SMART BANKING CHATBOT

Abstract

The purpose of the project is to make any domain-specific website, in our case banking, more usable by integrating a chatbot that serves as an interface for customer inquiries about services. This reduces customer interaction time with websites, thereby valuing their time and improving their overall experience. As part of this project, we explored and attempted to create an intelligent chatbot that could extract relevant information, recognize various intents and execute the pre-mapped actions. To create a contextual assistant for the above purpose, we used the RASA framework. To train the model, we constructed a custom dataset that includes multiple intents and entities. Additionally, we provide some python scripts (RASA actions) that will be executed when some intents are detected. Our solution consisted of creating a pipeline having a chatbot and several actions triggered by the chatbot. These actions will connect with the database and then provide the required data or make changes according to the user's query and display the feedback back to the user via the chat widget.

Existing system

In existing system, Technology use in banking sector continues to be high, pushed by the ever-increasing need for more banking services. In the competitive banking area, the customer expects quick responses increasing the load for banks to catch up with the requirements. This project aims to develop a website with a chatbot that is not only capable of having conversations with the customer but also has the ability to listen to commands and make changes to the database.

Disadvantages:

1. Less Accuracy
2. More time taking process

In this project we have employed Artificial Intelligence technique to process text data and then employ machine learning algorithms to predict answers for user questions. Chatbot will take user queries and then employ ML algorithm to predict answer and then this answer will be given as output to the user.

To get accurate answer we have evaluate performance of multiple algorithms like Random Forest, KNN and SVM. In all algorithms Random Forest is giving best accuracy.

Advantages:

1. High Accuracy
2. Takes less time

Modules Information:

To implement this project we have designed following modules

1) Admin Login: using this module admin can login to system using username and password as ‘admin’ and then can train ML algorithms. Admin can view list of sign up users and can view all interaction between all users and Chatbot.
2) New user sign up: using this module user can sign up with the application
3) User Login: registered user can login to system
4) Interact with Chatbot: using this module user can communicate with Chatbot.

HARDWARE & SOFTWARE REQUIREMENTS:

HARDWARE REQUIRMENTS:

- processor : intel i3(min)
- Hard Disk : 40 GB.
- Floppy Drive : 1.44 Mb.

SOFTWARE REQUIRMENTS:

- Operating system : Windows 10 (min)
- Coding Language : python(3.7.0)