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COLLEGE ENQUIRY BOT

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ABSTRACT

A chatbot is a computer program which conducts a conversation through auditory or textual methods. A chatbot has a information stored in its database to identify the sentences and making a decision itself as a response to answer to a given question. A college enquiry chatbot will be built using algorithms that analyses queries and understand user's message. This will become a web application which provides answer to the students' questions effectively. Students just have to put their question in the chatbot which is used for chatting. The system will use sentence algorithms to answer for the given question very appropriately and legibly. If the answer is found invalid, then there is a system to declare the answer as invalid. These invalid answers can be deleted or modified by the administrator of the college or the system provided in the particular college. In this chatbot we can find the information related to the available faculty, we can also enter into the websites of particular college we are going to search .We can also interact with the respective faculty whom we want to and we can also search for the results.

Keywords: *Chatbot, Conversation, Algorithms, Administrator, Legibly.*

I. INTRODUCTION

College Enquiry Chatbot is used to know about the particular college in an easier way. It reduces time waste and gives much more information related to the college to the user. So that user gets some idea about the college then they will decide to join in that particular college or not to join in it based on the information the bot shows to the user. It shows the experience of faculty available in the college and infrastructure and facilities available in the college. It also helps us to know the performance of students and gives a clear idea to parents about their child. It displays the different departments available in the college and faculty of all the departments and the information related to higher authorities of the college also can be seen in this chatbot. All this is possible just by logging into college website with your mail id. Just by logging in you can collect lots of information related to the college which is very much helpful for a particular student.

1.1 About Project:

The college enquiry chatbot project is built using algorithms that analyses user's queries and understand user's message. This is an application which provides answer to the query of the student. Students just have to query through the bot which is used for chatting. The user can query any college related activities through the system. The user doesn't have to personally go to college for enquiry. The system analyses question and answers to the user. The system answers to the queries as if it is answered by a person. System can do this only with the help of algorithms that user built. College enquiry chatbot gives information related to every stream related to college and authorities of the college too. That's the reason the efficiency of chatbot usage increased in present generation.

College Enquiry Chatbot project will be built using artificial intelligence algorithms that will analyze user's queries and understands user's message. The system replies using an effective Graphical user interface which implies that as if a real person is talking to the user. The user just have to register himself to the system and has to login to the system. After login user can access to the various pages.

A Chatbot is a computer program which conducts a conversation via textual methods. Such programs are often designed to convincingly simulate how a human would behave as a conversational partner, there by passing the turning test. Chatbots are typically used in dialogue systems for various practical purposes including customer service or information acquisition. Chatbots are often integrated into dialogue system for example, automated online

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assistants, giving them the ability of, for example, small talking or engaging in casual conversations unrelated to the scopes of their primary expert systems.

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A Web Based College Enquiry Chatbot with Results. In which we can obtain the information about the usage of chatbot related to the college enquiry. That is "The machine has been embedded with the knowledge to identify the sentence and making a decision itself as response to answer a question". In this he developed a web application through which user can enter into the particular college website through their mail id and search for the information which they need. In the website of the college we can get information of the courses available in the college, faculty of different departments, college infrastructure, in which area it is located, about transportation facilities and many other needs of what the students need.

1.2 Objectives:

- Developing a chatbot.
- Inserting a feature through which user can enter into system that is by using mail Id.
- Collecting information related to every faculty in the college.
- Collecting information related to student's performance.

1.3 Scope:

College Enquiry Chatbot is used to search the information about the faculty available in the particular college, and their experience, Qualification, about the infrastructure and facilities provided in the college, transportation facilities, and college contact numbers through which we can communicate and get to the information related to the college. We can also get the information related to the different departments available in the college and also placements. We can also analyze the performance of the students by seeing their results available in the website. But in this we can access information only through textual messages but not through voice based communication.

1.4 Advantages:

- Reduced costs- chatbots eliminate the requirement of any manpower during the online interactions and are hence seen as a big advantage by companies receiving multiple queries at once.
- 24-7 availability-Unlike humans chatbots once installed can attend queries at any time of the day. Thus, the customer doesn't have to wait for the company executive to come and help them.
- Learning and Updating-AI-based chatbots are capable of learning from interactions and updating themselves on their own.
- Multiple Customer Handling-Humans have limit to the number of customers that they can handle at once. However, with chatbots there is no such problem and they can handle as many queries as required at once.
- They are used to search for whatever the query you want to and there no restrictions of which type of query you want to ask like that.
- College Enquiry Chatbot is used to search for the complete information related to chatbot. It decreases the time of the user and increases efficiency.

1.5 Disadvantages:

- Complex Interface-Chatbots are often seen to be complicated and require a lot of time to understand user's message or requirement.

