

# Customized BOT for Educational Institution

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**Abstract:-** As the world is suffering from covid-19 due to which the pandemic has stopped day to day activities of students such as college admission inquiries, academic details, placement cell details, etc. by considering this problem, "Customized bot for educational Institution", is to be developed. The main objective of the system is to provide a facility for communicating with the end-user and the information which the user wants to access. The Methodology that can be used to develop the system is Amazon Lex is a service for designing chatty interfaces, [1]An Amazon web services Lambda named function used to compute service that makes it easy for building an application, and the Amazon's Dynamo-DB is a document database, Amazon CloudWatch is monitoring observability service, Amazon's S3 is the object storage service that offers data availability, scalability, security and performance and, Amazon IAM through which it will be able to use secure AWS resources. The system will answer user queries smartly. It is to be implemented to feel exactly like person-to-person communication. Information will fetch quickly without thinking about keywords and queries.

## I. INTRODUCTION

As the world is suffering from covid-19 due to which we stopped our all outsider activities. But we can't stop our daily routine activities such as office-work, college, and schools all these stuff are still going on in online mode.

High schools, colleges, and universities across the country are viewing students' safety as their ultimate priority and making new policy adjustments to protect everyone. The college admissions process was already complicated, and the ongoing pandemic has added to the complexity of it. Students, applicants, and families may be wondering what to expect going forward, and luckily we have developed a cloud-based Chatbot system on our college website.

If a student wants to take admission in college or he/she wants to enquire his/her doubts or a parent who wants to know more about the college in which they want to admit their child or an industry person who wants to know about college as well as placements information, to overcome everyone's problem in this pandemic we invented a new system named as "Customized Chatbot For Educational Institution".

Users can ask any queries, college-related activities, through the Chatbot System User can get information that they want to access. There is no need to user go to college personally for any inquiry. This system analyzes the query later replies to the handler. The chatbot scheme uses specific keywords to retrieve the answer from the database. There is no format to follow while asking any question in the chatbot. So that they would feel the bot to be very friendly.

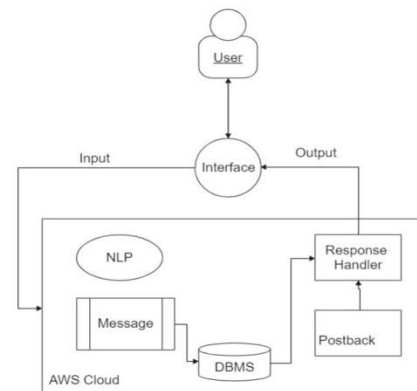


Fig. 1: System Architecture

An architecture of Chatbot requires a handler edge is a scheme or a structure that dissimilar units practice to intermingle through which user action is handled. NLP helps your chatbot analyze and understand natural human language communication. Response handler to give the response to the user's queries through text/message. Those messages are fetched by DBMS. The architecture of the Chatbot is shown in the below figure.

### ➤ Level 0:

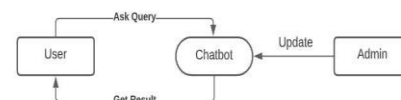


Fig. 1: Data Flow Diagram

### ➤ Level 1:

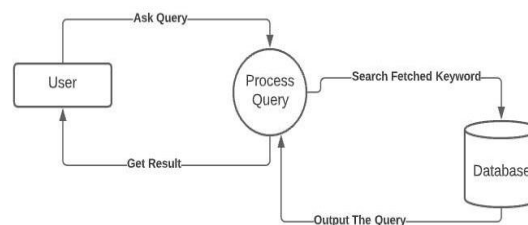


Fig. 2: Data Flow Diagram

The above DFD indicates that the material flow through a procedure or structure.

Zero level DFD: User asks queries on chatbot and gets the result back form chatbot and also admin can update the queries.

First level DFD: In the first level the user query will be processed and search fetched keyword from the database and then return the result in the same flow.

## II. ALGORITHM

- Admin enters user pin for login.
- After Login Success admin can update data.
- Admin can delete the data.

## III. USER LIST

### A. User: Admin

Admin is handling this Chatbot for maintaining the Data related to College.

