## **RBS Developer Challenge: Chatbot**

## Create conversational chatbot using Watson Assistant and IBM cloud services!!

Chatbots are changing how the enterprise interacts with their customers. With chatbots the need of the customers can be easily fulfilled. Chatbots can be used in solving the problem in areas like customer support, transaction fulfillment, information sharing, data retrieval and things like that..

Create a chatbot using Watson Assistant and other relevant services from IBM cloud like Functions, Watson NLU and Watson Discovery. Identify a problem statement which you think will help in solving or mitigating the pain points.

Some of the problem statements are given below for your reference. You are free to choose any problem statement of your choice, not to restrict to the below alone:

#### **Problem Statement:**

- 1) Al Enabled Customer response system
  - Account Balance, recent transaction
  - Amount spent on food last week
  - Location of nearest ATM etc.,
- 2) Financial Advisor
  - Where to invest money property or car?
  - Explain complex finacial terminology in layman's definition
- 3) Expense saving Bot
  - last month expenditure on Uber/Ola
  - last month Credit card expenditure
  - set up spending alert
  - similarly we can have tax bot, retail banking etc.,
- 4) Improving the efficiency of the service desk Logging , create & update issue etc.,
- 5) Open category

### Pre-requisite:

- 1. Sign up for IBM cloud account (hhtps://bluemix.net)
- 2. Participant to have individual private / public github repository

### Skills required:

- Understanding of NLP
- Language nodejs, javascript, nodered
- Platforms and tools IBM Watson suite of api's like NLU, VR, discovery

#### **Submission Requirement:**

- 1. Build a working conversational, natural language chatbot using Watson virtual assistant, Watson Discovery, Watson NLU and other Watson api's. Use Functions where appropriate to execute the logic
  - a. Recommendation
    - i. Solution can be, but are not required to
      - 1. Be deployed in slack, facebook or any other interface
      - 2. Incorporate speech capabilities, if possible
- **2.** Create a demonstration video that shows the chatbot in action.
- **3.** Fill the details as provided in <u>Annexure A</u> (Submission Template) and upload it in the below github link. Use your team name as name of the file
  - i. Github link: <a href="https://github.com/IBMDevConnect/RBS2018">https://github.com/IBMDevConnect/RBS2018</a>
- **4.** Create your own github repository and upload all the relevant files. If the repository is private, access details must be given.
  - **a.** Export the dialog from the Watson Assistant (conversation) workspace as json and upload it in your repository.
  - **b.** Instruction file describing how to validate the chatbot. Sample questions and other relevant instructions.
  - c. Provide the chatbot application link, if any
  - **d.** Video of the demo , if any . Video can be uploaded in youtube or any other resource as well

### Judging criteria: (In the scale of 10)

- 1. Quality of the Idea Originality and creativity (2)
- 2. Implementation completeness, features, level of complexity (5)
- 3. Customer value: Potential Impact Does the bot help solve a problem or pain point? (3)

## Timeline: (3 weeks)

- Preparation phase:
  - Hands on workshop one day
- Challenge duration
  - o 2 weeks
- Evaluation and scoring

#### o 1 week

#### **Resources:**

- <a href="https://developer.ibm.com/code/patterns/">https://developer.ibm.com/code/patterns/</a>
- <a href="https://developer.ibm.com/code/exchanges/bots/">https://developer.ibm.com/code/exchanges/bots/</a>
- IBM cloud resources bluemix.net

Note: Resources specific to certain IBM cloud resources will be shared during the hands on workshop

#### Annexure A

# **Submission Template:**

<file format : md or word >

Inspiration: < What is the motivation to do this chatbot >

Solution Description: < What it does? What problem it solves >

Built with: <Technology used>

Actors: <dialog between whom>

Accomplishment: < what makes you feeling great with this chat. What you have

accomplished>

What I Learnt:

Challenges: <hurdles and issues while developing the chatbot >

What's next:

Try it out: <your github link>