

## Artificial Intelligence- College Inquiry System

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**Abstract**—We know that Artificial Intelligence is play an major role in a multiplicity of fields ranging from manufacturing industries to sale industries, to customer care in public relations. As there are many online Artificial Intelligence (AI) systems or chat bots which are in existence that help people get answer to their day to day queries. So, we are going to implement a AI Based college information system that can solve any college related query. This will work as a College information Intelligence machine. This AI Bot will respond the queries of students on college related topics like exam, fees, placement information etc..The college enquiry chat bot will be built using algorithm that analyses exact queries input by student and respond accordingly.

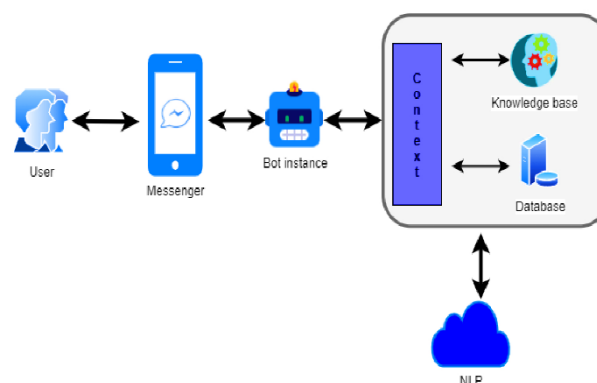
**Index Terms**—Artificial Intelligence, Word order simmilarity, Stemming, Intelligence Machine.

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### I. Introduction

Chatbots are system that mimic human interaction using artificial intelligence (AI). It is developed to be the as a virtual assistant, helping one to complete work. Chatbot is which is capable to communicate with operators by using natural languages. The main principle of every chatbot is to communicate with a human user (in most cases) via text messages and behave as though it were capable of understanding the conversation and reply to the user properly. A chatbot is a system that uses for natural language processing (NLP) for human to machine interaction and Machine Learning (ML). AI Chatbot requires a huge knowledge base, whereas, a closed domain has a more required knowledge base that was implement to get a specific goal. Chatbots can understand what the user needs from a single text instead of the customer having to follow a process of multiple steps. Students in college demand effortless experiences, answers within no time. Therefore College Enquiry Chat Bot will answer to student a question that is related to college. First bot analyses user's requirements and understand user's message, based on bot knowledge bot provide answers to the queries of the students. Students will just have to opt the displayed option for the department and then put the queries to the bot that will be used for interacting with user that can be admission process , faculty information or hostel details, etc. The purpose of developing this project is based on an intellectual chat-bot system which will deal with the academic activities like admission enquiry, fees structure, scholarship details, time-table of every department, details of the documents required to attach etc. With this chat-bot system it will be easy for the student to directly clear their queries in lesser time.



**Figure 1:** System Overview

## II. Problem definition

To develop a college information system through which student can interact with system and get answer to their all queries.

## III. Literature review

Prof. Ram Manoj Sharma [2] proposed a college enquiry chatbot system which has been built by using Artificial Intelligence algorithms. The bot analyses user's query and understands user messages. The system has modules like Online chatbot, Online Noticeboards etc[2].

P.Nikhila, G.Jyothi, K.Mounika, Mr. C Kishor Kumar Reddy and Dr. B V Ramana Murthy [3], they have designed using AIML (Artificial Intelligence Mark-up Language) to make response to queries. AIML is employed to make or customize alicebot that could be a chat-bot application supported ALICE free code [3].

Harsh Pawar , Pranav Prabhu, Ajay Yadav, Vincent Mendonca , Joyce Lemos [6], a chatbot is designed by them using knowledge in database. The proposed system has Online Enquiry and Online Chatbot System. The development is done using various programming languages by creating a user friendly graphical interface to send and receive response. The main purpose is it uses SQL (Structured Query Language) for pattern matching which is been stored in program [6].

Nitesh Thakur, Akshay Hiwrale, Sourabh Selote, Abhijeet Shinde and Prof. Namrata Mahakalkar [10], proposed an artificial chatbot using NLP (Natural Language Processing) which can be done in two ways the first via written text and the second is via verbal or voice communication. Written communication is much easier than the verbal communication. This paper introduces an interest in some emerging capabilities for evolving speed understanding and processing in virtual human dialogue system

## IV. Existing system

Existing most of the chatbot are statics and they consist of fix set of queries. User have to select any query from given list. According to input options or choice provided by user chat bot gives the response. In case user wants to know about other queries there is a no choice to enter query as per his interest.

