"Student Helping Chatbot"

Amol.N.Mane[1], Shivraj.R.Koli[2], Amit.V.Shinde[3], Pratik.N.Ghadage[4], Pratik.S.Babar[5]

Lecturer, Computer Technology, AITRC, Vita, India[1]

Student, Computer Technology, AITRC, Vita, India[2-5]

Abstract: This project is built using custom algorithms that analyze user queries and understand user messages. This app is a web application that provides the answer to a student's question. Students should ask about the bot used for conversation. Students can chat using any format there is no specific format that the user should follow. The system uses built-in artificial intelligence to answer a question. Answers are relevant to what the user is asking. The user can inquire about any college-related activities in the program. The user does not have to go to the college in person to be interviewed. The system analyzes the question and answers the user. The system answers the question as if it were being answered by someone. With the help of artificial intelligence, the program answers the question asked by the students. The system responds using a Graphical user interface that shows the real person talking to the user. After logging in the user can access various help pages. Various help pages have a bot where the user can chat by asking questions related to college activities. The system responds to the user with the help of an active user interface. The user can inquire about college-related activities online with the help of this web application.

Keywords :- Algorithms, Web Application, Artificial Intelligence, Graphical user interface.

I.INTRODUCTION

This project focuses on creating a chatbot for students to use so that their questions can be easily answered on the college website. A chatbot is a program that can perform real conversations with text channels. By using Artificial Intelligence (AI), chatbots can mimic human conversations. There are two categories of chatbots. One category of chatbots is based on the order in which chatbots rely on the data bank for responses and heuristics. The user must be clear when asking questions for the bot to answer. Therefore, these bots can answer a set of limited queries and cannot perform work without a code. Another category is chatbots based on AI or machine learning algorithms, these bots can answer confusing questions which means the user does not have to specify when asking questions. Thus, these bots create answers to user questions using Natural Language Processing (NLP).

AI-based chatbots are motivated by the need of traditional websites to provide a chat facility where a bot is required to be able to chat with users and solve queries. When a live agent can handle only two to three operations at a time, chatbots can operate without an upper limit that scales up the operations. Also, if any school or business is receiving lots of queries, having a chatbot on a website takes off the load from the support team. Having a chatbot improves the response rate compared to the human support team. In addition, since millennials prefer live chats over a phone call, they find a chatbot, which provides a highly interactive marketing platform, very attractive. Chatbots can also automate repetitive tasks. There may be some scenarios at work or school where you receive the same request multiple times throughout the day and your support team has to respond to each request. Finally, an essential advantage of chatbots is that they are available 24/7. Regardless of the time, users can get a solution to their requests. All of these benefits of chatbots are what motivate you to implement a college survey chatbot.

II.LITERATURE SURVEY

This project is principally targeted at colleges and therefore the synchronization of all the sparse and diverse information regarding the regular college schedules. Generally, students face problems in getting correct notifications at the proper time, sometimes important notices like campus interviews, training and placement events, holidays, and special announcements. Smart Campus tries to bridge this gap between students, teachers, and college administrators. Therefore in an exceedingly real-world scenario, like a university campus, the data within the type of notices, and auditory communication, are often directly communicated through the android devices and may be made available for the scholars, and teachers directly on their android devices and therefore the maintenance of application are easier in later future thanks to the employment of architectural MVC which separates the most important works within the development of an application like data management, mobile program display and web service which can be the controller to form sure for fast and efficient maintenance of the applying.

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III.PROBLEM STATEMENT

Generally, if a student has to get any quite information regarding courses, admissions, and so on, one has to come to college or enquire through the helpline. Although they need enquired through the helpline they further forward the decision to a different section associated with the query. This whole process is time-consuming for both students and also the management. Student has to visit the school nose to nose to induce their queries answered. There could also be some general queries for a student/parent that may be clarified from the net chatbot itself. Here the chatbot comes into the place. Any question on university-related activities are often asked by the user to the chatbot without directly visiting the university for inquiry. These limitations sort of a time-consuming activity and money-consuming activity to induce the desired information are the motivation to develop a university chatbot.

