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

### **Project Summary:**

Context: Intelligent Customer Help Desk with Smart Document Understanding is a chatbot, which can answer the queries asked by the user of any category. This chatbot takes the input from the user and generates the answer. In general, few bots are built in such a way that if any query or input from the user falls out of the pre-determined queries set, then the bot tells that, the question is invalid, since it is not trained. Now this is an issue with few chatbots, as the customer is not getting the solution for his query. To get over this issue we are using **IBM Discovery**.

<u>Objective:</u> So, we'll be using watson assistant 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. In watson descovery 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.

<u>Outputs</u>: Finally we produced a well designed chatbot for customer help, as it is fulfilling the user's or customer's query by giving correct information. Any query regarding the document can be given now to the bot, irrespective of a category or usecase like Banking, E-Commerce and for basic information. At the end, the user will be addressed with the answer, without any issue.

#### **Project Requirements**: This project requires,

- We need a user manual or a document to run the bot.
- We need a cloud platform to deploy the project.

#### **User Requirements:**

• User must have a web browser to access this bot.

**Functional Requirement:** Some of the basic requirements are listed

below.

Functional	Description
Requirement	
FR1	Taking a query from the user
FR2	check whether the intent of query lies within 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**. All is playing a crucial role in current industry. In a nut shell All is being used everywhere in current trends. In the current project we are goint to use Smart Document Understanding, which trains the data to IBM Watson Discovey. Also we need **python programming** at some areas to complete this project.

#### **Software Requirements:**

- We'll be using few softwares, even cloud platforms to deploy the project. We are using IBM cloud for deploying the project and creating necessary cloud services.
- We are using IBM watson for intents, entities, dialogues.
- We are using IBM cloud functionalites, that allows Watson Assistant to post queries to Watson Discovery.
- **Watson Discovery** is an award-winning enterprise search and AI search technology that breaks open data silos and retrieves specific answers to your questions while analyzing trends and relationships buried in enterprise data.
- **RESTful web services** are built to work best on the Web. Representational State Transfer (REST) is an architectural style that specifies constraints, such as

the uniform interface, that if applied to a web service induce desirable properties, such as performance, scalability, and modifiability, that enable services to work best on the Web. In the REST architectural style, data and functionality are considered resources and are accessed using **Uniform Resource Identifiers (URIs)**, typically links on the Web

### **Project Deliverables:**

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

Project Id: SPS\_PRO\_99

**Project Manager:** Bhargava Rajasimha

S.No	Title	Deliverable	Description	Status
1.	Project Planning & Kickoff	<ol> <li>project scope, team, schedule &amp; deliverables</li> <li>Setup the development environment</li> </ol>	To prepare project scope documents with following headings     To create GitHub, Slack account. An working with Document writer	Started, to be verified
2.	Explore IBM Cloud Platform	<ol> <li>Create IBM</li> <li>Account</li> <li>Create a</li> <li>Node-RED</li> <li>starter</li> <li>application</li> </ol>	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. *Buiding 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	
4.	Explore IBM Cloud Functions	1.Getting started with IBM cloud functions	1. Restful web services  2. Getting started with IBM cloud functions  To be started	

			3. Getting Hands-on with IBM cloud functions	
5.	Customer Help Desk With Smart Document Understanding	Merging up all things to build final web application	*Configuring Watson discovery services and Watson assistant  *Building a web dashboard  * Testing the bot and capturing the results  * Preparing Final report  *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:**

There's no team for this project. This project is done individually

# **Project Schedule:**

This project is scheduled for 30 days. That means we need to build a web application with integration to all these services & deploy all the services on IBM Cloud Platform within 30 days of span.