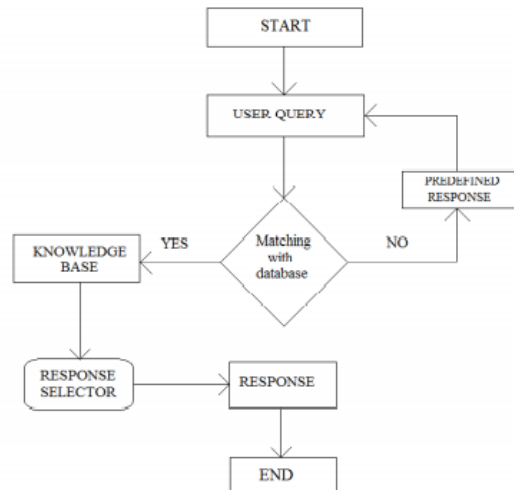
## V. Proposed work

The proposed system will have the following modules:

**A] Online Enquiry:** Students can enquire about facilities and query related to exams, academics, fee structure, etc. Students can also ask questions related to placement activities.

**B] Online Chatbot:** The result can be showed in the form of images and card format or in text format. The query will be answered on the basis of questions asked and the language model built and also the response media created. Users that want to enquire about the college at the time of admission or any competition held in the college can query to the chat-bot.

A College Enquiry Chatbot is developed using chatterbot algorithm that is a that makes it easy to generate automated responses to a user's input. This makes it easy for developers to create chat bots and automated conversations with the users. Some of the chatterbot tasks performed are Present some information and taking inputs. The proposed system is an internet application that provides answers to the queries provided by the college administrators. Users will put the questions through the chatbot that's used for chatting, questions can be related to the Enquiry process, course details , eligibility criteria description and Admission. The answers depend on the user queries. The users do not need to go to the college for enquiry always. The chatbot examines the inquiry and after that responses to the user. The framework answers to the queries of the user as though it is replied by the individual



**Figure 2:** Working of Praposed System.

The basic algorithm that will be implemented for working of this proposed system is as follows:

Step 1: Start.

Step 2: accept text query from the students or user.

Step 3: The query is pre-processed. E.g. suppose there is this query “What is the schedule of summer 2022 exam.” So, we are going to remove these stop words or grammatical words like “is”, “the” using stemming algorithms.

Step 4: Collect the remaining keywords after step 3.

Step 5: Match this final keyword with the keywords in Knowledge base,

Step 6: Implement word order simmilarity algorithm to identify exact what use ask from given keyword.

Step 7: The keywords will be matched with the help of keyword matching algorithm.

Step 8: AI based chatbot generate a query response for the user.

Step 9: Display response on client window.

Step 10: Exit

## VI. Advantages of proposed system

1. Proper time & man-hour utilization.
2. No need to visit physivally any section or office for query.

## VII. Limitations

1. The Input query must contains proper key words.
2. If quey mis-spelled by user, then not able to provide proper response.

## VIII. Application

1. College enquiry chatbot helps students to get the right source of information.
2. Provide instant as well as accurate response.
3. AI based Chatbot system can be used by colleges, universities, Industries or any businesses.
4. Healthcare Consultancy.
5. Travel Agencies.
6. Education System.
7. Financial Compnies.

## IX. Result analysis,

The proposed system reduces the manpower, time of college administrators and paper work. It also reduces the efforts of the students to travel all the way to college for enquiry purposes. In this paper we have a developed a chatbot which will interact with the users and provide all the college related information. The student/parent and the college admin are interacted through a chatbot. The questions which are not answered by the chatbot will be updated by the college admin.

## **X. Conclusion**

The goal of the system is to help the students to stay updated with their college activities. Artificial Intelligent is the fastest growing technology everywhere in the world, with the help of Artificial Intelligent and Knowledgeable database. We can make the transformation in the pattern matching and virtual

## **XI. Future scope**

In the future enhancement of our college enquiry chatbot, we can make it more interactive in various different languages for users located in different regions. we can include speech based questions and responses for people who cannot read and type their queries.

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