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Artificial Intelligence Based College Enquiry Chatbot

Abstract— A chat bot is supposed to start a conversation between humans and machines. The machine has integrated the knowledge to identify sentences and make a decision itself in response to a question. Chat bots will be entirely text-based. User interface through which the user can enter commands and receive text replies. Chatbots are usually services that remember previous commands to provide functionality. It can be used safely by an even larger audience when using chatbot technology. Integrated with popular web services. University research chatbots are created using artificial algorithms that analyze user requests and understand the user's message. The answer principle is to match a user's input sentence via the chat bot, without being physically available to the university for inquiries. The system analyzes the question and then answers the user. The system responds to the students' inquiries with its intelligence.

Keywords— Artificial Intelligence, College Enquiry, Deep Learning, Cloud Computing, Machine Learning

I. INTRODUCTION

One of the goals of AI (AI) is the realization of the natural dialogue between humans and machines. In recent years, dialogue systems, also referred to as interactive conversation systems, became the fastest growing area of AI. Many companies have used the chatbot. System technology to create different types of normal conversation depending on your applications and areas.

Basically, a chat bot is a toll booth that conducts a conversation between humans and machines and acts like a human. Make a decision yourself in response to a question. Chat bots are entirely based on a text-based user interface that allows the user to enter commands and receive text responses. Chatbots are usually services that remember previous commands to provide functionality. Chatbot (also known as Talk-Bot, Chatterbox, Bot, IM-Bot, or Artificial

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<u>Cite this article</u> – Titiksha P. Mothankar, Prajakta S. Maski, Poonam D. Dhote, Pragati S. Asatkar, "Artificial Intelligence Based College Enquiry Chatbot", *International Journal of Computational and Electronic Aspects in Engineering*, RAME Publishers, vol. 2, issue 2, pp. 33-37, 2021. https://doi.org/10.26706/ijceae.2.2.20210411 Conversational Entity) is a computer that mimics human conversations in their natural format, including text, using artificial intelligence techniques such as Natural Language (NLP), video and image processing and audio analysis. Intelligence algorithms that analyze user requests. This system is a web application that responds to the analyzed requests from the user. This project aims to be developed using artificial intelligence algorithms that analyze user requests. This system is a web application that responds to the analyzed requests from the user. Users just need to select the category of queries and then run the query to the bot that is used to respond to it. Artificial intelligence is used to respond to that user enquiries. The user receives the appropriate answers to his questions. The answers are given using artificial intelligence algorithms. Users don't have to go to the university in person to make inquiries. Users need to register in the system and log into the system. After logging in, the user can access the various tools. There will be several helps pages for the user to chat through to make inquiries about the university's activities. The system responds to the user using an effective graphical user interface (GUI). Help with this web application. University-related activities such as anniversary, sports day, admission and other cultural

activities. It will help students / users keep up to date on the university's activities.

II. EXISTING WORK

A.L.I.C.E. (Artificial Linguistic Internet Computer Entity): A.L.I.C.E (Artificial Linguistic Internet Computer Entity) which is an award winning open source natural language artificial intelligence chat robot which utilizes AIML(Artificial Intelligence Markup Language) to form responses to queries. Alice bot engine and AIML are freely available under the terms of the GNU General Public License (used by GNU/Linux and thousands of other software projects). The A.L.I.C.E. project includes many contributors from round the world. This is the general Chatbot available in the industry which can be used for various purposes. But, there is no Chatbot for making college enquirers. Thus, we are designing a Chabot which will help students to do necessary enquirers without even going to college. The output is fed to the algorithm where the strength of the sentence is calculated. The intensity of negation is calculated, which helps prioritize the complaint automatically for the service provider to resolve the complaint. It reduces management effort to reach college administrators easily. It is easily accessible and saving time and money also helps in reducing visits to college for every inquiry. It is providing an available information source without taking any physical effort. Students will get their queries resolved without any hassle to reach out to the college. This application enables the students to be updated about college cultural activities. This application saves time for students as well as for teaching and non-teaching staff. Enhance AI based this chatbot can widely use in various colleges around the country and can be used in firms also. In this paper, interactive college enquiry using bot. The scientist proposed system will be based on Alice and AIML algorithm that will be used to identify answers related to user submitted questions. The need is to develop a database where all the related data will be stored and to develop a user interface. The android interface developed will have two parts, one for straightforward users and one for the administrator. A background research passed, including summary of the conversation procedure and any relevant chatbots available. A database is developed, which can store information about questions, answers, keywords, logs and feedback messages. In this paper, Chatbot for college management system they create a software tool which can be employed by any company to assist the users to freely upload their queries. Once the complaint is registered within the database, automatic tokens are generated and conveyed to the customer through a text message and email for further tracking of the complaint. The output is fed to the algorithm where the strength of the sentence is calculated. The intensity of negation is calculated, which helps prioritize the complaint automatically for the service provider to resolve the complaint. In this paper, college chatbot enquiry chatbot system the main objective of the project was to develop an algorithm that may be accustomed to identify answers associated with users submitted questions. The requirement is to develop а database where all the related data will be stored and to develop a web interface. The application developed will have two parts one for simple users and one for easy users and one for the administrator.

