PROJECT SCOPE

Topic: Intelligent Customer Help Desk With Smart Document Understanding

1. Project Summary

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

 I n this project, there will be another option. If the customer question is about the o peration of a device, the application shall pass the question onto Watson Discovery S ervice, which has been pre-loaded with the device's owners manual. So now, i nstead 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. To take it a step further, the project shall use the Smart Document Understanding f eature of Watson Discovery to train it on what text in the owners manual is important a nd what is not. This will improve the answers returned from the queries.

2. Project Requirements
2.1. Functional Requirements

● IBM Cloud
The IBM cloud platform combines platform as a service (PaaS) with infrastructure as a service (IaaS) to provide an integrated experience. The platform scales and supports both small development teams and organizations, and large enterprise businesses. Globally deployed across data centers around the world, the solution you build on IBM Cloud spins up fast and performs reliably in a tested and supported environment.

2.2. Technical Requirements

● AI
 Artificial intelligence (AI) is an area of computer science that emphasizes the creation of intelligent machines that work and react like humans.
● Node.js
  Node.js is an open source server environment. Node.js is free. Node.js runs on various platforms. Node.js uses JavaScript on the server

● IBM Watson

 Infusing Watson into apps and workflows helps to tap into organizational data and put AI to work across multiple departments – from finance, to customer care, to supply chain. With Watson more personalized experiences for customers, scale the expertise of your best people across the organization, and make smarter decisions based on deep insights from data.

2.3. Software Requirements

● IBM Discovery Service

 With IBM Watson Discovery, you can ingest, normalize, enrich, and search your unstructured data (JSON, HTML, PDF, Word, and more) with speed and accuracy. It packages core Watson APIs such as Natural Language Understanding and D ocument Conversion along with UI tools that enable you to easily upload, enrich, a nd index large collections of private or public data

● IBM Assistant

 Watson Assistant is a conversation AI platform that helps you provide customers fast, straightforward and accurate answers to their questions, across any application, device or channel. By addressing common customer inquiries, Watson Assistant reduces the cost of customer interactions, helping your agents focus on complex use cases – not repetitive responses.

● IBM Functions

 IBM Cloud Functions is a distributed compute service that executes application logic in response to requests from web or mobile apps. You can set up specific actions to occur based on HTTP-based API requests from web apps or mobile apps, and from event-based requests from services like Cloudant.

● Node-Red

 Node-RED is built on Node.js, taking full advantage of its event-driven, non-blocking model. This makes it ideal to run at the edge of the network on low-cost hardware such as the Raspberry Pi as well as in the cloud.

3. Project Deliverables

Intelligent Customer Help Desk with Smart Document Understanding
● 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

4. Project Team
N.pavan Kumar

5. Project Schedule
19 days.