- Add, Update, Delete Information

### B. User:

Students, parents, and guests use this chatbot on our college website then they can ask their queries.

- Check Attendance report
- Check College Placement details.
- Check Activity
- Query related to admission.

## IV. PROPOSED SYSTEM

This chatbot help students and parents resolve their queries it will save time for them. All queries can easily be answered within a seconds and are also available 24x7.

This chatbot is very easy to use for Admin and Employee. Admin maintains all the details related to college that is stored in the chatbot.

## V. RESULT

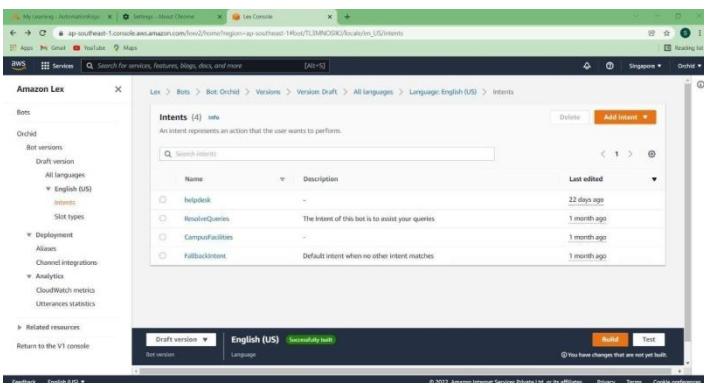


Fig. 3: Add Intents

Amazon'slex service is a completely managed service, and as thatoffers all the neededstructures to figure, install, measure, and screen the bot. A chatbot consists of several child configuration items, such as intents, utterances, slot types, channels, lambda functions, to name a few.

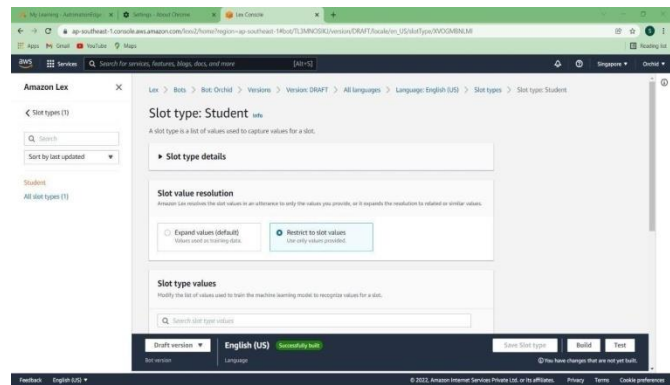


Fig. 4: Add Slots

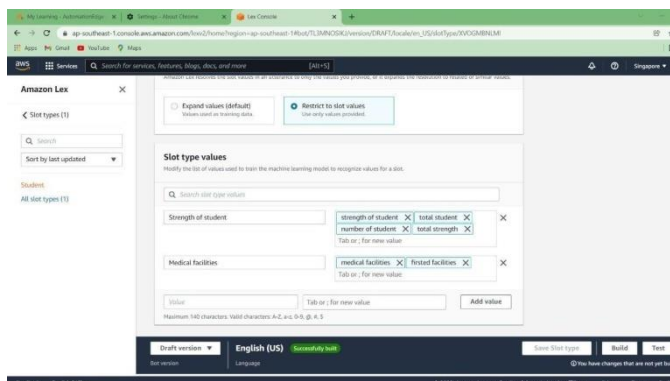


Fig. 5: Add Utterances

An intent represents some sort of outcome or action that a boy may perform. A single bot may be comprised of multiple intents. Utterances are several phrases that the user speaks or types to activate the intent. The fulfillment process is a method to complete or fulfill the intent, for example, a configured lambda function implementing the respective business logic. In addition to the custom intents, lex provides several built-in intents than can be leveraged. Each intent may require and must solicit additional attributes, otherwise known as slots, from the user to complete this intended outcome. Slot types provide a typing system for slots. That is, each slot that is defined is used to specify a slot type.

