## **DOCUMENTED STEPS IN BUILDING A CHATBOT**

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**BANKINGBOT DOCUMENTATION**

**INTRODUCTION**

Chabot or chatterbox is a virtual assistant embedded in Web apps and apps to help users with queries about the environment it is deployed in .

Basically ,it helps answer some basic or iterative questions that users of the site have .

In this project I built a virtual assistant for the finance sector called banking bot. I named it Ashley.

**WHY BANKINGBOT?**

In recent days with the dire need of Technology in every sector ,banking sector has experienced some need of assistance handle customer queries and requests and some point they end up disappointing customers because of :

* Unsatisfactory response
* Traffic due to the increasing population
* Connection problems
* Human feelings ,exhaustion
* Lack of trust over a line of communication

This inspired me to build a bot which can interact with human beings and able to answer their questions thereby solving their problems.

**COMPONENTS OF A CHATBOT**

Chat bots are mainly composed of three components

* Intents
* Entities
* Dialog

**AN INTENT**

Is a component of Chat bot that tries to determine what the user wants .It captures the goal of the user.

They don’t have spaces and have an # symbol at the beginning.

Some of the examples include;

* #greeting – this contains how user starts the conversation
* #goodbye – this is when user is ending the conversation
* #banking\_cancel\_card – user requesting for his/her card to be cancelled
* #banking\_activate\_card -the user requesting for card activation
* #banking\_fee\_inquiry- inquires about fees associated with card transactions
* #banking\_replace\_card -replace a card
* #banking\_report\_missing\_card -report a lost or stolen card
* #banking\_request\_card\_member\_agreement -request card member agreement
* #banking\_request\_checkbook -request a check book
* #banking\_increase\_in\_credit\_limit -request an increased credit limit
* #banking\_set\_up\_direct\_deposit -set up a direct deposit for an account
* #banking\_transfer\_money – transfer money from one account to another
* #banking\_view\_activity -view the activity on an account
* #banking\_view\_pending\_charges -view pending charges on a card account
* #banking\_view\_routing\_number – view routing number

**HOW TO CREATE AN INTENT**

When creating an intent ,two conditions must be met:

* Intent name must begin with #
* Intent with more than two parts is separated by an underscore(\_)

Watson comes with pre built Intents for particular area of interest.

1. In your Watson tab click create intent or upload intent prebuilt by the Watson studio
2. Define the intent
3. Enter hello then click Add examples
4. Repeat the process for other examples

**AN ENTITY**

Is a component of Chat bot that captures the specific values in a users utterance.

They recognise and capture specific pieces of information in the user input .

**CREATING AN ENTITY**

When creating an entity take key note that ;they must begin with @ symbol.

* In your skill click on Entities
* Click the create entity button for example; @location
* Enter a city and then click Add Value
* Repeat the process

In my bot I used @location -user requesting to know the physical location of the bank.

**A DIALOG**

The dialog allows us to issue a response to the user based on the basis of their intent and the specifics of their request which we captured through Entities we defined.

Here nodes are used as well as child node. The first node to be defined in the dialogue is the welcome node . This node is responsible for giving feedback to the user when the chat bot identifies Intents similar to those identified in the welcome node.

The there is a default anything else node which asks the user if they anything else .

In between these two nodes I added my own nodes:

* @sys-date
* #banking\_report\_missing\_card
* #banking\_request\_increase\_in\_credit\_line
* #banking\_fee\_inquiry
* #greeting
* #goodbye
* #banking\_activate\_card
* #banking\_replace\_card

**SLOTS**

Works in the similar way as nodes except capturing context variables and defining parameters is easier. It has a tool called multiline which allows for multiple responses within the scope of the dialog.

**CONTEXT VARIABLES**

Has a dollar sign($) in the name of the variable .

It stores information within the duration of the conversation that can later be used within the conversation.

**TESTING AND DEPLOYMENT**

In your Watson assistant there is a panel for try it which is useful in facilitating you to see whether at the end of every if your chat bot is working. Helps the designer add and remove parameters so as to make sure the bot is as humane as possible.

**CONCLUSION**

With the given guidance in skills build and the Watson assistant ,the procedure is fis simple and time saving. The project worked as we anticipated.