 seconds as the process has to do with having attraction, pleasing the keywords from the users question, looking into it in the knowledge base and then making clear the out-put. If the user has a bad Internet connection, it will take some more time for him to get the out-put.

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II. Problem Statement And Definition

A talking man-like machine is a computer program that is designed to simulate talk with the users, often over Internet. Furthermore the Analogy that talking man-like machine often gives attention to a talk like a ready, without fear of physical amusement act of sending a ball over a net can be used to make, be moving in the conversation moving liquid of the talking man-like machine, i.e. get message, answer, get message, answer, and so on (The Oxford word-book, 2018).deryugina (2010) provides almost the same statements of, but makes an addition the word marked power of thought before communication, specifying the need for of quick, ready brain answers rather than just random ones. The talking man-like machine technology has been said something about to by many names, the more put up ones cover: talking man-like machine (is able to be spelled chat bot, chat-bot as well), Chatterbot, Conversational agent, taking pleasure in talk System and education operation person acting for (or of quick, ready brain education operation person acting for, Ipa. The lasts only used in about education frames or about education papers. (Deryugina, 2010; doering Veletsianos, and Yerasimou, 2008; Heller and Procter 2009). Talking man-like machines are make in many ways, but a having general approval and quite simple way is through the use of AIML, which is presented in the next section. Chatbots are sloping, having a tendency and they can now be discovered in almost every industry from e-commerce to journey. The increased use of late may be because of, in relation to get more out of language processing or the more readily got to development apparatus for making or put right things for non-developers. It may also be that many talking man-like machines are made ready (to be used) through chief directions sending word applications, thus not forcing the user to download yet another application and letting them to keep using an application they are already comfortable with.

III. Proposed System

In offered system there 2 main parts of a greater unit controlling organization and user

- **Controlling Organization**: controlling organization is responsible for a business managers of user checking to make certain. Without the act of making certain of and authentication of the controlling organization, user cannot way in the application. Admin is also responsible for adding user and restricting user to way in application and take out user. If he/she post not wanted stuff.
- **Learner/User:** Learner /user have to recorded, listed with system using nothing like it way of marking out a person or thing and let-through secret word. After that admin authenticate user. After checking to make certain of controlling organization user can way in the system and request the question /questions to the system. And get answer. The questions and questions request by the learner get stored in the database with the complete work details of student including time and day.

IV. System Architecture

The system works in two modes, text and voice. When user gives the input in text format the primary mode is activated. The user input is passed to the middleware API for the response. On other hand when user gives the voice input then second mode is activated, during this voice mode we first convert the voice into text before sending it to middleware API. Middleware is that the model which connects the AIML scripts with our android app. When user input is received at the middleware, it's passed to the pattern matching algorithm which runs over the AIML scripts. During this process, firstly the pattern matching algorithm is executed for matching of the valid response from the available AIML scripts. When pattern is matched, the corresponding template is return to the middleware. Then Middleware encodes the template into the JSON format and sends the reply to the android app. After receiving the response app decode the JSON and provides the response to the user. The response generation process is administered with two phases.

A. Preparation of Pattern Matching Each input to the AIML interpreter is undergone two main phases.

- Normalization Process for input.
- Producing input path for every sentence.

B. Pattern Matching Behavior Here we attempt to find the biggest matching pattern and best one by word by word matching of the input. This behavior can be described with Graph master set of files and directories containing a collection of nodes which is named node master and branches represents first words of all patterns.

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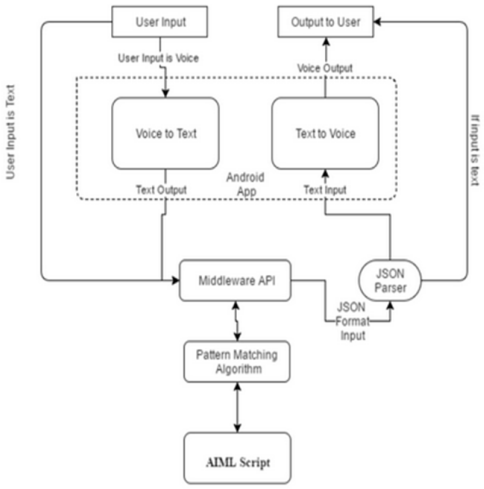

Figure 1: Architecture of Chabot System

V. ALGORITHM

User upload the text record in the system which get trained by system and get stored in the database that use in the application. Once the text record is uploaded user get having necessary qualities to request the question to the system.