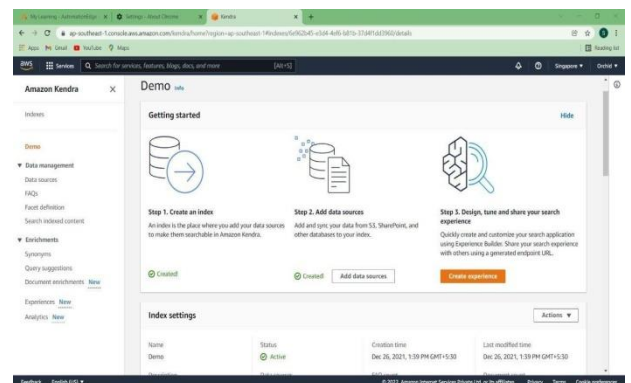


Fig. 6: Database

[3] With help of Amazon Kendra, it will be easy to summative content from content sources such as Microsoft SharePoint, Amazon's S3, Salesforce, and Amazon's RDS into a unifiedkey that lets you fastlysearch all of your creativity data and find the most accurate answer.

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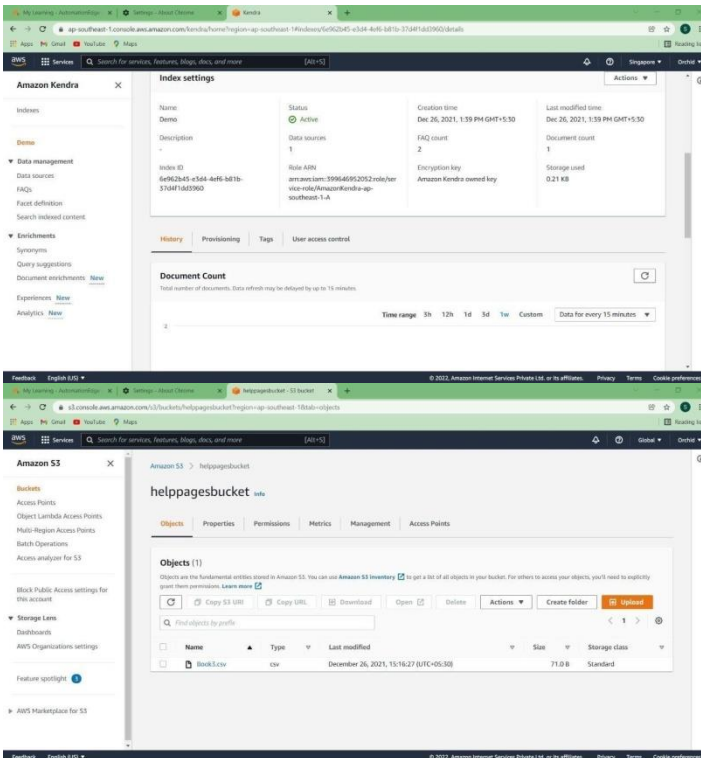


Fig. 7: S3 Connection

[1]Amazon’s S3 and start to using standard SQL to also to run ad-hoc queries and get results in min time. Also, as an administrator, it is important to monitor and review any missed utterances, as it allows them to modernize and polish the utterances list insideanresolved [4] to certify that it spirits under as many ordinarily used slogans as probable. This chatbot can be integrated into the website using the thought of canals. Developers can form and design a chatbot bidinside Amazon’s Lex, and then install it to variouscanals. This allows the conversation to take place from within the platform beyond AWS’s or developers’ applications. All network connections established to Amazon Lex are done using HTT.

VI. CONCLUSION

The persistence of this scheme is to feign a human dialogue. Its constructionassimilates a semantic model and computational steps to imitatematerial through communiquéamong a hominoid and a PC using natural language. The institution chatbot targets to eliminate this struggle by given that a public and manageableedge to explainthe probes of institution students and users. The user can freely upload ownrequests. The methodoffersa debauched and effectivequest for replies to the demands and catches the significant result to request. Thestoringcontainsmaterialnearby the inquiries, answers, and keywords. Meanwhile the folder is self-governing of stowedanswers, new information/data below any class can be simplymore and detached and need no modification of the stored system responses.