

## EDUBOT : A VIRTUAL ASSISTANT FOR COLLEGE ENQUIRY

<sup>1</sup>Konda Venkata Bhavitha, <sup>2</sup>Mandha Prathyusha

<sup>1,2</sup>UG Student, <sup>1,2</sup>Department of Computer Science & Engineering, Geethanjali Institute of Science and Technology, Gangavaram, Andhra Pradesh, India

### ABSTRACT

Nowadays, many people are using smart phones with many new applications i.e., technology is growing day by day. A chat bot has information stored in it to identify the sentences and making a decision itself as response to answer a given question. The college enquiry chat bot will be built using RASA Framework that analyses queries and understand user's message. RASA is an open-source framework for building Artificial Intelligence (AI) bots which consists of two components: RASA Natural Language Understanding (NLU) and RASA Core. RASA Core is the component which handles the dialog engine for the framework and helps in creating more complex chatbots with customization. RASA Natural Language Understanding (NLU) helps the developers with the technology and the tools necessary for capturing and understanding user input, determining the intent and entities. This College Enquiry Chatbot is for Students to solve their queries within few minutes.

### INTRODUCTION

College enquiry chatbot built using RASA encompasses the integration of advanced conversational AI techniques to streamline the process of answering inquiries related to college admissions, courses, facilities, and more. Leveraging RASA's robust framework, the chatbot is designed to engage users in natural language conversations, providing tailored responses to their queries. The chatbot begins by welcoming users and guiding them through the interaction process, prompting them to input their inquiries.

Through Natural Language Understanding (NLU), the chatbot comprehends the intent behind user messages and extracts relevant entities, such as the desired course or admission requirements. It then processes this information, retrieving pertinent data from the college's database or knowledge base. The chatbot employs Natural Language Generation (NLG) techniques to formulate coherent and contextually appropriate responses, delivering information in a manner that mimics human conversation.

Additionally, the chatbot's dialogue management capabilities ensure a seamless flow of conversation, maintaining context and guiding users through the inquiry process efficiently. By deploying this college enquiry chatbot, institutions can enhance their accessibility and provide timely assistance to prospective students, ultimately improving the overall user experience and facilitating informed decision-making.

A chatbot is a program which can do real conversations with textual and/or auditory methods . Using Artificial Intelligence (AI), chatbots can simulate human conversations.

There are two categories of chatbots. One category is command based chatbots where chatbots rely on a databank of replies and heuristics. The user must be very specific while asking the questions so that the bot can answer. Hence, these bots can answer limited set of questions and cannot perform function outside of the code. The other category is chatbots based on AI or machine learning algorithms, these bots can answer ambiguous questions which means the user do not have to be specific while asking questions. Thus, these bots create replies for the user's queries using Natural Language Processing (NLP).

As students, we require many types of information regarding our college and university during our course. Sometimes getting this information is rather cumbersome and lengthy. Like getting information regarding our fees structure or the due fees remaining is a very lengthy process we have to go to administration building and find the correct window and then look for a no dues form then fill it with correct data and then submit it to the appropriate person and then that person will tell us our due fees. This is all long, hectic and unnecessary. We live in an age of computer science, where automation and simple procedures are easy to achieve. So why have this long and unnecessary process to get this trivial information. We as a computer science student are always looking forward

to solving the problems around us using the technology that we learn and how to implement them to achieve ease of usage in real life. This is where we thought of using an intelligent voice bot delivering this information. Think about an application, where all you have to do is ask. You want to know the fee structure of a student, then ask the voice bot about is it clear or not it will tell you. there is no need of doing a lengthy and hectic procedure. if You want to know the process of filling the university exam form, no problem our bot will tell you the steps. It can also solve the dilemma when a student is about to join the college. He/she may want to enquire about the fee structure of various colleges and know their admission procedure. Now in the current system, it can be a long process.

## CONVERSATIONAL AI

**Conversational AI represents a cutting-edge field of artificial intelligence focused on enabling machines to engage in natural, human-like conversations with users. At its core, conversational AI leverages advanced techniques in natural language processing (NLP) to comprehend and interpret human language inputs, whether they are in the form of text or speech.**

**Through sophisticated algorithms and machine learning models, conversational AI systems can recognize user intents, extract relevant entities, and generate responses that sound natural and coherent. Dialogue management plays a crucial role in orchestrating the flow of conversation, maintaining context, and determining appropriate responses based on the current state of interaction.**

**With applications spanning across industries such as customer service, virtual assistants, healthcare, and education, conversational AI is poised to redefine how humans interact with technology. Despite its rapid advancements, challenges persist in areas like understanding context-dependent language nuances, managing complex dialogue flows, and addressing privacy concerns. Nonetheless, the potential for conversational AI to revolutionize human-machine interaction remains immense, driving ongoing innovation and development in the field.**

