<u>Documentation of IBM Project</u> <u>Chatbot deployment with IBM Cloud Watson</u> <u>Assistant</u>

This is a clear-cut documentation of the project "Chatbot deployment with IBM Cloud Watson Assistant". We'll see the process of the project development.

My main project is "Link Explorer". The chatbot gives the links of the website which is required by the user. The chatbot has many types of links integrated into it.

At Phase 1: In phase 1 we have done the design thinking work for the chat bot like brainstorming, ideation and defining. With the help of design thinking we can make the theoretical and paperwork of the chatbot project. And then we can do the project via coding and with some software.

At Phase 2: In phase 2 we have done the chatbot in a software called "VisualStudioCode" for the use of advanced features such as Natural Language Understanding (NLU) for the user's intent recognition. And that project also been uploaded in the GitHub account and the GitHub account link is:

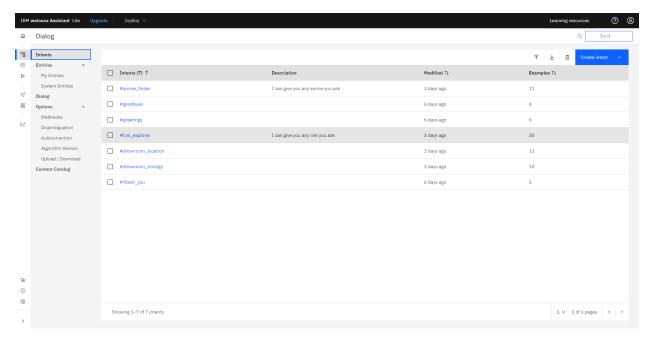
"https://github.com/Mathew0510/Naan-Mudhalvan.git" You can see the phase 2 projects and all other phase projects via this link.

At Phase 3: The Development of the chatbot Watson:

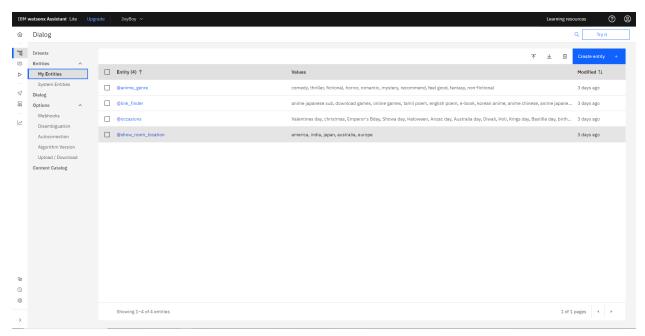
The main project begins now, the chatbot using IBM Cloud Watson Assistant is being developed now. First, we'll create an account in the IBM Cloud by using the ID given by the IBM cloud company. After fully completing the account creation we'll install the required resources from the cloud website. At first the chat bot was created without any dialogs or any intents. As it is a simple program integrated chatbot. We have to give the exact commands to get the output. That's the chatbot project done in phase 3.

At Phase 4: At phase 4 the chatbot has been fully developed and integrated with dialogs, entities and intents. With the help of intents, entities and dialogs we can make the chatbot to do refining responses. The dialogs have been integrated as user queries and the intents are the keywords to get understood by the chatbot. The entities are the responses which are gained as output. The entities and intents are integrated nodes. The nodes are very important for the chatbot responses. These nodes make the intents and the entities to combine and when the user gives his query the chatbot goes to the intent and makes the matches with the keywords and through the entity the chatbot makes its responses.

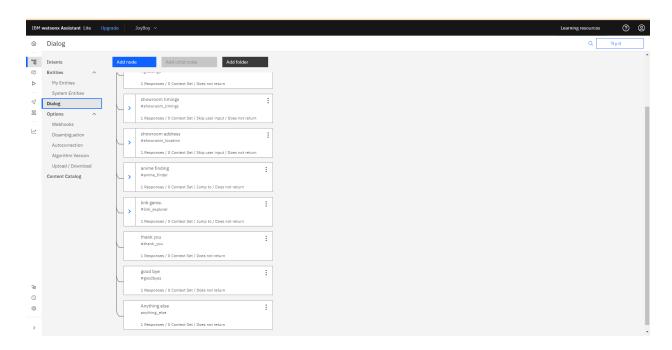
Some examples of the chatbot user queries and responses from the chatbot.



