Intelligent Customer Help Desk With Smart Document Understanding

Project Scope Document

Project Summary

The typical customer care chatbot can answer simple questions, such as store locations and hours, directions, and maybe even making appointments. When a question falls outside of the scope of the pre-determined question set, the option is typically to tell the customer the question isn't valid or offer to speak to a real person.

In this project, there will be another option. If the customer question is about the operation of a device, the application shall pass the question onto Watson Discovery Service, which has been pre-loaded with the device's owners manual. So now, instead of "Would you like to speak to a customer representative?" we can return relevant sections of the owners manual to help solve our customers' problems.

Project Requirements

- To create a chatbot that can provide solutions to questions on device operation from the owners manual and to create the important sections of owners manual.
- Create a customer care dialog skill in Watson Assistant
- Use Smart Document Understanding to build an enhanced Watson Discovery collection
- Create an IBM Cloud Functions web action that allows Watson Assistant to post queries to Watson Discovery
- Build a web application with integration to all these services & deploy the same on IBM Cloud Platform

Functional Requirements

- User should be able to enter their query.
- Chatbot should be able to comprehend and categorise query.
- Appropriate action must be taken for the query by the chatbot.
- In case of a query on device operation, Watson Discovery Service is to be used for resolution of problem.
- User should be able to talk to customer service executive if not satisfied with chatbot's response.

Technical Requirements

This application is to be written mainly in Python in IBM Cloud Services and also uses Node-RED for flow based visual programming.

Software Requirements

Target system: Since this is a service that runs on IBM Cloud Functions, it is enough if the user's system has a working internet connection.
Software required for project: IBM Cloud Services (IBM Watson, Watson Discovery, Cloud Functions), Node-RED.

Project Deliverables

An intelligent chatbot that can answer queries based on device operation.

Project Team

Adithya Ganesan - Developer

Project Schedule

Successful completion of project before 05/06/2020.