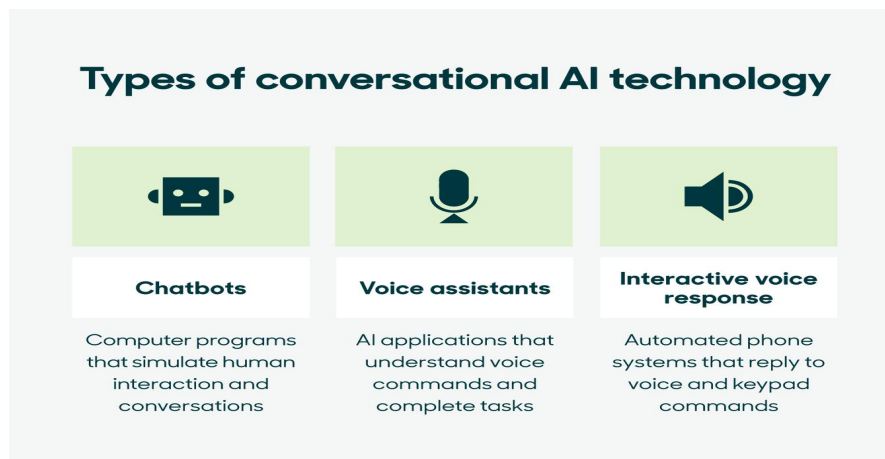


Fig.1. Types of Conversational AI

## RASA

Rasa is a cutting-edge open-source framework that has revolutionized the field of conversational AI. It empowers developers to create intelligent chatbots and virtual assistants capable of engaging in natural, context-aware conversations with users. With its powerful Natural Language Understanding (NLU) and Dialogue Management capabilities, Rasa has become a preferred choice for building sophisticated conversational AI applications across various industries.

At the heart of Rasa lies its NLU component, which processes user messages and extracts structured data, such as intents (the purpose or goal behind a user message) and entities (relevant pieces of information within the message). Rasa NLU leverages machine learning techniques to classify intents and identify entities accurately, enabling chatbots to understand user input effectively.

Complementing the NLU component is Rasa Core, the dialogue management module responsible for orchestrating conversations and guiding chatbots through complex dialogue flows. Rasa Core employs Reinforcement Learning,

a machine learning approach that learns optimal dialogue policies from interaction data, allowing chatbots to make informed decisions about what actions to take next based on the current conversation context and user input.

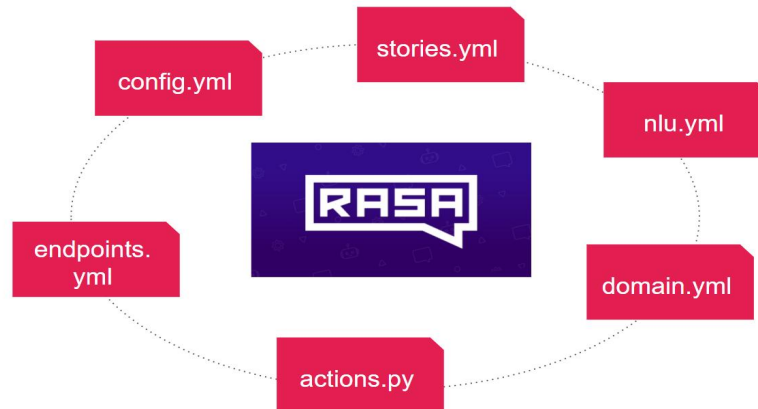


Fig.2. Components of RASA Frame work

### NATURAL LANGUAGE UNDERSTANDING (NLU)

NLU enables machines to extract meaning from text or speech, discerning the underlying intent and extracting relevant entities. This process involves various tasks such as text parsing, intent classification, and entity recognition. Text parsing dissects user messages into structured representations, facilitating subsequent analysis. Intent classification aims to identify the user's purpose or goal in the conversation, allowing the system to tailor its responses accordingly.

NLU involves several key tasks, including:

**Tokenization:** Breaking down text into individual words or tokens.

**Parsing:** Analyzing the grammatical structure of sentences to understand their syntactic relationships.

**Semantic Analysis:** Extracting the meaning of sentences by understanding the relationships between words and phrases.

**Named Entity Recognition (NER):** Identifying and classifying named entities such as people, organizations, locations, dates, etc., mentioned in the text.

**Coreference Resolution:** Determining which words or phrases in a text refer to the same entities.

**Sentiment Analysis:** Identifying the sentiment or emotion expressed in a piece of text.

**Question Answering:** Understanding questions posed in natural language and providing relevant answers.

**Machine Translation:** Translating text from one language to another while preserving its meaning.

### OBJECTIVE

Overall experience of students and prospective applicants navigating through the complexities of academic inquiries. By leveraging RASA's advanced natural language processing capabilities, the chatbot aims to streamline the process of gathering information, providing instant responses to queries, and offering personalized assistance tailored to individual needs. Additionally, the chatbot seeks to alleviate the burden on human resources by handling routine inquiries efficiently, allowing staff to focus on more complex tasks and providing a seamless and accessible channel for communication between the college and its stakeholders. Ultimately, the goal is to empower users with easy access to accurate and up-to-date information regarding courses, admissions, campus life, and support services, fostering a positive and engaging experience throughout their educational journey.

