

Intelligent Customer Help Desk With Smart Document Understanding

May 05, 2020

Project Summary

This project aims to create an Intelligent help-desk for Customers that not only performs the functions of a typical chatbot but also provides Smart Document Understanding and support. A typical customer care chatbot can answer simple questions, such as store locations and hours, directions, and maybe even making appointments but 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 owner's manual. So now, instead of "Would you like to speak to a customer representative?" we can return relevant sections of the owner's manual to help solve our customers' problems. The project shall use the Smart Document Understanding feature of Watson Discovery to train it on what text in the owner's manual is important and what is not.

Therefore, a fully functional web-application will be ready with integration to all the services and deployed on the IBM Cloud Platform.

Project Requirements

1. PC with high-speed Internet Connectivity
2. IBM Cloud Account
3. GitHub Account

Functional Requirements

1. The user will input its query.
2. The Intelligent Help Desk will answer the typical questions directly just like a chatbot.
3. If the question falls out of its scope, the application shall pass the question onto Watson Discovery Service, which has been pre-loaded with the device's owner's manual.
4. We can then return relevant sections of the owner's manual to help solve our customers' problems.

Technical Requirements

1. Knowledge of Python
2. Working knowledge with IBM Cloud
3. IBM Watson Services and IBM Cloud Functions.
4. Using GitHub and Slack.

Software Requirements

The project is based on IBM Cloud and GitHub, so no such requirements on PC.

Project Deliverables

1. A customer care dialog skill in Watson Assistant.
2. IBM Cloud Functions web action that will allow Watson Assistant to post queries to Watson Discovery.
3. A web application with integration to all these services deployed on the IBM Cloud Platform.

Project Team

Hritik Bhandari [Individual Project]

Project Schedule

To be completed by 30th May 2020.