IV.OBJECTIVE AND SCOPE

Continuing with the matter introduced within the previous section that chatbots are still not commonly implemented in education, the aim of this thesis is ready in context. To further the event of educational chatbots, it's important to search out what has been done and to summarize this information in a very concise and relevant manner. No such summarizing study was found, thus, this study aimed to provide that summary to seek out what pedagogical uses and capabilities a chatbot has in an academic context by reviewing the literature within the field, this suggests gazing at what the chatbot can do and be used for in an academic context. during this circumstance, it's also relevant to see if the chatbot may be useful on its own or if additional technology is required, like any system the chatbot has to be encompassed in or that enhances its capabilities, e.g. e-learning system or text-to-speech technology. Hence, the add this study will be used as a stepping stone for coming researchers who might more efficiently uncover the further potential of the technology. This goal was developed with the necessary attention of teachers and researchers as they continued to develop chatbot technology. Of course, there is also quite one thing that's important, for instance, which kind of chatbot to use, the way to adapt it properly to a course, what quite architecture the chatbot system might need, and the way to attain the best pedagogical value and then on. But the question of what role a chatbot could take and what can it neutralize the context of education seemed more acutely relevant since its answer could be a good place to begin answering other questions.

objective:

- To reduce the time required to resolve questions.
- To provide user feedback based on questions.
- Facilitate communication between user and machine.

Scope:
Save timing of scholars and teachers and also save extra manpower. Students can see all documents related to college like notice, study material, question papers, etc. from time to time and from anywhere whether the student is present in college or not. And also reduce the work of staff. it's proper communication between staff and students.

V.PROPOSED WORK

Existing System:

Most of the present chatbots lack empathy and fail to accommodate anything outside of the script. to deal with these problems, the school Enquiry Chatbot extends the implementation of these chatbots by adding sentiment analysis and active learning. Although sensitive analysis identifies the user's question as positive, negative, and neutral, the system has been partially successful in increased sensitivity.it's because the system requires more rigorous training data to handle all queries which are off-script. However, for such queries, active learning helps to boost the chatbot performance since it correctly understands the user's questions, asks clarifying questions, then retrains the system to relinquish the response to what the user intends to urge. the longer-term work includes training the chatbot with more varied data; increasing the scope of the chatbot by adding a speech recognition feature so users can speak to urge responses; and including integration with multiple channels like call, SMS, and various social media platforms.

Proposed Methodology:

Chatbots are designed to provide communication between humans and machines. Admin feeds information to chat-bot as a database so that the machine can identify the sentences and take the decision itself to answer a question as a response. The function of connecting the chat bot to the database is done by MySQL. In the pattern-matching operation Knowledge representation and implementation of SQL are needed. To respond based on user Submitted questions, the database is checked using some validation algorithm. If in case any questions in the query did not match the stored database then it will be notified to the admin then the admin will work on that or it will add that query/output. Chat-bots can be identified as information accessing systems as they try to answer questions directly instead of just giving some document links. The aim is to provide exact information related to user-submitted queries. So, the chat bot is implemented using a pattern-matching chat-bots technology. This paper gives a simple way of building a chatbot that can provide answers to the user. It will receive an "input" as a plain text and send "output" through a process that can answer appropriate questions. Answers will be provided related to that specific word through its available database. The purpose is to provide a solution to the problem.

- **Login :**

The user needs to register to the bot and then log in to the bot. After login user can see the page on which queries can be asked and submitted to get answers.

- **Response Block :**

Search Questions within the knowledge database: we've got used the Auto complete Mechanism within the chatbot to produce the users an inventory of questions while typing the start word within the text box. It facilitates the user to pick out an item from the list, which can be displayed within the input field then the precise question within the database is detected using the stored procedure in SQL.