### LITERATURE SURVEY

In this chapter will review some papers to get knowledge and understanding on the techniques had been proposed. All those techniques have the same aim which is to built a college enquiry assistant using RASA powered chatbot. As Archimedes once said, "Man has always learned from the past. After all, you can't learn history in reverse!" it is essential for man to learn from history. Thus, considering all past researches,

**the most relevant research glimpses have been picked to be explained in detail. The overview shall discuss relevant aspects contributing to our research.**

### **College Enquiry Chatbot using Conversational AI**

Dhruv Patel<sup>1</sup>, Nihal Shetty<sup>2</sup>, Paarth Kapasi<sup>3</sup>, Ishaan Kangriwala<sup>4</sup>

This project outlines the development and execution of a virtual assistant at Mumbai's MPSTME college. The chatbot was built with Azure's LUIS and achieved a 95% accuracy rate, rendering it a highly dependable and efficient tool for college students, teachers, and other stakeholders looking for information. We also created an elementary rule-based chatbot and a RASA - NLU chatbot for comparison reasons, with accuracies of 65% and 70%, respectively. The comparison shows that the Azure-based chatbot is not just more accurate, but also more successful at processing complex requests and providing relevant information. Even if the current chatbot implementation has attained a high degree of accuracy, there are still areas for improvement and growth.

College Agent: The Machine Learning Chatbot

Waranya Mahanan, Jirapipat Thanyaphongphat; Suttinee Sawadsitang; Sumalee Sangamuang

In this project a chatbot is a computer program that can understand the human language and respond like humans. The more it acts like a human, the more helpful the chatbot is. There are several attempts to make the chatbot intelligent or human-like. In college, the routine task is to answer the questions that have been asked repeatedly or found on the official website. This task is time-consuming and a wastes task. The chatbot is one of the solutions to this problem. A good chatbot can naturally answer such questions quickly and tirelessly. However, producing an intelligent or human-like chatbot is a challenge. The chatbot should be able to answer the fundamental questions in the domain and the advanced opinion questions. In this research, we proposed the chatbot system using the machine learning technique. Therefore, the chatbot can learn from the user to improve its performance. We evaluate our chatbot by testing with real-world conversation. The result shows that our chatbot can respond to the fundamental questions with a higher accuracy rate than the advanced questions.

AI based Chatbots using Deep Neural Networks in Education

### **B Chempavathy, SN Prabhu, DR Varshitha, Y Lokeswari**

In this project they present era of technology had a tremendous influence on society. With the advancements in the artificial intelligence and machine learning domains, machines are trying to impersonate humans. Chabot's are gaining popularity in this aspect and have changed the patterns of conversations between humans and computers. With the creation of these virtual assistants, the conversational services have been improvised. Basically, a Chabot is a software program programmed to interact with humans using artificial intelligence in messaging platforms. Nowadays, Chabot's are not just restricted to one field, they can be used in numerous fields in different forms. The Chabot introduced in this paper mainly concerns itself with college activities. College campuses are vast in the area. If a particular person has a query about which he wants to inquire, the individual would have to shuttle from here and there in order to gather the information for the query. So, the main intention of this research is to develop a college friendly chatterbot sooner or later, servicing the scholars. The tools used are artificial intelligence, such as natural language input and deep learning methods like deep neural networks. This uses LSTM, an extension of RNN, in order to process the user input. It trains the Chabot using these techniques and gives a response. All the data of the Chabot, which is the input given by the human, will be stored in a database and the data will be saved every time a query is asked for future use.

### **AI and Web-Based Interactive College Enquiry Chatbot**

Akshada Phalle<sup>1</sup>, Saniya Kadam<sup>1</sup>, Sakshi Sonphule<sup>1</sup>, Ila Savant<sup>2</sup>

This chatbot proposes a college enquiry chatbot that can be integrated with a college website to interact with visitors and answer their questions about the college. The proposed chatbot will be able to accept both text-based as well as audio-based input from users. We have conducted a comprehensive literature survey to find the most appropriate chatbot framework and have referred to existing works that could provide an insight into the domains of NLP and Conversational AI. This research study is focused on identifying the requirements for the development of a dynamic chatbot that supports text as well as voice-based interaction with the users. Thus the future work of this research study is to implement said chatbot that could verify the hypotheses made.

### **College Enquiry chatbot**

Ms.Ch.Lavanya Susanna, R.Pratyusha, P.Swathi, P.Rishi Krishna, V.Sai Pradeep

This project they often tend to pay our time interacting with varied chatterboxes on the web, largely targeted at such functions or simply amusement. The chatbots have embedded data that helps them acknowledge the user's question and supply a solution to that. The college enquiry chatbot project is intended exploitation algorithms that interpret user queries and perceive user's message. The college enquiry chatbot project is developed exploitation algorithms that analyze user queries and perceive user message. This technique may be a internet application that gives answers to the student's question. Students would like solely question through the bot want to chat. The program analyzes the user's question and answers it then. The machine responds to the question, as if the person were asking it. The program responds to the students' question with the assistance of algorithms. The system will have a web board which may read any text notices or PDF documents through the links. this can facilitate the user get the relevant notifications modified. The user will not waste a lot of time searching for the acceptable notices.

#### **An Intelligent College Enquiry Bot using NLP and Deep learning techniques**

A Kousar Nikhath; Vijaya Saraswathi R; MD Abdul Rab; N Venkata Bharadwaja; L Goutham Reddy; K Saicharan  
In this project every year freshers and their parents do visit our college website in order to get their queries clarified. Also, college students do visit the website in order to get their queries resolved. Thus we felt the need for an 'Intelligent Enquiry Bot' to be associated with the official college website. The Bot should be intelligent enough to resolve the queries of freshers, parents, students, and faculty. The college enquiry chatbot is designed using certain algorithms which understands and analyzes the user queries. This System is basically a web application that provides valid responses to the various queries of the users, which will make use of Natural Language Processing (NLP) and Long Short Term Memory (LSTM) networks, which are a special kind of recurrent Deep Neural Networks (DNN). In this paper, we have completed building a quite intelligent chatbot based on NLP and DNN for basic college-related enquirers and admission related queries especially.