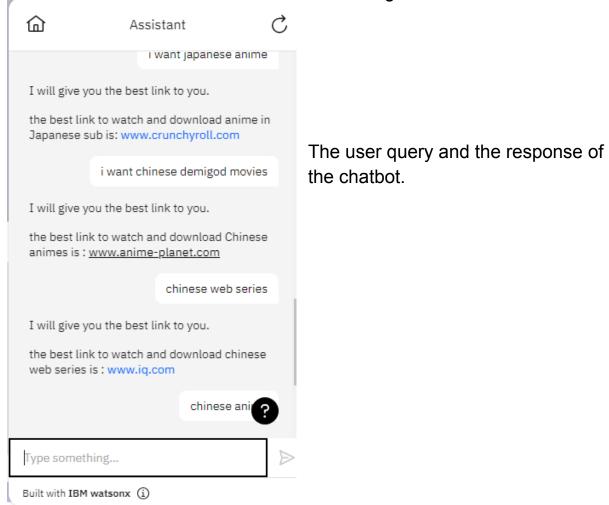
The intents in the chatbot

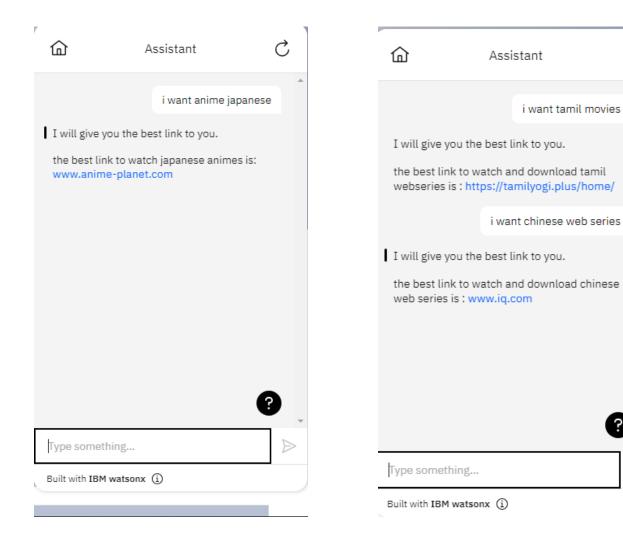


The entities in the chatbot

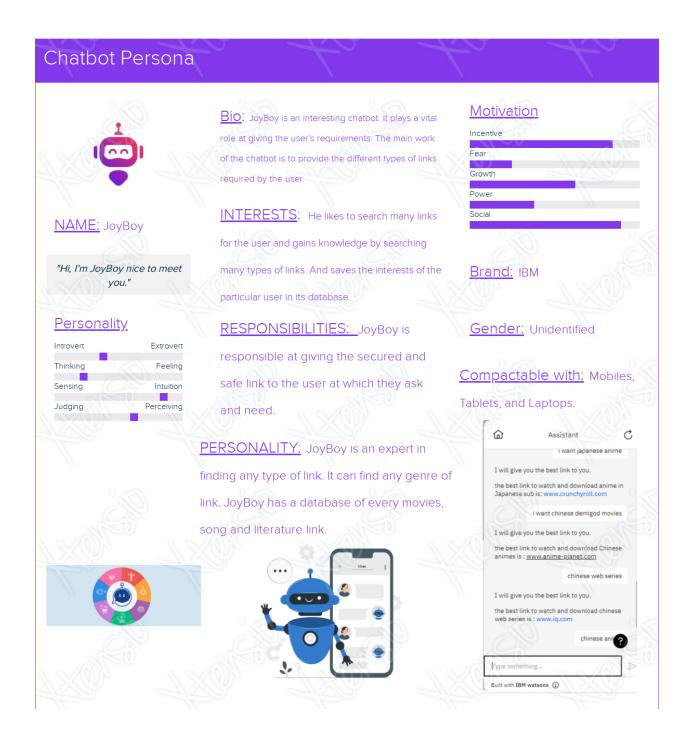


The dialogs and nodes in the chatbot.





And this is the project of Chatbot deployment with IBM Cloud Watson Assistant.



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