Project report on “Movie Ticketing Bot”

Prepared by:

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Category: IBM Cloud Application

Skills Required:

ChatBot,IBM Watson Assistant,IBM Nodered

Problem Statement:

In this project, we will be building a chatbot using Watson assistant. This chat should have the following capabilities:

1. Give the list of movies available
2. The Bot should be able to show different show timings
3. When a movie is selected the bot should show the availability of tickets and their respective prices.
4. The bot should be in a position to book tickets.

Introduction

In the given problem statement asked to create a Movie ticketing chat bot which is capable of to do following task.

1. Give the list of movies available
2. The Bot should be able to show different show timings
3. When a movie is selected the bot should show the availability of tickets and their respective prices.
4. The bot should be in a position to book tickets.

To implement the given problem statement requires two phases such as

1. Create interactive chat using Watson assistant
2. Create UI using Node RED service

1. Create interactive chat bot using Watson assistant:

The following steps are required to create interactive chat bot in IBM account.

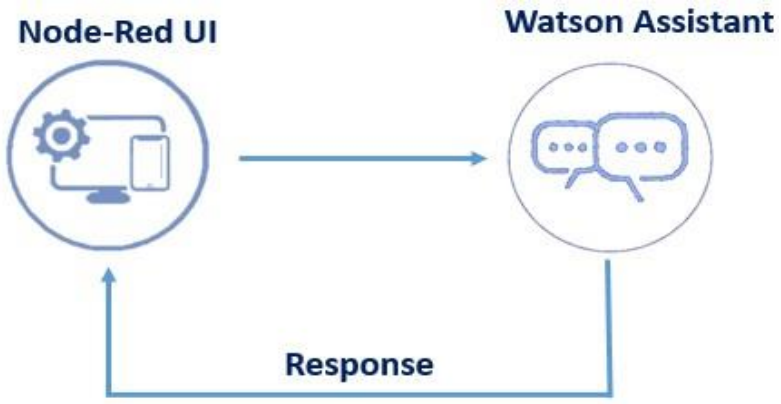
Step1: Login to IBM account
Step2: Go to Catlog and search for Watson assistant
Step3: Create Watson Assistant Service
Step4: Click on launch Watson assistant
Step5: Create a skill in Watson assistant
Step6: Create intents entities and dialogs

2. Create UI using Node RED service:

The following steps are required to create UI using Node-RED service

Step1: Get the User input
Step2: Using http request hit the model which is trained
Step3: get response
Step4: Show case it on UI

Architecture:



Services used:

1. IBM Watson Assistant
2. Node-Red

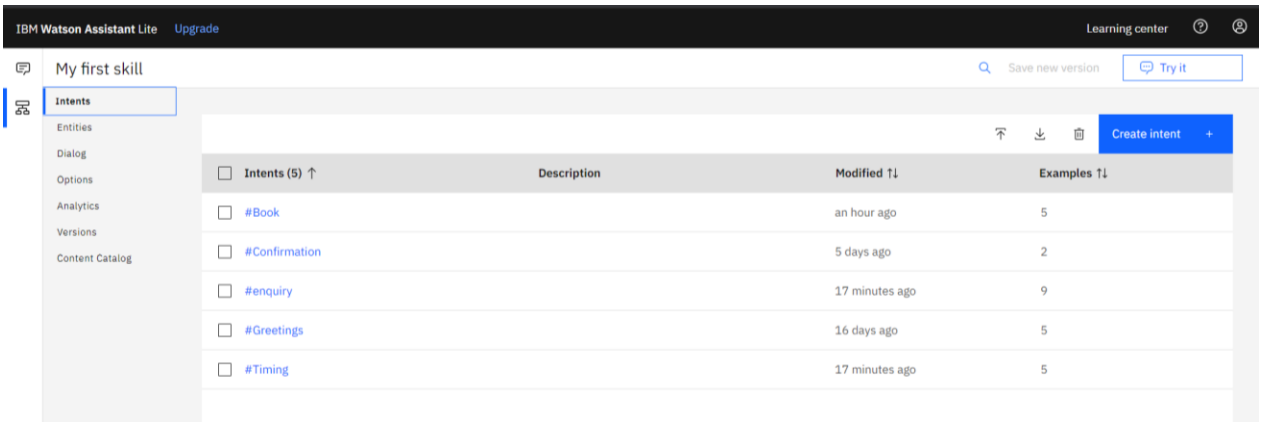
1. IBM Watson Assistant:

Watson Assistant is a conversation AI platform that helps you provide customers with fast, straightforward and accurate answers to their questions, across any application, device or channel. By automating responses to common inquiries, Watson Assistant reduces the burden on your agents and the risk of disruption during peak times. This lets your agents focus on complex use cases – not repetitive responses – and helps customers resolve issues day or night.