#### **Chat-Bot For College Management System Using A.I**

K.Bala, Mukesh Kumar ,Sayali Hulawale, Sahil Pandita,

**The machine has been embedded knowledge to identify the sentences and making a The machine has been embedded knowledge to identify the sentences and making a decision itself as a response to answer a question. Chat-bots will be completely based on 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 stateful services, remembering previous commands in order to provide functionality. It can be utilized securely by an even larger audience when chat-bots technology is integrated with popular web services. The college inquiry chat-bots will be built using artificial algorithms that analyze user's queries and understand user's message. The response principle is matching the input sentence from a user. The User can ask the question any college-related activities through the chat-bot without physically available to the college for inquiry. The System analyses the question and then answers to the user.**

#### **Artificial Intelligence chatbot**

Nitesh Thakur, Akshay Hiwrale, Sourabh Selote, Abhijeet Shinde and Prof. Namrata Mahakalkar

**As there are many online Artificial Intelligence (AI) system or chat bots are in existence that help people solve their problems. So, our team is going to implement a system (a virtual assistant) based on AI that can solve any college related query. This will work as a College Oriented Intelligence Machine. This system is like an Interaction with virtual human and this is strictly for college oriented. This virtual machine will respond the queries of students on college related issues, and If in the process of responding answer if the answer is found invalid, the system will declare that the answer is invalid and further this invalid answer can be deleted or modified by the admin on the system. As this will help students in fetching the information without visiting the college or to stand in queue. Students can use this chat bot to get the answers to their queries in a very easy and fast way.**

#### **Chatbot for E-Learning: A Case of Study**

Francesco Colace, Massimo De Santo, Marco Lombardi, Francesco Pascale, and Antonio Pietrosanto DIIn, University of Salerno

**The use of Chatbots is very popular in a large scale of applications especially in systems that provide an intelligence support to the user. In fact, to speed up the assistance, in many cases, these systems are equipped with Chatbots that can interpret the user questions and provide the right answers, in a fast and**

correct way. This paper presents the realization of a prototype of a Chatbot in educational domain: it has been developed a system to provide support to university students on some courses. The initial purpose has focused on the design of the specific architecture, model to manage communication and furnish the right answers to the student. For this aim, it has been realized a system that can detect the questions and thanks to the use of natural language processing techniques and the ontologies of domain, gives the answers to student. Finally, after the implementation of the designed model, experimental campaign was conducted in order to demonstrate its enforceability and efficiency.

### EXISTING SYSTEM

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.

### PROPOSED SYSTEM SYSTEM ARCHITECTURE

The System consists of the following steps :- 1. Web Interface Bag of Words Conditional Random Fields

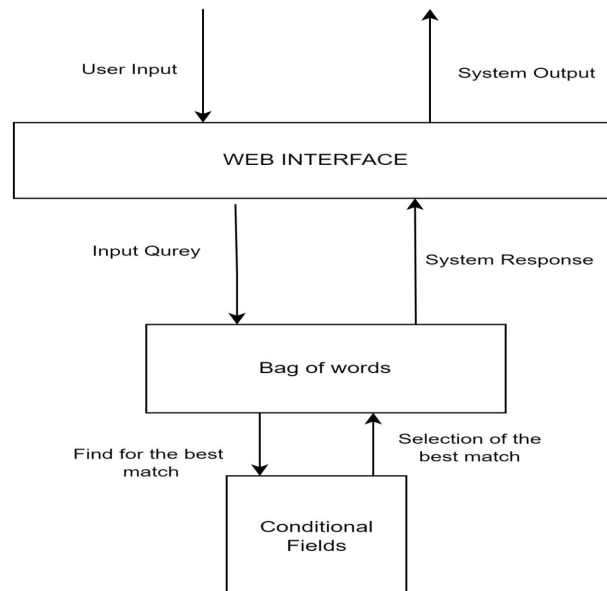


Fig.3.College Enquiry Chatbot Architecture

### WEB INTERFACE

Integrating a web interface into the college enquiry chatbot powered by Rasa serves to enhance accessibility and user engagement, providing a seamless experience for students and prospective applicants. Through the web interface, users can interact with the chatbot directly from their browsers, eliminating the need for additional applications or platforms. This allows for greater convenience and flexibility, as users can access the chatbot anytime, anywhere, using their preferred devices.

The web interface not only facilitates text-based conversations but also enables the incorporation of multimedia elements such as images, videos, and links, enriching the user experience and making it easier to convey information effectively. Additionally, features such as interactive forms and buttons can be integrated into the interface to enable users to perform actions such as submitting applications, scheduling appointments, or accessing specific resources with ease.

