Chatbot System for Latest applications and Software

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Abstract - *Nowadays, there are lots of new upcoming applications and software which seems to be new for many people due to which people faces various difficulties regarding how to use that particular newly launched applications and software. So, taking this as a problem we have decided to add a personal assistance based chatbot system through which each user can find the solution for their queries related to that particular applications. Now there are many resources available in market for creating a chatbot system which are available freely whereas some resources need a subscription. So here we are doing a comparative study on various freely available resources so that one can provide the best personal assistance chatbot features in their applications and software to the user.*

Key Words: IBM Watson, Oracle, Python, Ochatbot, etc.

1. INTRODUCTION

The chatbot system is defined as a computer services that can interact with humans in the form of chats in various modes of input like text, voice and others. Nowadays, communication technology is progressing very fast with increase in the population. Also, in today's world people loves to do chatting in the form of text and voice. So, in order to make the life more convenient, chat bot system needs to be added to newly introduced applications and software so that users can use that particular software or application in a better way.
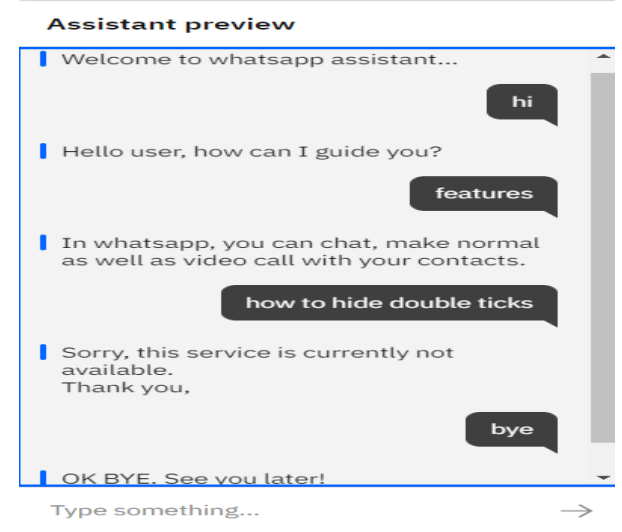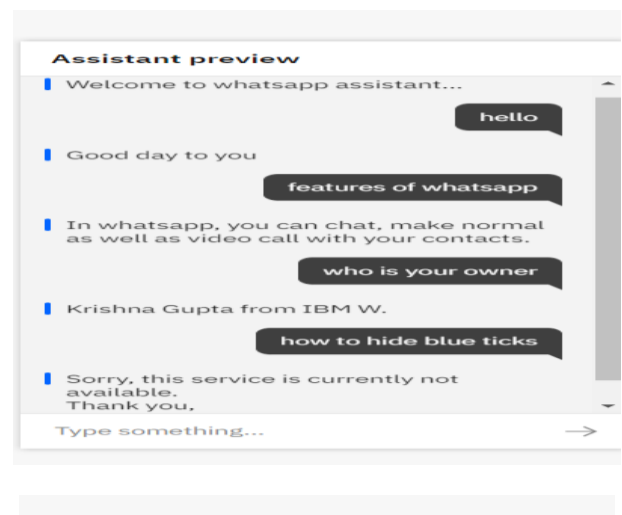
1.1 IBM Watson

IBM Watson was created as a question answering (QA) computing system that IBM built to apply the concept like neural networks, soft computing, various machine learning technologies to the field of open domain question answering. In recent years, IBM Watson capabilities have been extended and the way in which Watson works has been changed to take advantage of new deployment models (Watson on IBM Cloud) and evolved machine learning capabilities and optimized hardware available to developers and researchers. Now Watson is no longer pure form of a question answering (QA) computing system designed from Q&A pairs. In IBM Watson, basically training is provided to our question and answers so that if the user frames any question through any meaningless statement but through the main keyword Watson can provide the user a desired response.

Steps to built the IBM Watson chatbot system:

- Open IBM Watson website and create our account.
- Register for free version/paid version to build the system.
- Select the icon Add Dialog Skills and give name to the dialog through which you will train your system.
- Now add intents, entities and dialog through which our system will be getting trained.
- Finally, click on Try it icon to run the system that have been designed.
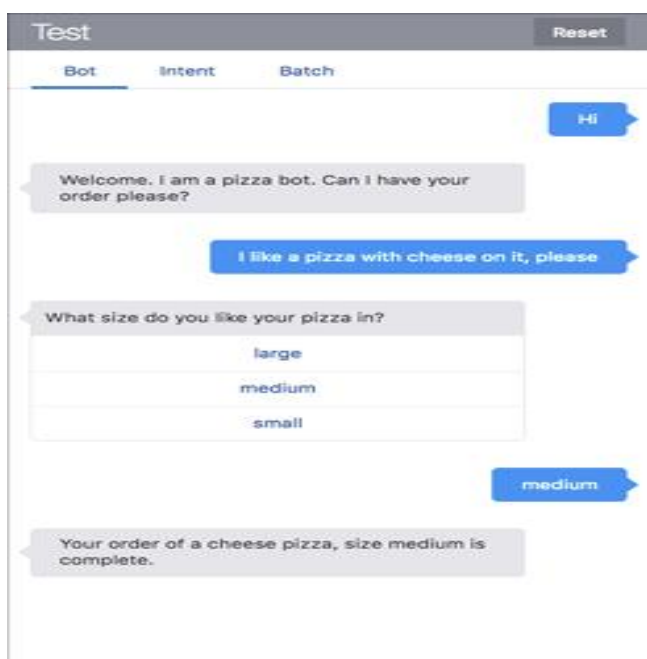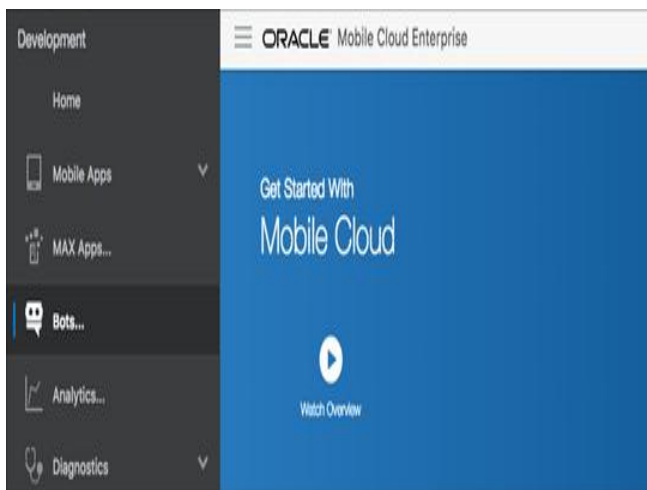
Here is the sample output:

1.2 Oracle

Oracle intelligent bots is a feature of oracle mobile cloud platform. Using oracle intelligent board and the following instruction are going to build a pizza bot that leverages artificial intelligent and machine learning to understand user intent and to exact values from user input.

Start creating a new bot by performing the following steps:

- ➢ Open the Brower and log in into the oracle mobile cloud enterprise homage.
- ➢ Click the hamburger icon present in the upper left to open the oracle mobile cloud menu.
- ➢ Click the bot menu item.
- ➢ Click the new bot icon to create a new bots project.
- ➢ Enter oracle magazine online pizza order.

Here is the sample output:

1.3 Python

Python is an interpreted, object-oriented, high-level programming language with dynamic semantics. Its high-level built in data structures, combined with dynamic typing and dynamic binding, make it very attractive for Rapid Application Development, as well as for use as a scripting or glue language to connect existing components together. Python's simple, easy to learn syntax emphasizes readability and therefore reduces the cost of program maintenance. Python supports modules and packages, which encourages program modularity and code reuse. The Python interpreter and the extensive standard library are available in source or binary form without charge for all major platforms, and can be freely distributed.

Advantages of using python for chatbot:

- ➢ Less Code
- ➢ Prebuilt Libraries
- ➢ Support
- ➢ Flexibility
- ➢ Popularity

Steps to do installation and procedure to follow to make chatbot:

