© 2018 IJSRST | Volume 4 | Issue 3 | Print ISSN : 2395-6011 | Online ISSN: 2395-602X



National Conference on Advances in Engineering and Applied Science (NCAEAS) 29th January 2018 Organized by : Anjuman College of Engineering and Technology (ACET) Nagpur, Maharashtra, India, In association with International Journal of Scientific Research in Science and Technology



"Interactive College Enquiry Using Bot"

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ABSTRACT

Chat bots typically provide a text based user interface, allowing the user to type commands and receive text as well as text to speech response. Chat bots are usually stately services, remembering previous commands in order to provide functionally. When chat bot technology is integrated with popular web services it can be utilized securely by an even larger audience. User interfaces for software applications can come in a variety of formats, ranging from command-line graphical, web application, and even voice. While the most popular user interfaces include graphical and web-based applications, occasionally the need arises for an alternative interface. The college enquiry chat bot will be built using artificial algorithms that analyzes users query understand users message. This System will be a web application which provides answers very rapidly. Students just have to place their query to the bot which is used for chatting. The system will use the artificial intelligence algorithms to give appropriate answers to the user. If the answer is found invalid, then some system to declare the answer as invalid can be integrated. These invalid answers can be revised by the admin of the system. There is no need to go to college for enquiring regarding college.

Keywords: chat-bot, chatter-bot, pattern matching, keyword matching.

I. INTRODUCTION

A chat bot (also known as a talk bot, Bot, chatterbox, Artificial Conversational Entity) is a computer program which hold a conversation via auditory or textual methods. Chat bot that runs a automated task over the internet Such programs are often designed to convincingly simulate how a human would behave as a conversational partner, Chat bots are typically used in dialog system for various practical purposes including customer service Chat bots are often integrated into the dialog systems of for example small talking unrelated to the scopes of their primary expert system. College enquiry chat bot response the query on the basis of artificial intelligence. The student will get the proper answer as per the query. The answer of the query will be based on the artificial intelligence algorithms. Students won't visit to college to collect the enquiry. The system replies using an effective graphical user interface which implies that as if a real human is talking to the user. The user has to register him to the various helping pages through which user can asked the query effectively. The user can ask the query related activities like date, timing, annual day of the college, sports day, department activity, and other cultural activities.

II. LITERATURE REVIEW

A.L.I.C.E(Artificial Linguistic Internet Computer Entity)

A.L.I.C.E (Artificial Linguistic Internet Computer Entity) is an award winning open source natural language artificial intelligence chat robot which utilizes AIML (Artificial Intelligence Markup Language) to form responses of queries. But it is just simple XML.AIML is an XML based markup language meant to create artificial intelligent applications. AIML makes it possible to create human interfaces while keeping the implementation simple to program easy to understand and highly maintainable. AIML was developed by the Alice-bot free software community and Dr. Richard S. Wallace during 1995-2000. AIML is used to create or customize Alice-bot which is a chat-box application based on A.L.I.C.E. (Artificial Linguistic Internet Computer Entity) free software. There are several chat-bots are available used for many purposes. But there is no chat-bot are available for making college enquiry. The purpose of a chat-bot system is to simulate a human conversation the chat-bot architecture integrates a language model and computational algorithm to emulate information chat communication between a human user and computer using natural language. With the improvement of data-mining and machine-learning techniques, better decision-making capabilities, availability of corpora, robust linguistic annotations/processing tools standards like XML and its applications, chat-bot have become more practical in daily life applications such as help desk tools, information retrieval tools, automatic telephone answering systems, advertising, tools to

aid in education, business and E-commerce. In Ecommerce, chat bot helps in information retrieval tasks, such as for searching and browsing, as menu based navigation poses difficulties in locating the appropriate information. The dialogue system provides additional information on products and simplify decision making process to find a product that satisfy customer's requirements. The study focused more on user attitudes rather than on chatbot efficiency.

III. DESGN

Designing is the process of defining the architecture, components, modules, interfaces, and data for a system to satisfy specified requirements. Systems design could be seen as the application of systems theory to product development. There is some overlap with the disciplines of systems analysis, systems architecture and systems engineering. The college enquiry chat bot will take the query from the user and will give the appropriate answer to the user query. The user can even mark the answer given by system as invalid, if he/she finds that the answer is not relevant to the query. The user will just have to visit the web page of chat bot and interact with the bot to get the answers to their query.

MODULES

- ✓ Implementation of Complete Framework (all form Design)
- ✓ Knowledgebase creation for Chabot
- ✓ Integration and Connectivity.



Figure 1. Home Screen

Figure 2. Active chat



Figure 3. Data flow diagram

IV. METHODOLOGY

The incremental build model is a method of software development where the product is designed, implemented and tested incrementally (a little more is added each time) until the product is finished.

This model combines the elements of the water fall. Model with the iterative philosophy of prototyping.

Following are the algorithm to implement the proposed system as given below.

Step 1- Initialize

Step2- Input query

Step3- Pre-processing of the query. Least necessary word will be removed through preprocessing.

Step4- Fetch most valuable words from the query.

Step5-Match the fetch keywords with the knowledge base and provide apt response. The keyword will be matched with the help of keyword matching algorithm.

Step6- Output of the query.

Step7- Exit

V. CONCLUSION

The main objectives of the project were to develop an algorithm that will be used to identify answers related to user submitted questions. To develop a database were all the related data will be stored and to develop a web interface. The web interface developed had two parts, one for simple users and one for the administrator. A background research took place, which included an overview of the conversation procedure and any relevant chat bots available. A database was developed, which stores information about questions, answers, keywords, logs and feedback messages. A usable system was designed, developed and deployed to the web server on two occasions. An evaluation took place from data collected by potential students of the University. Also after received feedback from the first deployment, extra requirements were introduced and implemented.

VI. REFERENCES

- [1]. Emanuela Haller and Traian Rebedea,
 "Designing a Chat-bot that Simulates an Historical Figure", IEEE Conference Publications, July 2013.
- [2]. J. Bang, H. Noh, Y. Kim and G. G. Lee, "Example-based chat oriented dialogue system with personalized long-term memory," 2015 International Conference on Big Data and Smart Computing (BIGCOMP), Jeju, 2015
- [3]. Y. Chen, W. Wang and Z. Liu, "Keyword-based search and exploration on databases," 2011
 IEEE 27th International Conference on Data Engineering, Hannover, 2011
- [4]. S. J. du Preez, M. Lall and S. Sinha, "An intelligent web-based voice chat bot," EUROCON 2009, EUROCON 09. IEEE, St.-Petersburg, 2009.