## BAG OF WORDS

Bag of Words is basically the way of extracting the characteristics/features from text so that it can be used in building models. The approach is very easy and flexible. Bag of words is a representation of words which includes two main things, document of known words and frequency of known words. The Bag of words can be simple or complex, the complexity comes in how we handle both creating the vocabulary of known words and occurrence of known words. The bag-of-words model is a model of text which uses a representation of text that is based on an unordered collection or bag of words. It is used in natural language processing and information retrieval (IR). It disregards word order (and thus any non-trivial notion of grammar) but captures multiplicity. The bag-of-words model has also been used for computer vision. The bag-of-words model is commonly used in methods of document classification where, for example, the (frequency of) occurrence of each word is used as a feature for training a classifier.

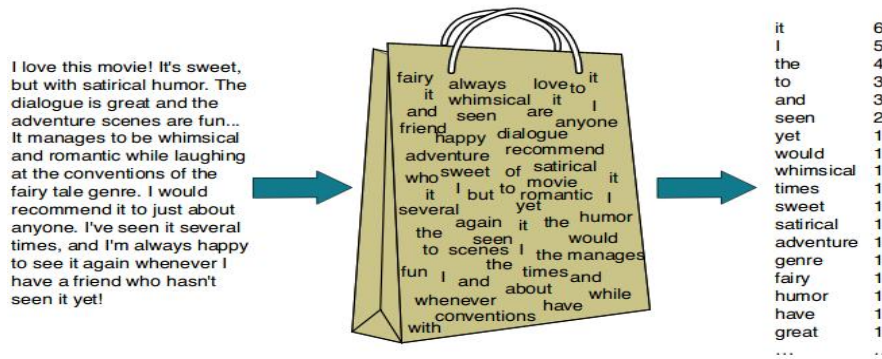


Fig : 4. Representation of Bag of Words

Which has three important steps first collecting the data, second designing the vocabulary and the last step is creating the document vector.

Step 1 : Collecting the data:

It can be any data given by the user, we can treat each and every line as different document.

Step 2 : Designing the vocabulary:

Here we can collect the list of all the unique words ignoring case sensitive and punctuation and Put that into the model vocabulary.

Step 3 : Creating the document vector :

Here we check the frequency of words in each document and the main goal of this step is to turn each word in the document into the vector form so that it can be easily used as an input to the other machine learning algorithms.

## CONDITIONAL RANDOM FIELDS

Conditional Random Fields(CRF) are a discriminative model, used for predicting sequences. They use contextual information from previous labels, thus increasing the amount of information the model has to make a good prediction. Conditional Random Fields (CRFs) are a type of probabilistic graphical model often used in pattern recognition and machine learning tasks, particularly in natural language processing (NLP) and sequence labeling problems. Unlike other models like Hidden Markov Models (HMMs) or Maximum Entropy Markov Models (MEMMs), CRFs model the conditional probability of a sequence given input features, without making any simplifying assumptions about the independence of input features.

Conditional Random Fields are especially useful in tasks where sequential data needs to be labeled or segmented. For example, in named entity recognition (NER), CRFs can be used to label each word in a sentence with its corresponding named entity type. Similarly, in part-of-speech (POS) tagging, CRFs can assign each word in a sentence its correct part-of-speech tag.

The strength of CRFs lies in their ability to model complex interactions between neighboring elements in a sequence, taking into account both local and global features. This makes them particularly effective in capturing dependencies between adjacent labels in sequential data, leading to more accurate and coherent

predictions. Conditional Random Fields are a powerful tool in machine learning for sequence labeling tasks, offering flexibility, robustness, and the ability to model complex dependencies in sequential data.

A Student chatbot project is developed with the help of codeigniter that is widely called a php framework that analyzes user’s queries and perceive user’s message. The proposed System could be a internet application that provides answers to the queries provided by the scholar or the user. Users will merely question through the chatbot that's used for chatting. Students will chat by using anyformat there's no specific format the user needs to follow. The answers are applicable what the user queries. If the answers are found to be invalid or not accessible then those queries are hold on into the unrequited table that is essentially created by the admin. Later those queries can updated by the admin, just in case of urgency we are going to provides a message that “our representatives will get in touch with you shortly”. This may be displayed once aggregation the specified info from the user. Admin will read invalid answer through portal via login System, it'll permits the admin to get rid of the invalid answer also as in updating the acceptable answer for the question raised by the user.

The User will raise any faculty connected activities through the system. The user doesn't ought to in person move to the faculty for enquiry. The System analyzes the question and so answers to the user. The system answers to the question as if it's answered by the person. The system replies with the help of a good Graphical interface which suggests that as if a true person is reprehension the user. The user will question regarding the faculty connected activities through on-line with the assistance of this internet application. this method helps the scholar to be updated regarding the college related information.