- **Failed To Finding Matching Response :**

Whenever a user submits an issue or query, the precise question/queries are detected. Then chatbot checks for the query within the database and if it's already there or not within the database. If the solution is accessible within the database then the solution is shipped to the User. If the question isn't present within the database, the user will get a response as an invalid question. And such questions are forwarded to the admin person. Admin can have a glance at such user-submitted questions and if those questions are found to be valid then information associated with such questions will be stored within the database by the admin person. so that such questions can get answered directly from the database(whenever asked). thanks to this admin just need to answer the question just once, No must answer manually again and again.

- **Programing**

i.Front End :
1. **HTML :**
HTML help to build the chatbot's body. It also set web data in a block of containers. The controller determines how to render an opinion, which means which values are accepted in View and which must be returned in response.

2. **CSS :**
Designing a chatbot using css attributes by making external css file.

3. **Jquery and Javascript :**
It is used for setting an activity on the chat screen and also it helps to get data from the python mini server.

ii.Back End :

1.   Python :

Python creates a mini local server by using a flask. is used to fetch data to a web chat application. We use the Chatterbot library for providing a correct answers to user. chatter bot is python library wich used to pattern matching algorithms

2.   MYSQL :

It is used for storing user data and providing a response throughout of python programming language
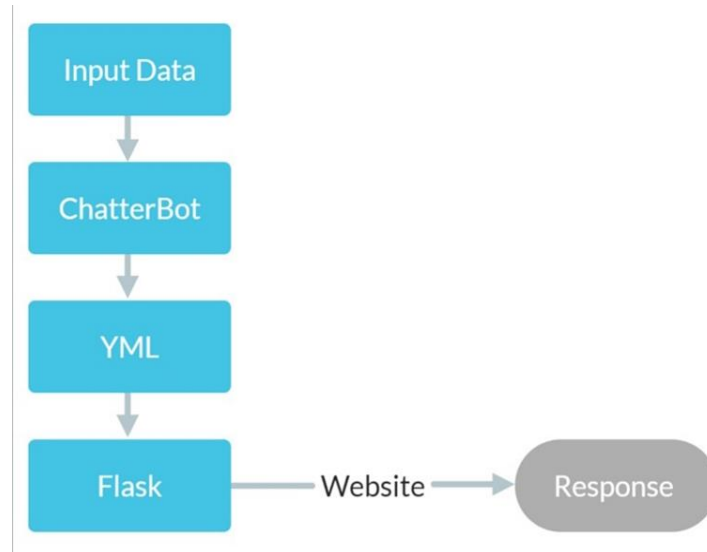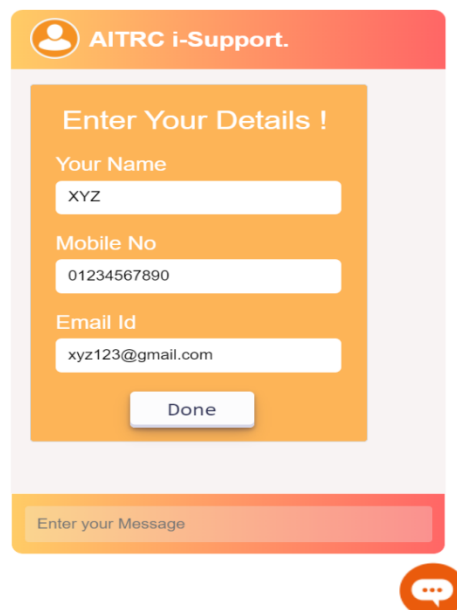
VI.SYSTEM ARCHITECTURE:

Fig-1: Flow Chart diagram for College Enquiry Chatbot.

VII.RESULTS

1.Login :

2.Chat Window :

VIII.CONCLUSION

The purpose of this program is to help students stay up-to-date on their college activities. Artificial Intelligent is the fastest growing technology in the world, with the help of a smart and knowledgeable database. This program creates a chatbot based on the python-app system and therefore with the integration of a site with intelligent Artificial Intelligent information and visual assistance. We can develop such a chatbot that will make the transition between person and machine and that will satisfy the question raised by the user. The main purpose of this project is to reduce the workload of college office staff and to reduce the response time to users' queries.

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