III. PROPOSED METHODOLOGY

This System is a web application which gives reply to the question of the user. This system simply needs to question through the bot which is utilized for talking. The System utilizes worked in counterfeit consciousness to answer the enquiry. The appropriate responses are suitable for what the client questions. In the event that the appropriate response is found to invalid, the client simply needs to choose the invalid answer catch which will tell the administrator about the inaccurate answer. Administrator can see invalid answer through entrance by means of login system permits administrator to erase the invalid answer or to include a particular answer of that comparable enquiry. They create a software tool which will be used by any company to help the users to freely upload their queries. Once the complaint is registered in the database, automatic tokens are generated and conveyed to the customer through text message and email for further

tracking of the complaint. Natural language processing technologies used for passing tokenizing, stemming and filtering the content of complaint. The user can enquiry any college related exercises through the framework. The client does not need to go to the college for enquiry always. The system examines the enquiry and after those responses to the client. The framework answers the inquiry as if it's replied by the individual. With the help of computerized reasoning, the framework answers the question asked by the understudies. The client can question about the school related exercise online with the assistance of this web application. This framework causes the understudy to be refreshed about the varsity exercises. The proposed system will simply take the query of the user which can be a student or a parent, and will give a response according to the query. The system will match the user query with knowledge base and see for the appropriate response. The system can also reply to the general queries of the student. The algorithm of the complete system can be understood by the following flow chart.

A. Modules

1. Login Module

In this student will be able to login into the system by providing its username and password.



Figure 1: Login Module.

2. Sign Up Module

In this module student can able to register a new account into system by entering details like Name, Branch Semester, Year, Photo, Roll No., etc.



Figure 2: Signup Module

3. Login as Guest

In this module users can directly interact with chat bot without doing login and sign up. Sometimes users want to directly access the chatbot without signup but they have to provide their Phone no. or Email ID in that case it will be very useful.



Figure 3. Login as Guest

4. Chatbot Interface Module

This module provides an effective Graphical user interface which implies that as if a person is talking to the user and this module can be accessible through anywhere. The student just has to enter the query in the chat section which the user can chat by asking queries related to college and department related activities.



Figure 4: Chatbot Interface Module.

5. ChatBot Engine Module

This module is responsible to answer the student query In this module we are going to use machine learning power and will create one ML model which will be responsible to answer the student query and it uses the Artificial Intelligence and NLP to understand the user's intention and answer their query.



Figure 5: ChatBot Engine Module

6. Google web scraper

In this module we will create our own scrapper which will be responsible to fetch results of subject related query from google.



Figure 6: Google web scraper.

- B. Requirement
- 1. Software
 - a) Front End : HTML, CSS
 - b) Back End : Python, Flask.
 - c) Domain : Deep Learning, Cloud Computing, Machine Learning.
 - d) Library : Tensorflow, Keras
 - e) Algorithm : CNN.
- 2. Hardware
 - a) Processor : i3
- [1] Prof. Rachit Kulkarni, Ankit Methwani, Nakul Pawar, Charmi Valecha, "College Chat-bot", *International Journal*

- b) Hard disk : 5GB
- c) Memory : 2GB RAM

C. Design Description

The user can enquiry any college related exercises through the framework. The client does not need to go to college for enquiry always. The system examines the enquiry and after those responses to the client. The framework answers the enquiry as if it's replied by the individual. With the help of computerized reasoning, the framework answers the question ask by the understudies. The client can question about the school related exercises through online with assistance of this web application.

D. Result

Thus, a Chatbot has been designed which will help students to do necessary enquiries without even going to college. Necessary enquiries not related to topics or subjects mentioned in the chatbot can also be directly accessed by the google.

User Interface - To analyses users queries and understand users' messages. To provide a solution to the query of the user very effectively. This system will help the scholar to be updated about the school activities. To save the time of the user since s/he doesn't need to personally attend the school for enquiry. The system will reply using an efficient GUI.

CONCLUSION

We create a software tool which will be used by any college to help the students to freely upload their queries. The output is fed to the chat bot where the strength of the sentence is calculated. The intensity of negation is calculated, which helps the complaint automatically for the service provider to resolve the complaint. In this way, the proposed system will help many organizations and any college to ensure quality service provision and satisfaction with less human efforts.

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