

INTELLIGENT CHATBOT

Prof.Rohit.A.Kautkar¹, Sachin Tupe², Deepak Harak³, Akshay Ghegadmal⁴

¹ Professor, Department of Computer Engineering, Sandip Polytechnic, Maharashtra, India

² Student, Department of Computer Engineering, Sandip Polytechnic, Maharashtra, India

³ Student, Department of Computer Engineering, Sandip Polytechnic, Maharashtra, India

⁴ Student, Department of Computer Engineering, Sandip Polytechnic, Maharashtra, India

ABSTRACT

Digitalizing education and reinventing the learning experience is one of the big challenges in this age of information. Chatbots have been 'trending' for a few years and quite a few papers examining it in the educational sector have been published, albeit very little interest seems to have been given to the summation of this knowledge. In an attempt to fill the knowledge gap this thesis performed a literature study to examine the documented features and possible uses for chatbots in an educational context. Since quite a few chatbot technologies have been developed at this time and exhibit varied functions, this study was limited to only examine bots based on the jquery. The results imply that chatbots in education have quite a few uses and even more possible features. chatbot can be both simple and complex to implement, all depending on the effort put into implementation. The tool is diverse and may be used for many different purposes and aims, the only limitation being the creators creativity and imagination. The future work include training the chatbot with more varied data; increasing the scope of the chatbot by adding a speech recognition feature so that users can speak to get responses; and including integration with multiple channels such as phone call, SMS, and various social media platforms.

Keyword: - Chatbot , Education, Recognition, technologies

1. INTRODUCTION

Chatbots are trending and they can now be found in almost every industry from e-commerce to travel. The increased use of late may be due to improved language processing or the more accessible development tools for non-developers. It may also be that many chatbots are made available through mainstream messaging applications, thus not forcing the user to download yet another application and allowing them to keep using an application they are already comfortable with. (Jennifer Lachs, 2017). A chatbot is a computer program that is designed to simulate a conversation with its users, often over the Internet. Furthermore the analogy that a chatbot often treats a conversation like a game of tennis can be used to describe the conversation flow of a chatbot, i.e. get message, reply, get message, reply, and so on . Chat bot can run on local computers and phones, though most of the time it is accessed through the internet. Chat bot is typically perceived as engaging software entity which humans can talk to. It can be interesting, inspiring and intriguing. It appears everywhere, from old ancient HTML pages to modern advanced social networking

This project is focusing on creating a chatbot to be used by students to get their queries like fees structure, placement details and other information responded easily from the college website. A chatbot is a program which can do real conversations with textual and/or auditory methods

1.1 Problem Definition:

Even if there exist a chat bot system, it is not much accurate in proving the answer or solutions. Students need to manually visit to the college to get their queries answered by the college help desk. This process consumes lot of time as well as money as the customer needed to visit college if its miles away from home. Also, this process may lead to communication gap between student and college.

1.2 Purposed System:

This System is a web application which provides answer to the query of the student. Students just have to query through the bot which is used for chatting. Students can chat using any format there is no specific format the user has to follow. The System uses built in intelligence to answer the query. The answers are appropriate what the user queries. If the answer found to invalid, then system says invalid query. The User can query any college related activities through the system. The user does not have to personally go to the college for enquiry. The System analyzes the question and then answers to the user. The system answers to the query as if it is answered. With the help of artificial intelligence, the system answers the query asked by the students. The system replies using an effective Graphical user interface which implies that as if a real person is talking to the user. The user can query about the college related activities through online with the help of this web application. This system helps the student to be updated about the college activities.

We design the intelligent chatbot for give the meaningful information to visitors about the college like college infrastructure, Acedamic calender, scholarship details, placements and many more query about the college.

2. LITRATURE SURVEY

This project is mainly targeted at colleges and the synchronization of all the sparse and diverse information regarding regular college schedule. Generally students face problems in getting correct notifications at the correct time, some times important notices such as campus interview, training and placement events, holidays and special announcements. Smart Campus tries to bridge this gap between students, teachers and college administrators. Therefore in the real world scenario, such as college campus, the information in the form of notices, oral communication, can be directly communicated through the android devices and can be made available for the students, teachers directly for their android devices and the maintenance of application will be easier in later future because of the use of architectural MVC which separates the major works in the development of an application such as data management, mobile user interface display and web service which will be the controller to make sure for fast and efficient maintenance of application.

2.1 Existing Algorithm/program:

In the olden days students had to visit the college to enquire about details and other information about the college ,which is a time consuming process as well as lengthy procedure for both parents as well as students. now a days there are many changes occurred in the Education system with help of advanced technological improvements. Everything is happening over the internet without any difficulty. In those days for submitting a small application also we have to visit that place, but as the days are passing away its completing changing. Collecting the applications manually will be hectic procedure and it also needs a manpower. For reducing that manpower and such difficulties many devices or systems were emerged day by day.