- ➢ Create a Working Webhook Endpoint
- ➢ Create a Facebook Page
- ➢ Create a Facebook App
- ➢ Setup Your Messaging App
- ➢ Start Chatting with Your Bot
- ➢ Customize Your Bot's Behavior
- ➢ Submit Your App to be Reviewed
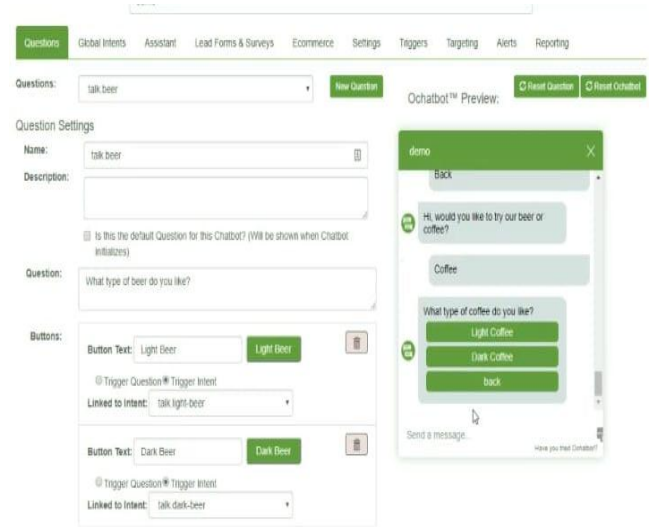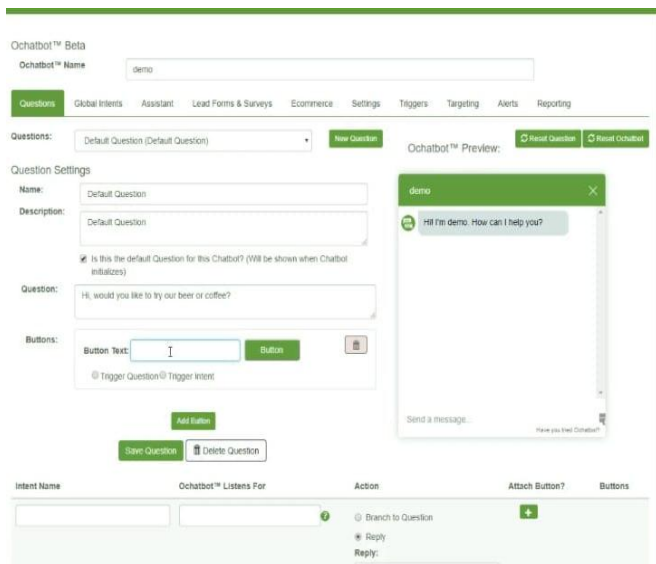
Here is the sample output:

1.4 Ochatbot

Ochatbot gives user easy to use features that help us engage with our users and getting higher conversion rates of leads and sales. The interface allows the companies to create conversations with questions, intents, keyword listeners and a variety of reply types and logic. Here are some of the features.

- ➢ Easily installed with one script on your website
- ➢ Build simple or complex conversational logic trees
- ➢ Engage users at the right time to start a conversation using a variety of triggers
- ➢ Gain insights from user data
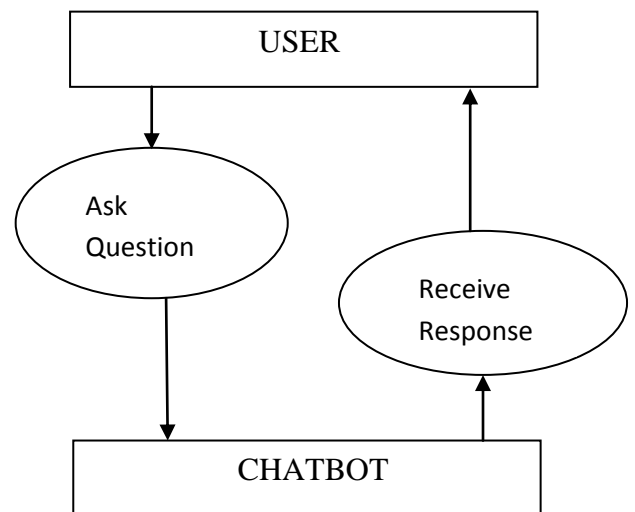- ➢ Build, test and launch your chatbot for free

The Ochatbot editor provide many features which help us to speed up the creation of a chatbot.

- ➢ Real-time testing of intents provides immediate feedback
- ➢ Create new questions and intents easily and duplicate other intents
- ➢ Site-wide variables are applied automatically to reduce maintenance time
- ➢ Brand the look and feel of Ochatbot quickly and easily

Here is the sample output:

2. Block diagram of chatbot system is as:

3. CONCLUSIONS

As in our paper each member has done the work on each chatbot resource. So, here is the difference between all the four resources.

1. IBM Watson: It provides free membership for one month. It works in terms of input like speech, text, etc. It is very easy to use and portable in any software and applications. It is codeless method of developing a system.
2. Oracle: It requires a paid membership for limited duration of time. The chatbot system to work in terms of input like text only at this stage of time. It is not difficult to use. It is code free.
3. Python: It is a free platform independent resources where with the help of code we can make our chatbot system. It is more secure and flexible. It needs coding to be done.

4. Ochatbot: It is a platform like IBM Watson which needs paid membership. It also provides services to chatbot like voice, speech, text, etc. It is flexible and very handy to use. It doesn't require to code.

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