

# Intelligent Customer Help Desk with Smart Document Understanding

## PROJECT REPORT

### 1. PROJECT SUMMARY

- A customer care chat bot can answer simple questions, such as store locations and hours, directions, and perhaps even making appointments.
- In this project, the queries will be handled in a better way.
- If the customer's question is about the operation of a device, the application shall pass the question onto Watson Discovery Service and we can handle the queries in a better way.
- We will build a chat bot that uses various Watson AI Services like Watson Discovery, Watson Assistant, Watson Cloud functions and Node-Red and deliver an effective user friendly Web User Interface.
- Artificial Intelligence( AI) is a science of making intelligent machine that are able to learn rules for using information in order to reach approximate conclusions.
- In this project we are going to create a chat bot which is intelligent conversational system and able to process human language. They themselves provide a platform for promotions of the products and services in online. For example, sir i is an intelligent agent used by Apple, reacting to the user spoken language. In the recent years, we are starting to see a variety of chat bot applications across industries and business processes using further advanced artificial intelligence technologies, as well as a growing number of technology platforms to facilitate them.

### 2. PROJECT REQUIREMENTS

- There must be some features that needs to be keep in mind while thinking before developing this, these are -
- Respond immediately: It can help to avoid long wait times for phone-based customer support agents or even longer wait times for email and even form-based support.
- Keep it conversational: Chat bot make it very easy for all the users to find the information they need.
- Improve Loyalty:-By helping users in the correct way without doing any type of formality will gain user's satisfaction, efficient experience.
- The minimum project requirements for chat bots are as follows:  
OS: Mac so high sierra, Windows 8.1, Windows 10,

Processor: 1.8 GHz Intel Core i5 or greater, Memory: 8GB RAM,  
Graphics: Intel HD Graphics 6000 1536 MB, DirectX: Version 11,  
Network: Broadband Internet connection, Storage: 2GB available space

### 3. FUNCTIONAL REQUIREMENTS

- If the chat bot does not understand the input, it should ask for more simplified input.
- If the chat bot understands the input, it should respond with correct information.
- If the chat bot needs more information to find an answer, it should ask for more information.
- The chat bot should use a text recognition API to understand all kinds of inputs.
- The chat bot can send a data as a text message.
- The bot should able to query the data from the API.
- The chat bot should create private cloud or virtual machine instances from user input.

### 4. TECHNICAL REQUIREMENTS

- GIT and GitHub
- IBM Watson Integrated Development Environment(IDE)
- Zoho Document writer
- Watson AI
- Node JS

### 5. SOFTWARE REQUIREMENTS

- Watson Assistant
- Watson Discovery
- Node-Red

### 6. PROJECT DELIVERABLES

- Instead of sharing only PDF documents that few people ever read, the better option is to make Chat bots with smart document understanding which can provide the relevant sections from a manual or a group of documents. We intend to implement a chat bot with smart document understanding using IBM Watson Platform.

## 7. PROJECT TEAM

- Utkarsh Bhardwaj – Project Manager  
Sophomore at Delhi Technological University, New Delhi

## 8. PROJECT SCHEDULE

- The project is for a duration of 30 days starting on 15<sup>th</sup> May.