An assistant helps your customers complete tasks and get information faster. It may clarify requests, search for answers from a knowledge base, and can also direct your customer to a human if needed.

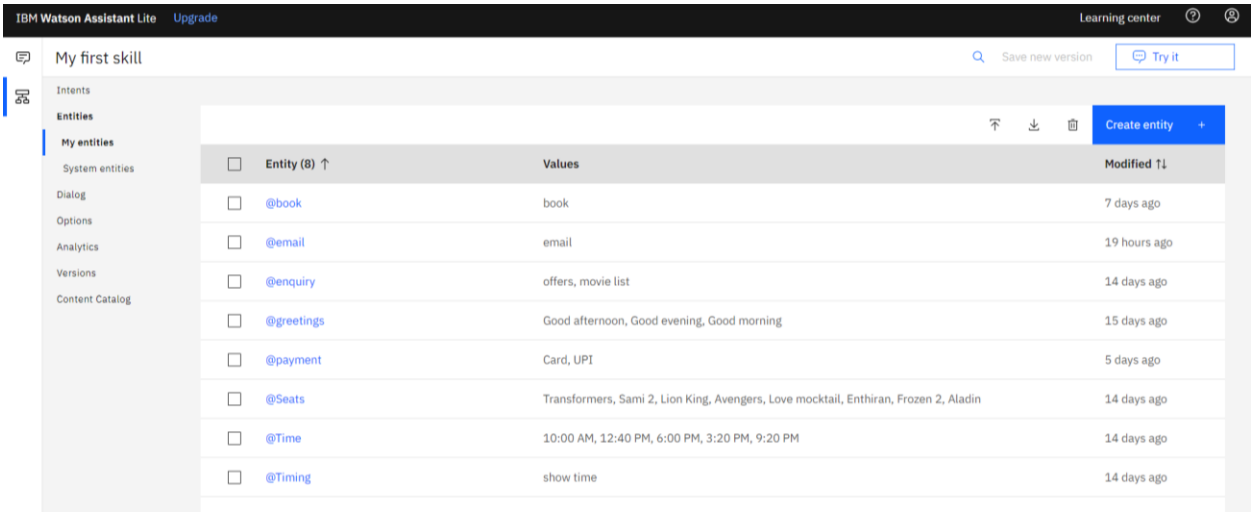
Intents:

An intent is a collection of user statements that have the same meaning. By creating intents, you train your assistant to understand the variety of ways users express a goal.