- It is also the poor processor which is not able to filter results in time as per user requirement.
- Inability to Understand-Due to fixed program, chatbot can struck if it encounters an unsaved query. This can lead to customer dissatisfaction and result in loss.
- Time Consuming-Chatbots are installed with the motive to speed-up the response and improve customer interaction. However, due to limited data-availability and time required for self-updating, this process appears more time taking and expensive.
- Increased Installation Cost-Chatbots are useful programs that help you to save a lot of manpower by ensuring the all-time availability and serving to several clients at once.
- Poor Memory-Chatbots are not able to memorize past conversation which forces the user to type the same thing again and again. Thus, it is important to be careful while designing chatbots and make sure that the program is able to understand user queries and respond accordingly.

1.6 Applications:

- It is used in collecting information about the particular college, its facilities, faculty, and different departments in college using College Enquiry chatbot.
- It is also used in analyzing the performance of students in the college website using AI chatbot.
- Chatbots are used to develop cloud platform.
- Chatbots are used for customer service on social media.
- It is also used to communicate with the humans in a rapid way.
- Chatbots are also used in Internet of Things (IOT).
- Chatbots are used in online shopping, food orders.
- Chatbots are used to rediscover the machine intelligence.
- They are used in marketing, booking tickets, banquet hall booking etc..
- They are used to develop many applications.
- They are much related to the web browsing, gaming, banking and all online applications.

1.7 Software Requirement Specifications:

IBM Watson Platform

II. LITERATURE SURVEY

K. Bala proposed that “Chatbot for college management system using A.I”. A chatbot aims to make a conversation between both human and machine. The machine has been embedded knowledge to identify the sentences and making a decision itself as a response to answer a question. Chatbot 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. Chatbots are usually statefull services, remembering previous commands in order to provide functionality. It can be utilized securely by an even larger audience when chatbots technology is integrated with popular web services. The college enquiry chatbots will be built using artificial algorithms that analyze users queries and understand the users message. The response principle is matching the input sentence from a user. The user can ask the question any college related activities through the chatbot without physically available to the college for enquiry.

The system analyses the question and then answers to the user. With the help of artificial intelligence, the system answers the query asked by the user. The system replies using an effective graphical user interface as if a real person is talking to the user. The user just has to register himself to the system and has to login to the system. The chatbots consists of core and interface that is accessing the core in (my SQL). Natural language processing technologies are used for parsing, tokenizing, stemming, and filtering the content of the complaint [1].

Amey Tiwari proposed that “College Information Chat Bot System”. 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. Whether due to multi threaded complexity, concurrent connectivity, or details surrounding execution of the service, a chatbot based interface may suit the need.

Chatbot typically operates a text based user interface, allowing the user to type commands and receive text as well as text to speech response. A chatbot is an artificial person, which holds conversation with humans. This could be a text based conversation, a spoken conversation or even a non verbal conversation. Chat bot can run on local computers and phones, through most of the time it is accessed through the internet. Chatbot 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 websites, and from standard computers to fashionable smart mobile devices. Chatbot talk in almost every major language. Their language skills vary from extremely poor to very clever intelligent, helpful, and funny. The same counts for their graphic design, sometimes it feels like a cartoonish character drawn by a child, and on the other hand there are photo realistic 3D, animated characters available, which are hard to distinguish from humans [2].

Emanuela Haller and Traian Rebedea, proposed that "designing a chatbot that simulates an Historical Figure". There are many publications that are incorporating human appearance and intending to simulate human dialogue, but in most of the cases the knowledge of the conversational bot is stored in a database created by a human experts. However, very few researches have investigated the idea of creating a chatbot with an artificial character and personality starting from wed pages or plain text about a certain person. This paper describes an approach to the idea of identifying the most important facts in texts describing the life of an historical figure for building a conversational agent that could be used in middle school CSCL Scenarios [3].

Maja Pantic proposed that " Teaching Introductory Artificial Intelligence Using A Simple Agent Framework". This paper describes a flexible method of teaching introductory artificial intelligence using a novel, Java implemented simple agent framework developed specifically for the purpose of this course. Although numerous agent frameworks have been proposed in the vast body of literature, none of these available frameworks proved to be simple enough to be used by first year students of the computer science. Hence, the authors set out to create a novel framework that would be suitable for the aims of the course, for the level of computing skills of the intended group of students and for the size of this group of students.

The content of the introductory AI course in question is a set of assignments that requires the students to use intelligent agents and other AI techniques to monitor, filter, and receive relevant information from the World Wide Web. It represents, therefore, a synthesis of the traditional objectivist approach and a real world oriented, constructivist approach to teaching programming to novices. The main aim of implementing such a pedagogy was to engage the students in learning to which they personally relate while attaining intellectual rigor. Classroom experience indicates that students learn more effectively when the traditional objectivist approach than when this orthodox approach to teaching programming to novices is used [4].

