

Project Scope, Schedule, Team and Deliverables

Project Summary :

Context: In this developer code pattern, we use the typical customer care chatbot 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 Discovery.

Description: The typical customer care chatbot can answer simple questions, such as store locations and hours, directions, and maybe even making appointments. 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 our code pattern, we will provide another option. If the customer question is about the operation of a device, we will use the webhook feature of Watson Assistant to pass the question onto our Watson Discovery Service, which has been pre-loaded with the device's owners manual. So now, instead 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, we will use the Smart Document Understanding feature of Watson Discovery to train it on what text in the owners manual is important and what is not. This will improve the answers returned from the queries.

Pattern flow:summary, this code pattern will

- We create a customer care dialog skill in Watson Assistant
- Then we use Smart Document Understanding to build an enhanced Watson Discovery collection
- Next the IBM Cloud Functions web action is created that allows Watson Assistant to post queries to Watson Discovery

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 Requirement	Description
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 response to the user

Technical Requirements :

The technology we will be using here is **Artificial Intelligence**. AI is playing a crucial role in current industry. In a nutshell AI is being used everywhere in current trends. In the current 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'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 functionlites, 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: Hafsa Sultana

S.No	Title	Deliverable	Description	Status				
1.	Project Planning & Kickoff	1. project scope, team, schedule & deliverables 2. Setup the development environment	<table><tr><td>1.</td><td>To prepare project scope documents with following headings</td></tr><tr><td>2.</td><td>To create GitHub Slack account. And working with Document writer</td></tr></table>	1.	To prepare project scope documents with following headings	2.	To create GitHub Slack account. And working with Document writer	Started, to be verified
1.	To prepare project scope documents with following headings							
2.	To create GitHub Slack account. And working with Document writer							
2.	Explore IBM Cloud Platform	1. Create IBM Account 2. Create a Node-RED starter application	<table><tr><td>1.</td><td>Signin up for IBM account and getting started with IBM cloud</td></tr><tr><td>2.</td><td>Getting started with Node-RED and</td></tr></table>	1.	Signin up for IBM account and getting started with IBM cloud	2.	Getting started with Node-RED and	To be started
1.	Signin up for IBM account and getting started with IBM cloud							
2.	Getting started with Node-RED and							

			<div><div></div><div>creatin g simple web page</div></div>	
3.	Explore IBM Watson Services	<div>1.Explore IBM watson usecases</div> <div>2. Introduction to watson assistance</div> <div>3. Introduction to Watson discovery</div>		<div>To be started</div>

			<table><tr><td>1.</td><td><ul style="list-style-type: none">*Watson products and services*performance of Watson.</td></tr><tr><td>2.</td><td><ul style="list-style-type: none">*Building own AI assistant*Learning to use Watson assistant with webhooks* Search skill</td></tr><tr><td>3.</td><td><ul style="list-style-type: none">* Watson documentation* Watson Discovery chatbot reference* Extract answers from large documents in 5 min</td></tr></table>	1.	<ul style="list-style-type: none">*Watson products and services*performance of Watson.	2.	<ul style="list-style-type: none">*Building own AI assistant*Learning to use Watson assistant with webhooks* Search skill	3.	<ul style="list-style-type: none">* Watson documentation* Watson Discovery chatbot reference* Extract answers from large documents in 5 min	
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4.	Explore IBM Cloud Functions	1.Getting started with IBM cloud functions	<table><tr><td>1.</td><td>Restful web services</td></tr><tr><td>2.</td><td>Getting started with IBM cloud functions</td></tr><tr><td>3.</td><td>Getting Hands-on with IBM cloud functions</td></tr></table>	1.	Restful web services	2.	Getting started with IBM cloud functions	3.	Getting Hands-on with IBM cloud functions	To be started
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2.	Getting started with IBM cloud functions									
3.	Getting Hands-on with IBM cloud functions									
5.				To be						

	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	started
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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.