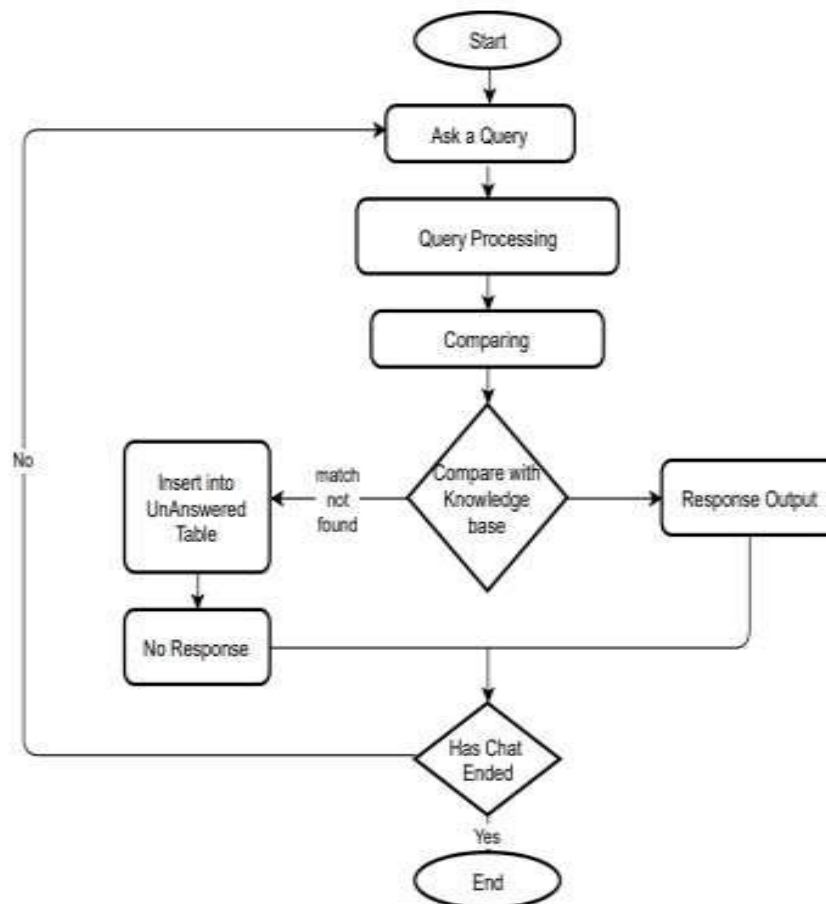


Fig.5. Flow Chart diagram for College Enquiry Chatbot

The above Flow Chart describes the entire process of the system, if the user query is not found in the database then we will collect the details from the user and one of the person from the college will contact the user personally. The answered questions will be stored in the database and the corresponding answers for those queries, will be updated by the Admin.

**ER DIAGRAM**



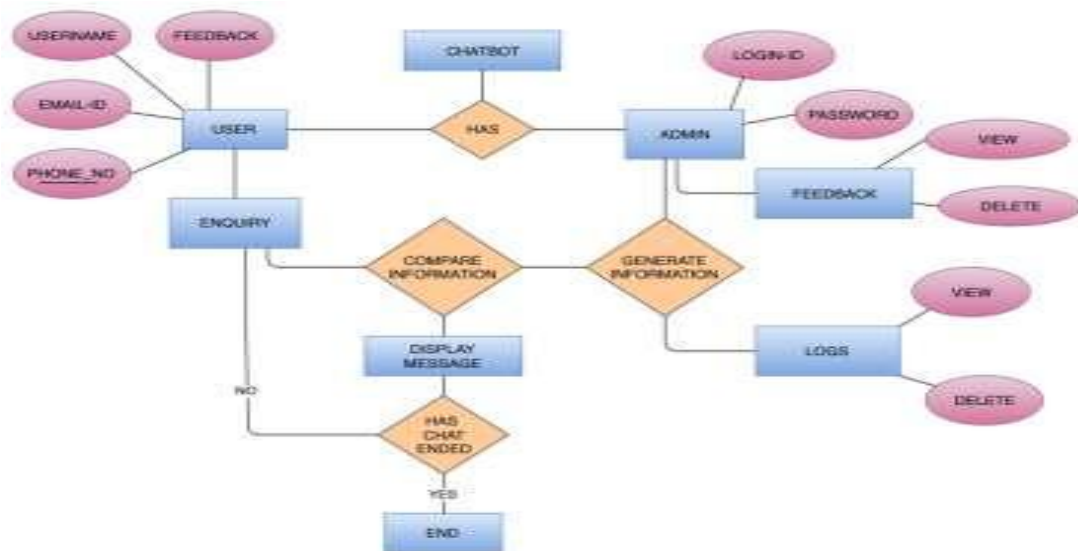


Fig .6. ER Diagram for College Enquiry ChatBot

The Entity-Relationship (ER) diagram for the college enquiry chatbot using RASA primarily revolves around two main entities: User and Information Source. The User entity represents individuals interacting with the chatbot to inquire about college-related information. Attributes of the User entity may include user ID, name, contact information, and any preferences or previous interactions stored for personalization. The Information Source entity represents the various sources from which the chatbot retrieves information, such as the college's database, website, or external APIs. Attributes of the Information Source entity may include source ID, type (e.g., course catalog, admissions information), and access credentials if applicable. The relationship between User and Information Source is typically represented as a many-to-many relationship, indicating that multiple users can access information from multiple sources, and vice versa. This relationship reflects the chatbot's ability to fetch relevant information from different sources based on user inquiries and preferences. Overall, the ER diagram provides a visual representation of the entities and relationships involved in the college enquiry chatbot system, facilitating the understanding and design of its underlying data structure.

**SYSTEM STUDY**

The system design for an online inquiry chatbot using RASA encompasses several key components and considerations. At its core, the chatbot system includes a user interface, a chatbot server powered by RASA, a database for storing information, and potential API integrations for enhanced functionality. Users interact with the chatbot through a web-based interface, such as a chat widget embedded on a website. This front-end interface serves as the entry point for user queries and provides a seamless experience for engaging with the chatbot.

