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.In this developer code pattern, we use the typical customer care chat bot experience but instead of relying on predefined responses, our dialog will provide a hook that can call out to other IBM Watson services for additional sources of information. In our case, it will be an owners manual that has been uploaded into Watson

Scope of Work:
● 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

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
4.IBM Watson node red

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.

Software Requirements:

Watson assistant, Watson discovery.

Project Deliverables:

Smartinternz Intership

Project Team

Akashsai Rajaram[Individual Project]
Responsibility to make and deliver project successfully

Project Schedule

To be completed by 30th May 2020.

Impact:

Technological change (TC) or technological development, is the overall process of invention, innovation and diffusion of technology or processes. In essence, technological change covers the invention of technologies

impact on marketing,Who are the key stakeholders - Sponsor and/or other decision makers who representconstituencies that will be impacted, and whose support is critical to the success of the project probably know that happy customer needs to be your primary goal. So, when you own a chatbot that provides service 24 hours a day, every day in a week and if it's a good service, your customer most probably will be happy with the provided service.