Project Scope, Schedule, Team and Deliverables

Project Summary:

Usual chatbots used by most companies for their customer care services are not entirely self sufficient. They often face the issue of understanding the customer's query's exact nature, and hence, ultimately ask them to wait while a customer care official is brought in touch with them.

This project; Intelligent Customer Help Desk with Smart Document Understanding, aims to provide further help by improving the chatbot's functionality.

The features provided by IBM Watson will be made use of to implement certain functionalities. Smart Document Understanding; one of the features of Watson Discovery, will help to determine the important content in the document provided to it, in order to reduce scope of confusion.

If the customer asks a question, the application will redirect it to Watson Discovery Service, which has already been pre-loaded with the device's manual. Hence, instead of redirecting the customer to customer service staff, it will return a helpful section of the User Manual in order to help the customer solve the issue.

Project Requirements:

For successful completion of the project, the following should be accomplished:

- The customer's queries should be answered successfully.
- The dashboard should be able to handle a significant amount of usage at a given point of time.
- Watson's Discovery Service should be able to give accurate and relevant replies to the customer, which would help increase customer satisfaction.
- The replies given will be in the form of links from the documentation of the product, corresponding to the customer's question.
- Since IBM Watson's Discovery is meant to read and train based on documents in English, the customer queries should be in English only.

Functional Requirements

The project primarily focuses on using web services , therefore access to these services along with the account cloud platforms will be essential . Services used will be :

- IBM Cloud Platform .
- Watson Discovery Collection .

Technical Requirements :

- Web dashboard should be accessible from different web browsers such as Google Chrome, Firefox, Internet Explorer, etc.
- Application should be scalable.
- Application should be able to adapt to changes.
- The application should be able to handle a surge in usage.

Software Requirements :

- IBM cloud service is required which combines platform as a service (PaaS) with infrastructure as a service (IaaS) to provide an integrated experience.
  - IBM Watson service helps to infuse AI into the applications using Watson AI.
- With IBM Watson Discovery, you can ingest, normalize, enrich, and search your unstructured data (JSON, HTML, PDF, Word, and more) with speed and accuracy.
- Node-RED is built on Node.js, taking full advantage of its event-driven, non-blocking model.

Project Deliverables:

A customer care chatbot which is able to answer user queries like :

- The location of the store.
- Time to reach the store.
- Appointments scheduling.

The chatbot will also respond to the question which is related to the operation of the device . If any such questions are asked the chatbot will pass the question to Watson Discovery Service which has been preloaded with the owners manual . Hence additional feature :

- Owners manual is used to solve device related problems.
- A web application with integration of services like IBM Cloud Functions and Watson Discovery Collection.

Project Schedule

Start Date: 30 April, 2020

Duration: 30 days

1. Create necessary IBM Cloud Services
2. Configure Watson Discovery Service
3. Create Cloud Functions Action
4. Configure Watson Assistant
5. Build Node-RED Flow to integrate all services
6. Build a Web Dashboard
7. Test the bot and capture the results
8. Prepare the Project Report and upload the Node-RED flow to GitHub
9. Create a project demo video and upload to YouTube