**Project Scope, Schedule, Team and Deliverables**

**Project Summary :**

**ISSUE:**

Most of the bots are built and designed in such a way that if any query or input from the user falls out of the pre-determined and no pre-programed queries set for the bot, then the bot tells that, the question is invalid and we will be not getting the output, because it is not trained or it is trained for limited queries. Now this is the big problem with few chatbots, as the user is not getting the required output for his query. To get over this issue we are using “**IBM Discovery”**.

Intelligent Customer Help Desk with Smart Document Understanding is a chatbot, in which it can answer the queries asked by the user of any requirement in any field (or) category. This chatbot takes the input from the user and generates the answer. This chatbot takes the input from the user and generates the answer.

**Outputs:**

At last we will be producing a well designed chatbot for customer help, in which the customer will be getting all the required outputs for the given input (or) queries. Any query regarding the document can be given now to the bot, irrespective of a category to get the information. And this may help to get the basic information of E-commerce, locations, banking. At the end, the user will be addressed with the output, without any issues and queries.

**Project Requirements:**

The project requirements are,

* We need a user manual or a document to run the bot.
* We need a cloud platform to deploy the project. (IBM cloud)

**User Requirements:**

User must have a web browser to access this bot. (mostly we use chrome)

**Functional Requirement:**

Some of the basic requirements are listed below.

|  |  |
| --- | --- |
| Functional Requirement | Description |
| FR1 | Taking a query from the user |
| FR2 | To check whether the intent of query lies within  t the scope |
| FR3 | If not, then the application passes the input to  watson discovery service |
| FR4 | Giving back the responce to the user |

**Technical Requirements :**

The technology we will be using here is **Artificial Intelligence**. AI is the ability of a computer program or a machine to think and learn. It is also a field of study which tries to make computers "smart". They work on their own without being encoded with commands.  is the ability of a computer program or a machine to think and learn. It is also a field of study which tries to make computers "smart". They work on their own without being encoded with commands. In a nut shell AI is being used everywhere.

In this project we are going to use Smart Document Understanding, which trains the data to IBM Watson Discovery. Also we need **python programming** at some areas to complete this project.

**Software Requirements :**

* We need few softwares, and even cloud platforms to deploy the project. We are using IBM cloud for deploying the project.
* We are using the following:
* **IBM Watson assistant**: This is used to create our intents, entities and dialogues. The queries from these intents can be known as Short Tail queries. A short tail questions are somewhat similar to FAQ's, which are within the pre-defined question data set. Also there are Long Tail queries which gives a invalid answer to the user, as they are outside the scope and hence we use Watson discovery.
* **IBM Watson Discovery** Service uses data analysis combined with cognitive intuition to take your unstructured data and enrich it so you can query it for the information you need. In Discovery services watson uses reasoning strategies that focus identifying the most appropriate answers. Smart Document Understanding enables you to train your IBM Watson discovery which will improve the answers returned by your application.

* **RESTful web services** are built to work best on the Web. Restful Web Service is a lightweight, maintainable, and scalable service that is built on the REST architecture. Restful Web Service, expose API from your application in a secure, uniform, stateless manner to the calling client.

**Project Deliverables :**

**Project Title:**  Intelligent Customer Help Desk with Smart Document Understanding

**Project Id:** SPS\_PRO\_99

**Project Manager:** Tumuluri. Sri Sai Vardhan

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S.No | Title | Deliverable | Description | Status |
| 1. | **Project planning and kickoff** | 1. project scope, team, schedule & deliverables  2. Setup the development environment | 1. To prepare project scope documents with following headings.  2. To create GitHub, Slack account. And working with Document writer   |  |  | | --- | --- | |  |  | |  |  | | Started, to be verified |
| 2. | **Explore IBM Cloud Platform** | 1. Create IBM Account  2. Create a Node-RED starter application | 1. Signing up for IBM account and getting started with IBM cloud.  2. Getting started with Node-RED and creating simple web page | To be started |
| 3. | **Explore IBM Watson Services** | 1.Explore IBM Watson usecases  2. Introduction to Watson assistance  3. Introduction to Watson discovery | 1. Watson products and services   \*performance of Watson  2. Building own AI assistant  \*Learning to use Watson assistant with webhooks \* Search skill  3. Watson documentation \*Watson Discovery chatbot reference \*Extract answers from large documents in 5 min | To be started |
| 4. | **Explore IBM Cloud Functions** | 1.Getting started with IBM cloud functions | 1. Restful web services  2. Getting started with IBM cloud functions  3. Getting Hands-on with IBM cloud functions | To be started |
| 5. | **Customer Help Desk with Smart Document Understanding** | Merging up all things to build final web application | 1.Building a web dashboard.  2. Configuring Watson discovery services and Watson assistant.  3. Testing the bot and capturing the results  4. Preparing Final report.  5. Upload Node-RED flow to GitHub. | To be started |

**NOTE:** Will modify the status column once the deliverables are verified by the mentors.

**Project Team:**

This project is done individually.

**Project Schedule:**

This project is scheduled for 30 days. So we need to build a web application with integration to all these services and deploy all the services on IBM Cloud Platform within 30 days of assigned time.