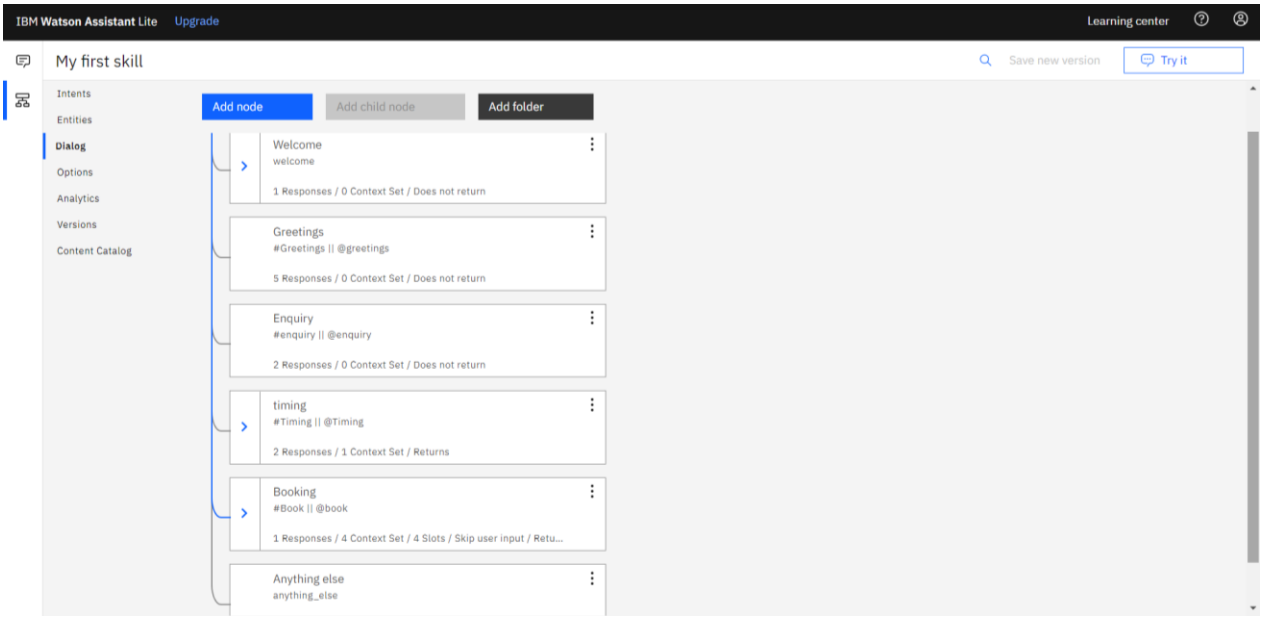


Entities:

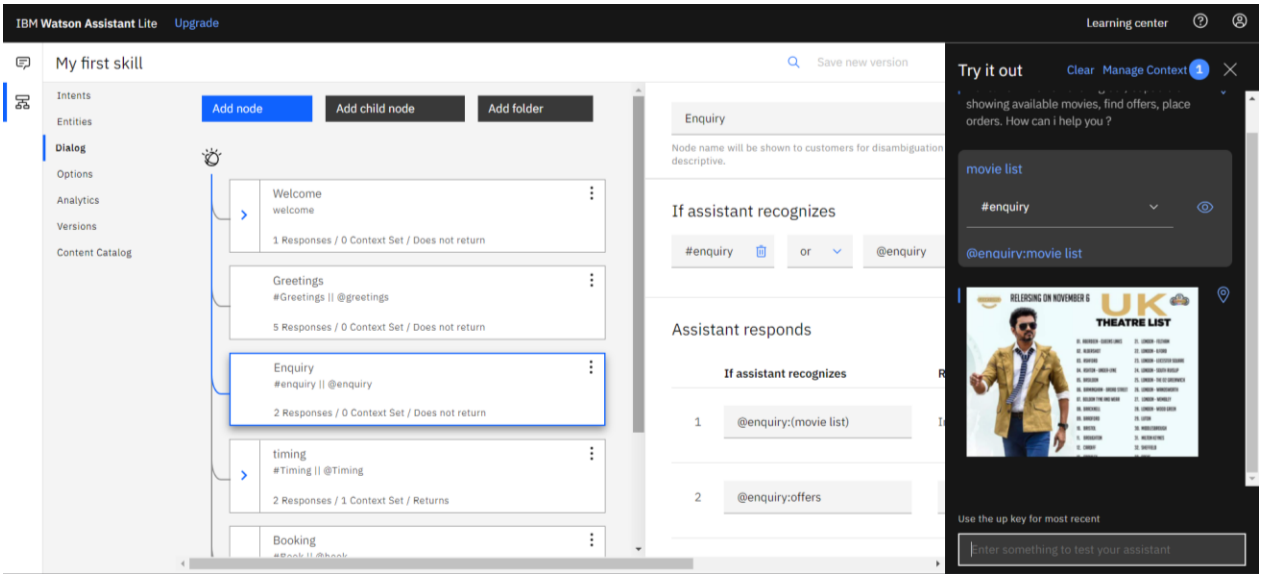
Entities are like noun or keywords. By building out your business terms in entities your assistant can provide targeted responses to queries.