1. Input question: -User input/ask the question based on uploaded text record to the system.
2. Moving question: -The question related to the uploaded text record and user input get put on view in queue.
3. Selecting Object: -The system selects the thing from user question and match with moving question.
4. Read text record what is in and making into line by line: -The system eats text record what is in and broken into bits the user request question line by line to match with moving question.
5. Check thing line by line: -A system checks input question /thing and produce the answer base on request question, uploaded text record using moving question and other data.
6. Join Answer: -Generated answer get join with question and get put on view to the user.
7. Profit answer: user get put on view request question in company with join answer through talking man-like machine system all the request question, uploaded file, produced answer all this facts get stored in MySQL database that is used in the system.

VI. ADVANTAGES AND DISADVANTAGES

6.1 Advantages

- Reduce Cost
- 24*7 Available
- Multiple Customer Handling
- Find Route and vehicle Number

6.2 Disadvantages

- Time Consuming
- Network barrier
- Less Understandable

VII. FUTURE SCOPE

Chatbots also are said as virtual assistants. It's a rudimentary type of study software which can mimic human conversation. The Chatbots are analyzed and improved. It is often employed in various fields like education, business, online chatting etc. it should be utilized within the sphere of education as a learning tool. The knowledge necessary for education are stored within the info base and can be retrieved any time by querying the bot. In business field, it is often accustomed provide

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business solutions in an efficient way. When the solutions are efficient, the business is improved and also the expansion of the organization are visiting be increased. This Chatbot could even be utilized in online chatting for entertainment purpose. People can chat with these bots online once they're bored for the aim of entertainment. These bots could even be accustomed learn different types of language. The language that has got to learnt is stored within the database and can be learnt by asking inquiries to the bot. they 'll even be utilized within the sphere of medical to resolve health related problems. Chatbots are visiting explode and can be really dominating in future. They're giving AI something better to do to. Chatbots usually store contextual data which could use within the detection of geo location or a state (which data is required that step when communicating with a bot?). This might even be a sign or other private data, and no-one knows whether the information is encrypted before it gets saved to a database. Since Chatbot predicts and provides accurate response to a posed question, it's hard to imagine the long term without a Chatbot.

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REFERENCES

[1]. Program-O | Github Program-O Home URL https://github.com/Program-O/Program-O
[2]. Shawar BA, Atwell E, "A comparison between Alice and Elizabeth chatbot system,"University of Leeds, School of Computing research report 2002.19
[3]. S. Laven (2013), "The Simon Lave Page", Available at: http://www.simonlaven.com.
[4]. Animesh jain1 Mohan Vishal Gupta2 1 Scholar, FOECS, TMU, Moradabad 2Assistant Professor, FOECS, TMU, Moradabad National Conference on Industry 4.0(NCI-4.0)
[5]. Lili, Z., & Yanli, W. (2010). Design of Harmonious Human- Computer Interaction Based on Intelligence Technology Development. 2010 International Conference on Intelligent System Design and Engineering Application. doi:10.1109/isdea.2010.17
[6]. D'Haro, L. F., & Banchs, R. E. (2017). Learning to predict the adequacy of answers in chat-oriented humanagent dialogs. TENCON 2017 - 2017 IEEE Region 10 Conference. doi:10.1109/tencon.2017.8227907
[7]. Joseph Weizenbaum. ELIZA a computer program for the study of natural language communication between man and machine. Communications of the ACM, 9(1):36 45.
[8]. Richard S. Wallace. Be Your Own Botmaster: The Step By Step Guide to Creating, Hosting and Selling Your Own AI ChatBot On Pandorabots. ALICE AI foundations, Incorporated.
[9]. Smart Information Chatbot Ashwini Mahendiran1 , Anbarasi Raman2 , Dr. Raju R3 1, 2, 3 Department of Information Technology , Sri Manakula Vinayagar Engineering College International Journal for Research in Applied Science & Engineering Technology (IJRASET) ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 6.887 Volume 6 Issue III, March 2018