2.2 Disadvantages of existing system:

The response will be slow if too many users try to access the chatbot at the same time.
This Application need Continues Internet Connection.

2.3 Purposed approach and its advantages over existing system:

- User friendly
- More efficient.
- Requires less effort and time.
- The system that we are developing is entirely different from the existing ones. Unlike other systems which focus only on a particular set of people.

3. DESIGN

3.1 User Interface Design

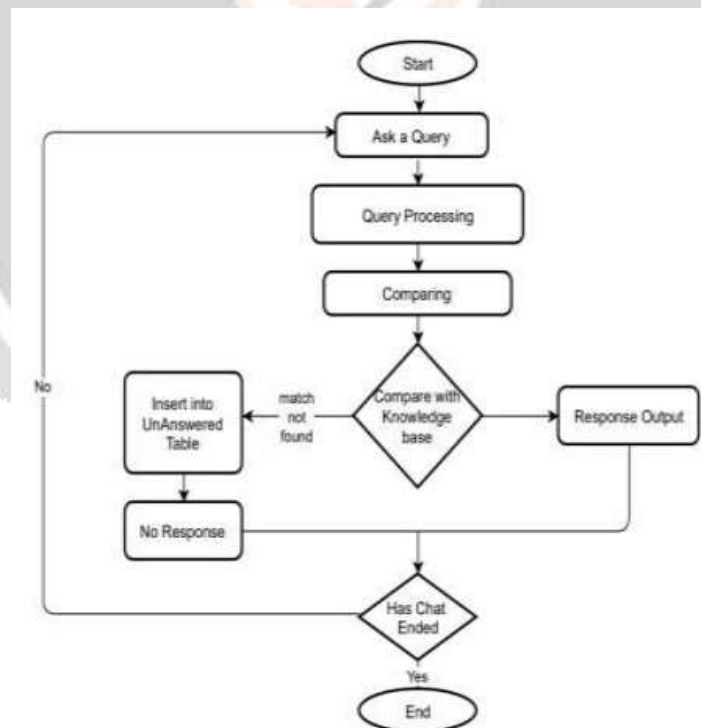
The user interface is designed using HTML, JQuery and Javascript. The complete website focuses more on efficiency in understanding the Query or question.

3.2 Database Design

Our system maintains a database for user information like email id, phone number and messages. There are a total of four tables created in Mysql database which is easy to access.

3.3 System Design

Systems design 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.



4. CONCLUSIONS

It is concluded that the system will work well and thus it will fulfil the end users requirement. The system is tested and errors are accurately removed. This application will be accessed from one or more than one system and hence more than one system is tested. The main objectives of the project were to develop an algorithm which will be used to identify answers associated with user submitted questions. To develop a database where all the related data are going to be stored and to develop an internet interface. The web interface developed had two parts, one for easy users and one for the administrator. A background research happened, including a summary of the conversation procedure and any relevant chat bots available. A database system was designed, that stores information regarding questions, answers, keywords, logs and feedback messages. A usable system was designed, developed and deployed to the online server on twice. An evaluation happened from data collected by potential students of the University. Also after received feedback from the primary deployment, extra requirements were introduced and implemented

5. ACKNOWLEDGEMENT

We owe our deep gratitude to our parents and teachers who took keen interest in our project work and helped us in improving our application. They always up front to motivate and encourage us for bringing out this project successfully. We would like to thank all the people who help us in this project and whom we might not have mentioned here

6. FUTURE SCOPE

In the future enhancement of our project, we can include speech based questions and responses. The users just need to provide voice-based input and the developed bot will provide the text-based output and while giving it, it will provide a voice-based output as well. Just by means of adding speech-to-text and text-to-speech we can improve the functionality of our project.

7. REFERENCES

- [1]. 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.
- [2]. E. Haller and T. Rebedea, "Designing a Chat-bot that Simulates a Historical Figure," 2013 19th International Conference on Control Systems and Computer Science, Bucharest, 2013.
- [3]. S. J. du Preez, M. Lall and S. Sinha, "An intelligent webbased voice chat bot," EUROCON 2009, EUROCON '09. IEEE, St. - Petersburg, 2009.
- [4]. Maja Pantic, Reinier Zwitserloot, and Robbert Jan Grootjans, "Teaching Introductory Artificial Intelligence using A Simple Agent Framework", IEEE Transactions on Education Vol. 48, No. 3, August 2005.
- [5]. Bateman, Joshua D. (22 November 2016). "Behold China's Answer to Amazon Echo: The LingLong DingDong". Wired. Condé Nast. Retrieved 25 November 2017.
- [6]. Weizenbaum, Joseph (January 1966), LIZA—A Computer Program For the Study of Natural Language Communication between Man and Machine Communications of the ACM, 9 (1).
- [7]. Mauldin, Michael (1994), "ChatterBots, TinyMuds, and the Turing Test: Entering the Loebner Prize Competition", Proceedings of the Eleventh National Conference on Artificial Intelligence