**FEASIBILITY STUDY**

The feasibility of the project is analyzed in this phase and business proposal is put forth with a very general plan for the project and some cost estimates. Preliminary investigation examines project feasibility, the likelihood the system will be useful to the organization. The main objective of the feasibility study is to test the Technical, Operational and Economical feasibility for adding new modules and debugging old running system. During system analysis the feasibility study of the proposed system is to be carried out. This is to ensure that the proposed system is not a burden to the company. For feasibility analysis, some understanding of the major requirements for the system is essential. Three key considerations involved in the feasibility analysis are:

- Technical Feasibility
- Operational Feasibility
- Economical Feasibility

The main objective of the study of the prospect is just to verify the technical, social as well as operational achievement to include additional features and to investigate the past working structure. Every device will be back to earth in the event that they are infinite energy and unremitting time. Perspectives exist in the concentration of attainability of some portion of the quick evaluation. During system analysis the feasibility study of the proposed system is to be carried out. This is to ensure that the proposed system is not a burden to the company. For feasibility analysis, some understanding of the major requirements for the system is essential

### Results & Analysis

In this study, we construct a system for real-time college enquiry chatbot using rasa framework, and we use it to know the information about the college regarding college fee structure, courses available in the college. In this method, we: a) Use RASA framework techniques to create the chatbot. b) Then we create the intents, domin and stories for the chatbot in visual studios. c) Use a command prompt we will train the RASA model .

d) After training the model we will run the code then the chatbot will be created. By using that chatbot we can know the information about the college.

The execution of the process will be explained clearly with the help of the continuous screenshots. Each figure mentioned below are the simultaneous process of screening outputs.

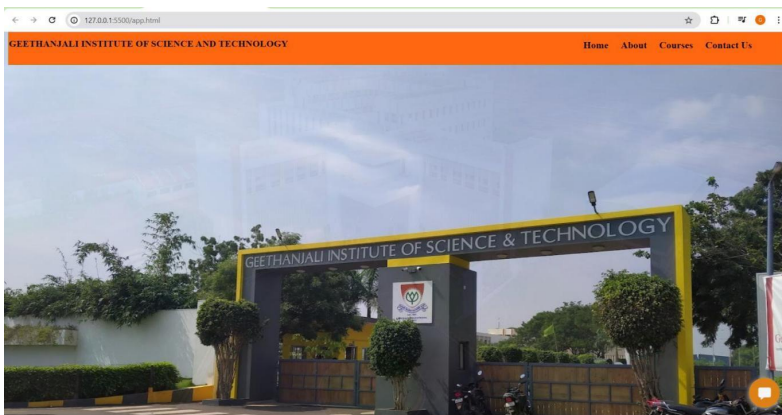


Fig.7. Sample college website with the chatbot.

Description : Fig 1, describes the website created with the chatbot at corner of the page. The above image explains that there is a chatbot with the college photo at background.

When model is trained with the intents and entities with the required information . That information is used to give the response when the use ask any question regarding the college. So, that the model need to be trained and tested .

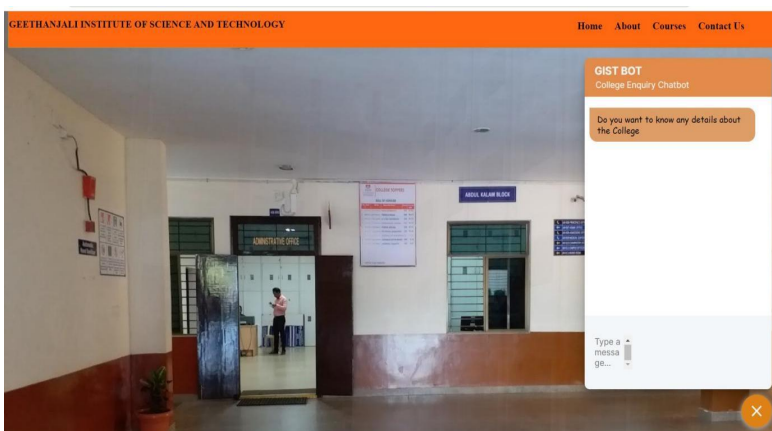


Figure.8. When the chatbot is opened it started with message.

Description : The above fig 2 represents that the vehicle is detected by the bounding box.

The above image explains that there is a chatbot with the college photo at background and the chat bot responds by showing the message “Do you want to know any details about the college” and picture of college with the 4 options so that the user can select according to his query.