Mukesh Kumar proposed that "Chatbot for college management system using A.I". A chatbot aims to make a conversation between both human and machine. The machine has been embedded knowledge to identify the sentences and making a decision itself as a response to answer a question. Chatbot 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. Chatbots are usally stateful services, remembering previous commands in order to provide functionality. It can be utilized securely by an even larger audience when chatbots technology is integrated with popular web services. The college enquiry chatbots will be built using artificial algorithms that analyze users queries and understand the users message. The response principle is matching the input sentence from a user. The user can ask the question any college related activities through the chatbot without physically available to the college for enquiry. The system analyses the question and then answers to the user. With the help of artificial intelligence, the system answers the query asked by the user. The system replies using an effective graphical user interface as if a real person is talking to

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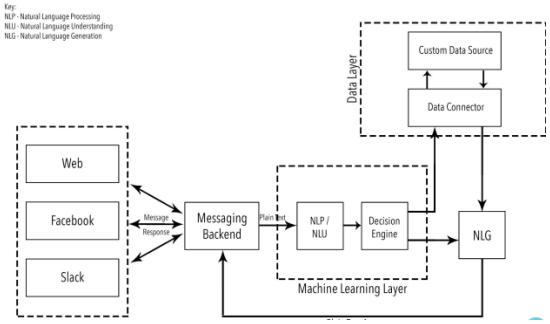
the user. The user can ask any question related to CSE department. It responds to all types of queries and gives the necessary answer for it. It is very much useful to the student to know clearly about a particular college.

III. PROPOSED CHATBOT



ARCHITECTURE OF CHATBOT

The above given is the architecture of chatbot which contains different layers to perform different tasks. It contains presentation layer which contains Web, Facebook, Slack .From this presentation layer messages passes to message backend.

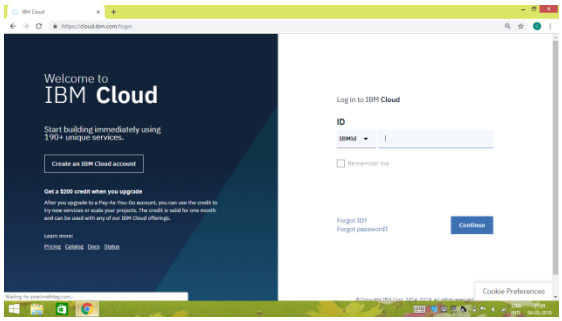
Message backend: it take messages from user and gives it to machine learning layer.
NLP : Natural Language Processing. It breaks the given statement into pieces and understands it and converts it to machine understandable language.
NLU: Natural Language Understanding. It also breaks the statement into pieces and understands it and converts it to machine understandable language.
NLG: Natural Language Generation. It converts machine language to user understandable language.

From here the data transfers to messaging backend. It gives data to presentation layer in the form of response. On the presentation layer user gets the output for the given input.

IV. RESULTS AND DISCUSSION

Now let us see the results that chatbot gives to the query of the user.

First open IBM cloud and then login to your respective id.



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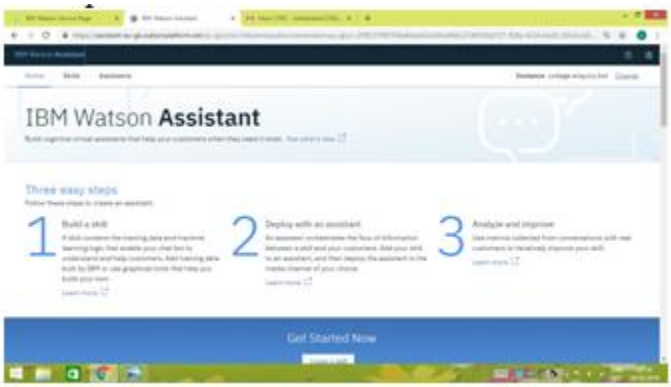
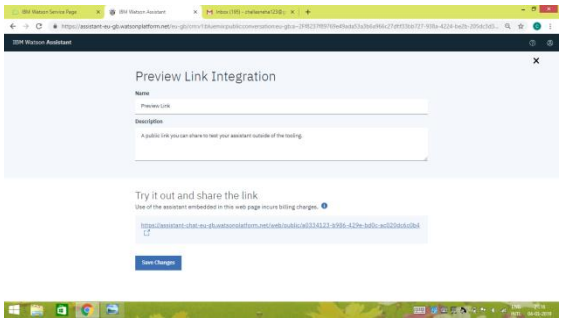
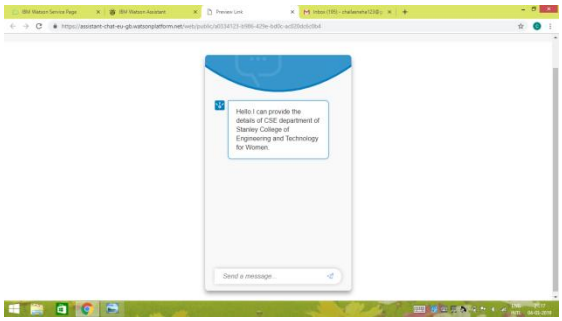
Open IBM Watson account to open the bot you developed.