Dialog:



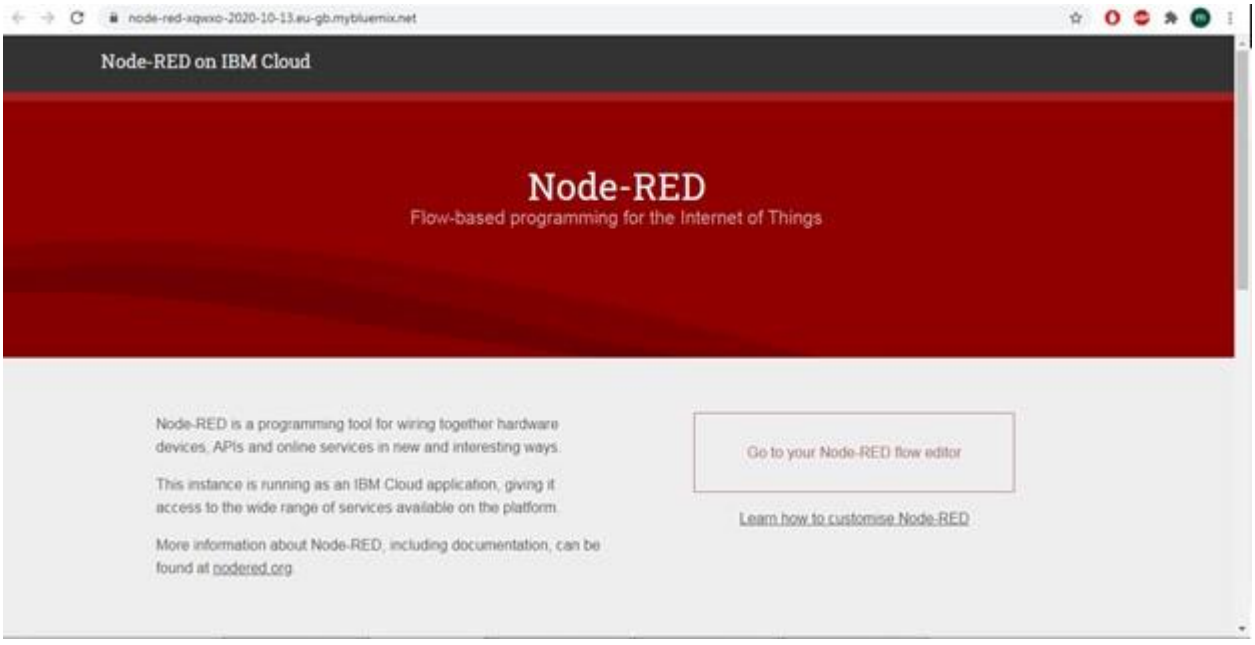
Working Movie Ticketing Chat Bot:



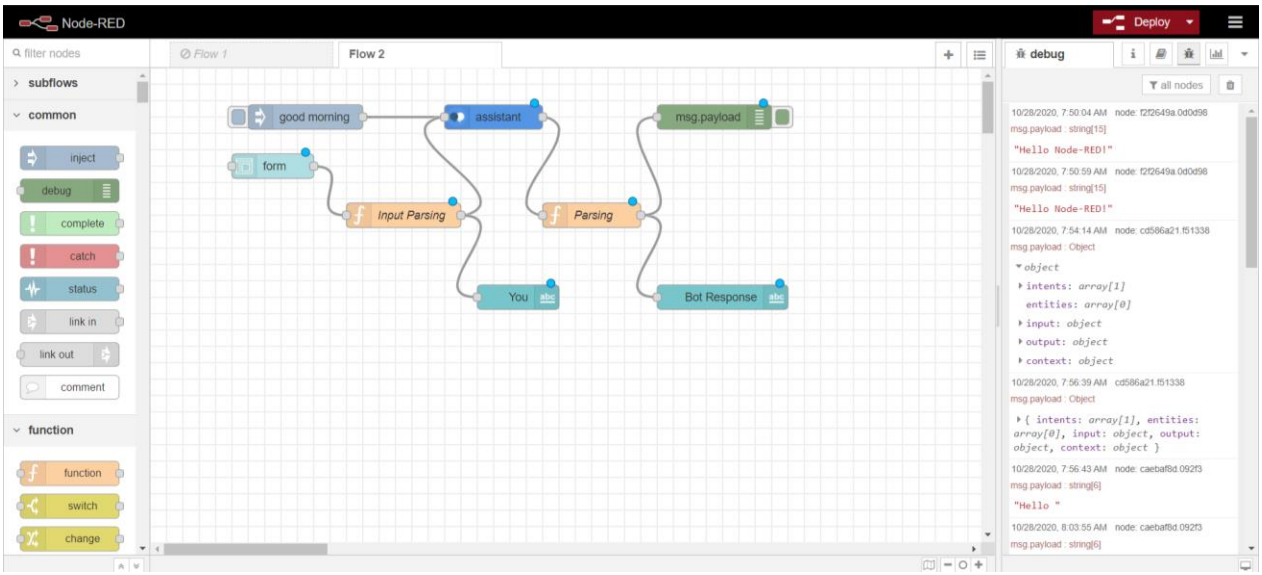
2.Node-Red:

Node-RED is a flow-based development tool for visual programming developed originally by IBM for wiring together hardware devices, APIs and online services as part of the IOT.

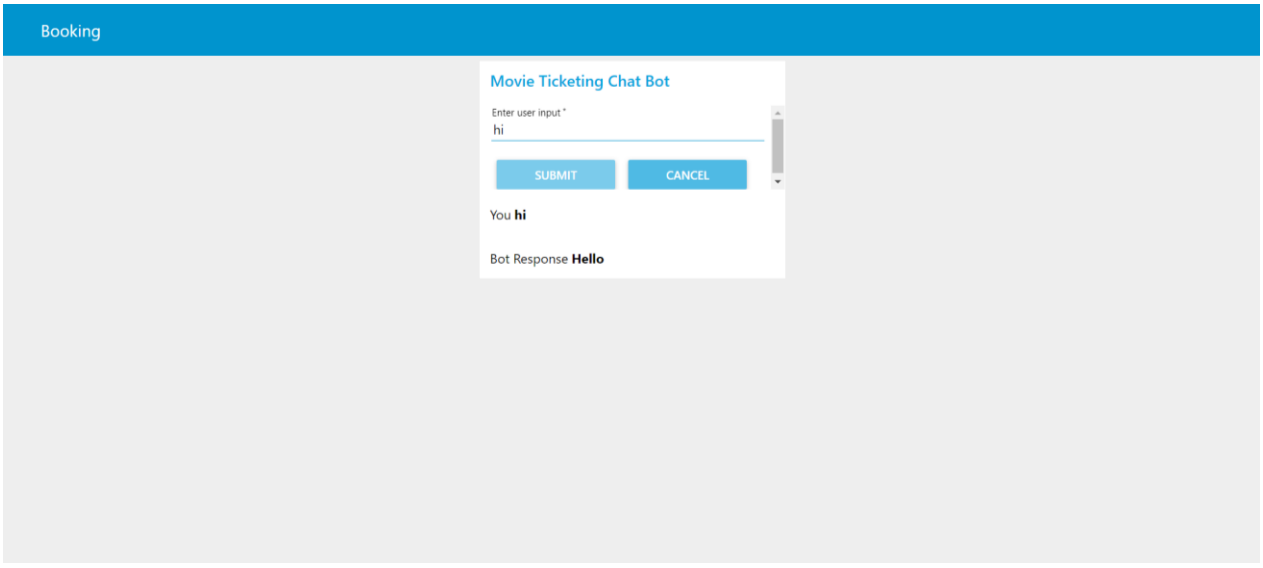
Node-RED provides a web browser-based flow editor, which can be used to create JavaScript functions. Elements of applications can be saved or shared for re-use. The runtime is built on Node.js. The flows created in Node-RED are stored using JSON.



Node Red Flow for interactive UI development:



Output:



Conclusion:

We have successfully implemented the IBM Watson Assistant and Node-Red service in IBM cloud account and developed the Movie Ticketing Chat Bot having following capabilities.

1. Give the list of movies available
2. The Bot should be able to show different show timings
3. When a movie is selected the bot should show the availability of tickets and their respective prices.
4. The bot should be in a position to book tickets.