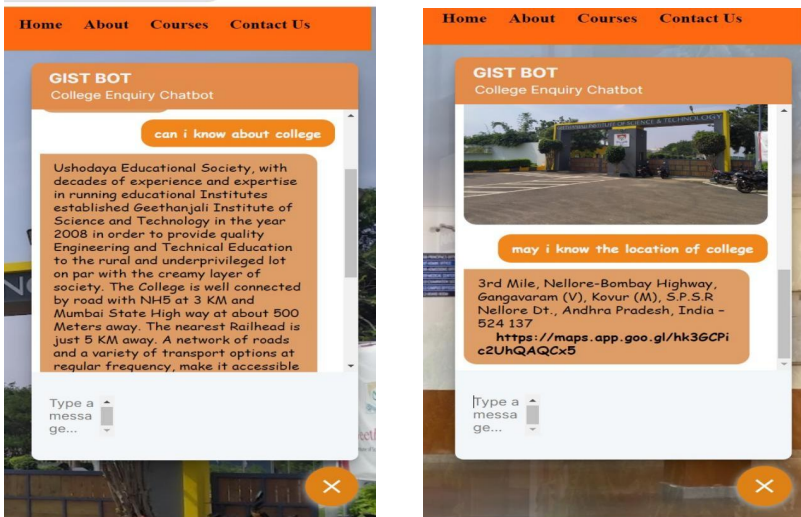


Figure.9. When user ask a question the chatbot will give the information on college.

Description : The above image is about the “About the college” option which will tell the user about the details of the college including the NAAC grade of college. It will also provide image of the college for the user.

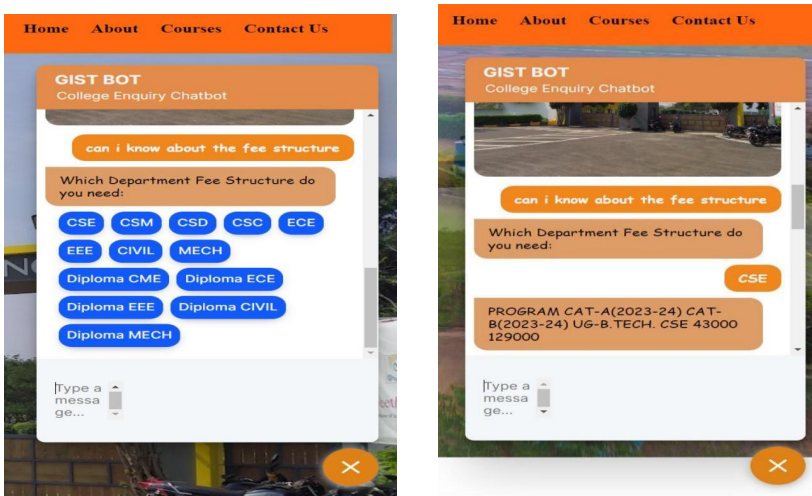


Figure.10. About the fee structure of the college

Description : Above fig represents the fee structure of the college , when the use ask about the fee structure then the chatbot will give us some options . Based on the option selected by the user the information will be provided.

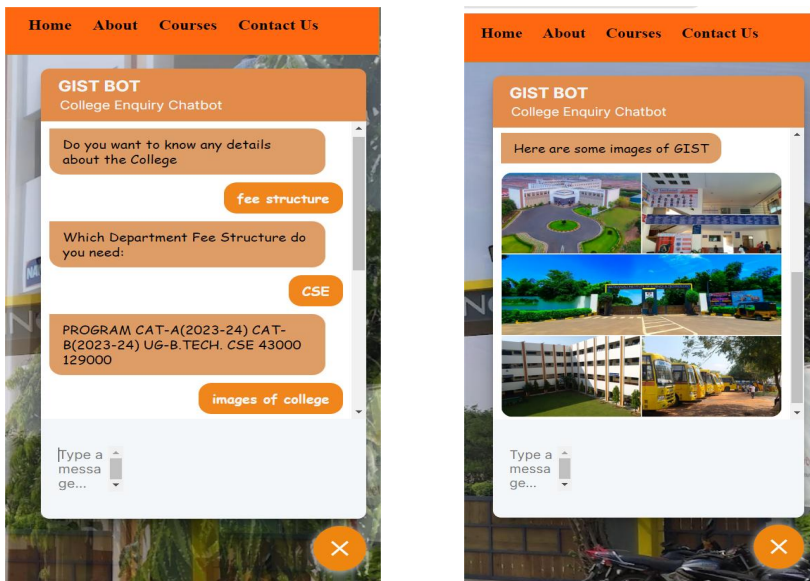


Figure.11. Displays some images of college

**Description :** Above fig represents the images of the college , when the use ask some images or pictures of the college, then the chatbot will give us some images of the college . That shows the surrounding of the college.

## CONCLUSION

In this project we have created, the chatbot 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 assistance. This system is developing chat bot based on android system so with the combination of Artificial Intelligent Knowledgeable database and virtual assistance. We can develop such chat bot which will make a conversion between human and machine and will satisfy the question raised by user. The main motive of the project is to reduce the work load on the college's office staff and reduce the response time to a user's query. Our ChatBot provides information regarding to the college. It is the website. It is interact to the user like parents, student. By using NLP human language transformed into a data language. And also by using the Pattern Matching, Enquiry related question respond quickly. When ChatBot technology is integrated with popular web services it can be utilized securely by an even larger audience.

## FUTURE ENHANCEMENTS

Enable the chatbot to support various modes of interaction, including text, voice, and perhaps even gestures or images, for different user preferences and accessibility needs. Utilizing advancements in Artificial Intelligence (AI) technologies such as machine learning and deep learning to enhance the chatbot's capabilities in understanding user intent, generating natural-sounding responses, and learning from user interactions to improve over time. Overall, these future enhancements aim to make the college enquiry chatbot a more powerful and indispensable tool for students, providing them with timely and relevant information to support their educational journey effectively.

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