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## **Automated Travel Insurance Chatbot**

Aishvarya Mohan<sup>1</sup>, Martin Jayabal<sup>2</sup>, Divya S<sup>3</sup>, V Vivekanandan<sup>4</sup>
Department of Computer Science
KGISL Institute of Technology, Coimbatore, India

Abstract - The Automated Travel Insurance Chatbot is designed to engage customers in a dynamic conversation, which will enable customers with a good level of interaction with the bot. This is automated to choose multiple travel plans as like in a webpage, based on the interactive and personalized customer engagement. It helps customers to choose the right plan for them. Specific travel insurance plans are designed for students, senior citizens and for a family or a group of people according to their needs. All plans offer combined insurance and services which covers accident and all medical expenses, transportation expenses associated with medical evacuation. Depending on the plan selected, other features and options are given.

#### I. INTRODUCTION

A chatbot (also known as a Bot, chatterbox, Artificial Conversational Entity) is a computer program which conducts a conversation via auditory or textual methods [1][2]. Such programs are often designed to convincingly simulate how a human would behave as a conversational partner. Automated travel insurance Chatbot project will be built using artificial intelligence algorithms that will analyze user's queries and understands user's message.

The Automated Travel Insurance Chatbot is designed to engage customers in a dynamic conversation, which will enable customers with a good level of interaction with the Travel insurance system. This is automated to choose multiple travel plans as like in a webpage, based on the interactive and personalized customer engagement. It helps customers to choose the right plan for them. We create specific travel insurance plans for students, senior citizens and for a family or a group of people.

This Chatbot provides appropriate and immediate answers. All plans offer combined insurance and services, such as coverage for accident and illness medical expenses, transportation expenses associated with medical evacuation and in event of accidental death or dismemberment and medical assistance services. Depending on the plan selected, other features and options are available. The important keywords will be fetched and appropriate answer will be provided. If the match is found, the relevant answer will be provided to the user or the default message will be shown to the user that "Sorry! What did you tell or I missed that".

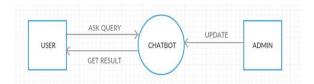
A website is created to access the chatbot. The user will the first login into the website by providing valid email id and password. Then the user will be connected to the next page where there will be many travel insurance plans according to their category and their uses. The user can interact with the chatbot and find a suitable plan according to their need. The response time to the queries of the user will depend upon the internet speed of the user. If the user has a good internet connection, he/she will get the answers to their queries in the 3-5 second. This process will take some time, which is estimated to be 4 seconds approximately if the user has a bad internet connection. But even in the worst case, the response time will not exceed 15 seconds.

#### II. RELATED WORK

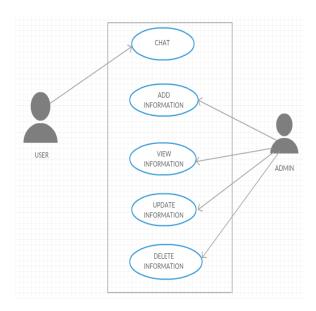
The first Chatbot, Eliza, was built in 1966. Most Chatbots are either accessed via virtual assistants such as Google Assistant and Amazon Alexa or via messaging apps such as Facebook Messenger or Wechat. There are various Chatbots available in many fields to answer simple questions and increase customer engagement and to offer additional ways for them. The top companies such as Reliance, Bajaj Allianz, HDFC ERGO has created many travel insurance policies which have more suitable plans. These travel insurance companies have chatting facility but the user's query will be answered by a customer service agent and there is no chatbot connected to these websites to answer queries automatically.

#### III. DESIGN

The Automated Travel Insurance Chatbot will take the query from the user and will give the appropriate answer to the user query. The user will just have to visit the web page of the Chatbot and interact with the bot to get the answers to their query.



- The proposed system will have the following modules:
- Website The user has to login into the website to access the chatbot
- ChatBot The query will be answered basis the question and knowledge base automatically. Hence there is no need to have a person to answer the queries and ease for the users to interact with college queries
- Users There will be two types of users: Admin and Normal Admin user will be able to see the unanswered
  queries and update the system with the right answers and keywords. Normal user will get answers for their
  queries
- In the future scope of the project, we can also include the voice assistant in the system which can also be connected to Google home, Alexa.



#### IV. METHODOLOGY

The chatbot is built using Dialog flow. It is a Google service that runs on the Google Cloud Platform. It also incorporates Google's machine learning expertise and products such as Google Cloud Speech-to-Text. The Dialog flow is user-friendly, intuitive, and just makes sense. Its natural language processing (NLP) is the best we've tried[3]. It gives users new ways to interact with your product by building engaging voice and text-based conversational interfaces, such as voice apps and chatbots, powered by AI. Connect with users on your website, mobile app, the Google Assistant, Amazon Alexa, Facebook Messenger, and other popular platforms and devices.[3] The chatbot is trained in such a way that it answers the user's queries correctly. By using the integration option in the Dialog flow the chatbot can be connected to many applications. While logging into the website, the email id and password are stored in the database so that is the user has an existing insurance plan it can be identified.

#### V. CONCLUSION

The main objective of the project is to develop a chatbot that will be used to identify a suitable travel insurance plan for the user. The need is to develop a database where all the related data will be stored and to develop a web interface. The web interface developed will have two parts, one for simple users and one for the administrator. Background research took place, which included an overview of the conversation procedure and any relevant chat bots available. A database will be developed, which will store information about questions, answers, keywords, login information.

### REFERENCES

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