Later go to skills on IBM Watson assistant it displays the bots you developed. Then press on link present on that bot then you will get a preview link. Below is the snap of that preview link.



Click on that link then it displays the bot which you developed. Ask the query to that bot. Bot responds to the query by understanding users need.



First you ask the bot about the top women's college then it displays the corresponding college name.

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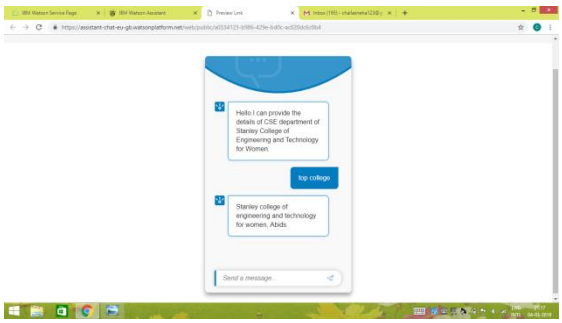
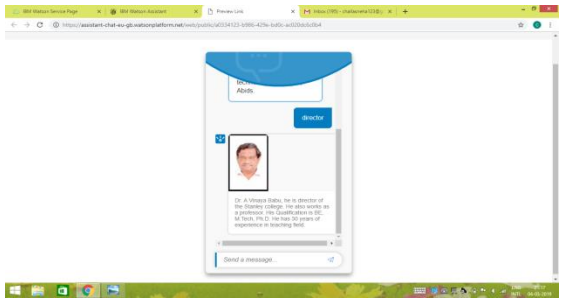
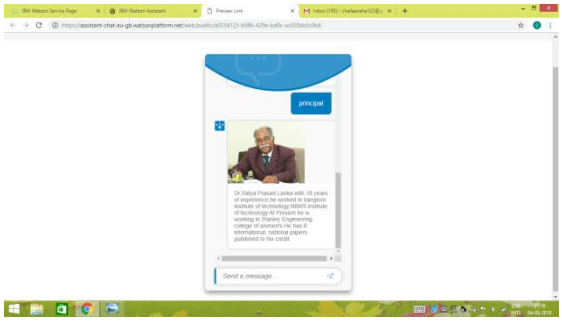


U can search for Director of respective college. As we developed this bot for Stanley Engineering Women's College. So it displays the director of Stanley College.

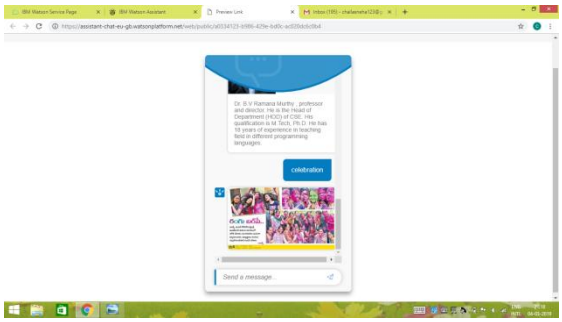


In the similar way it displays the principal of Stanley college. It displays his photo and information related to him.



In the similar way it shows about HOD and faculty members details.

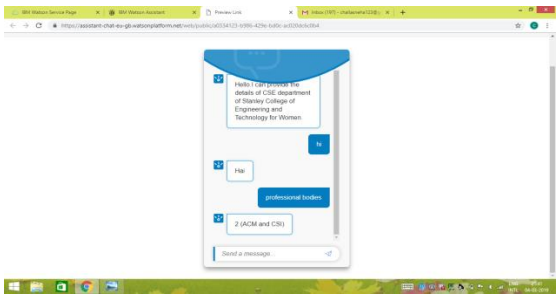
It also displays the celebration time photos and gives information related to professional bodies and also displays college picture.



Celebration time

For CSE department we have two professional bodies. They are

1. CSI
2. ACM



V. CONCLUSION

The proposed system helps us to know the complete details about the college. In this we can search information related to the top college and it displays Stanley college. In this it displays information regarding CSE department. We can know about director ,Principal and HOD of CSE departments. It also displays about faculty, infrastructure and facilities provided in that particular college. It understands the query posed by the user and reacts accordingly. It shows the celebrations of that particular college. We can also know the number of Phd's, Doctrates, number of labs in that college. It also displays the professional bodies associated with CSE department

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