

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.

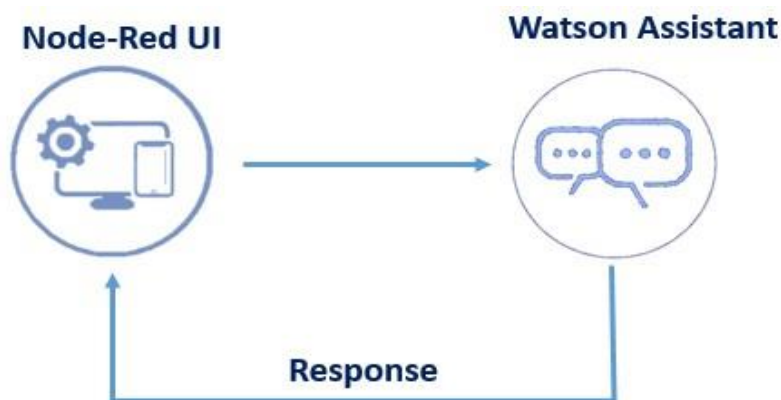
- Step1: Login to IBM account
- Step2: Go to Catlog and search for Watson assistant
- Step3: Create Watson Assistant Service
- Step4: Click on launch Watson assistant
- Step5: Create a skill in Watson assistant
- Step6: Create intents entities and dialogs

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

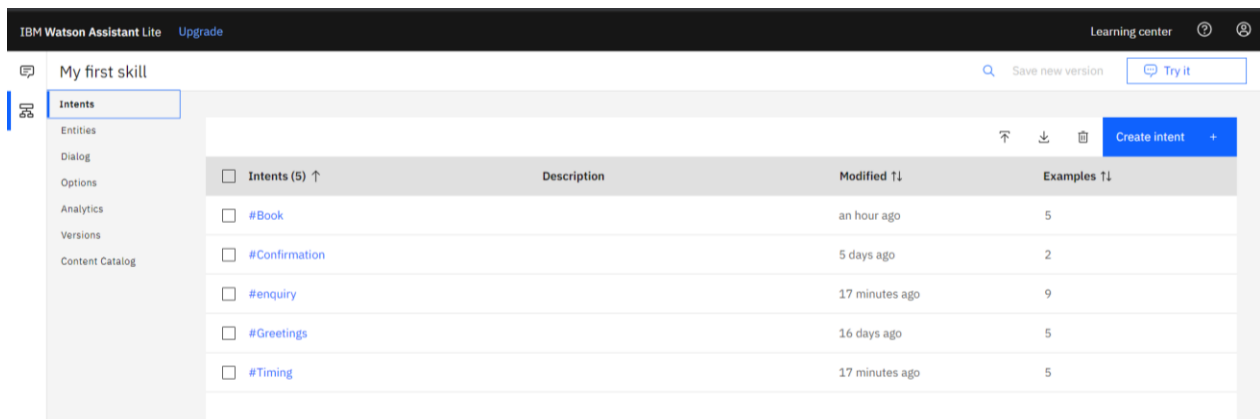
1. IBM Watson Assistant:

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:

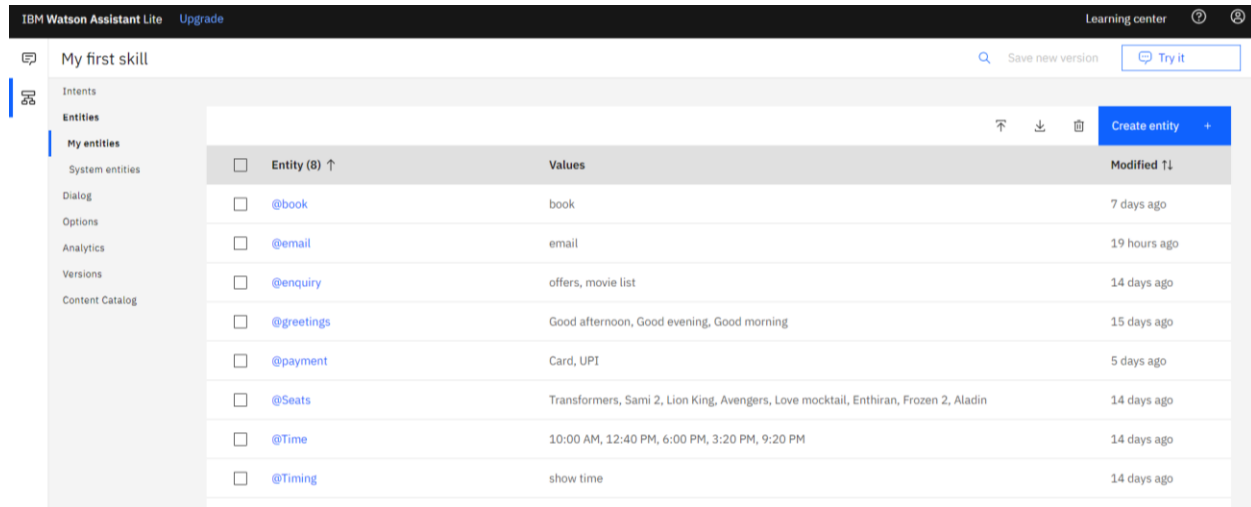
An intent is a collection of user statements that have the same meaning. By creating intents, you train your assistant to understand the variety of ways users express a goal.



Intents (5) ↑	Description	Modified t1	Examples t1
<input type="checkbox"/> #Book		an hour ago	5
<input type="checkbox"/> #Confirmation		5 days ago	2
<input type="checkbox"/> #enquiry		17 minutes ago	9
<input type="checkbox"/> #Greetings		16 days ago	5
<input type="checkbox"/> #Timing		17 minutes ago	5

Entities:

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



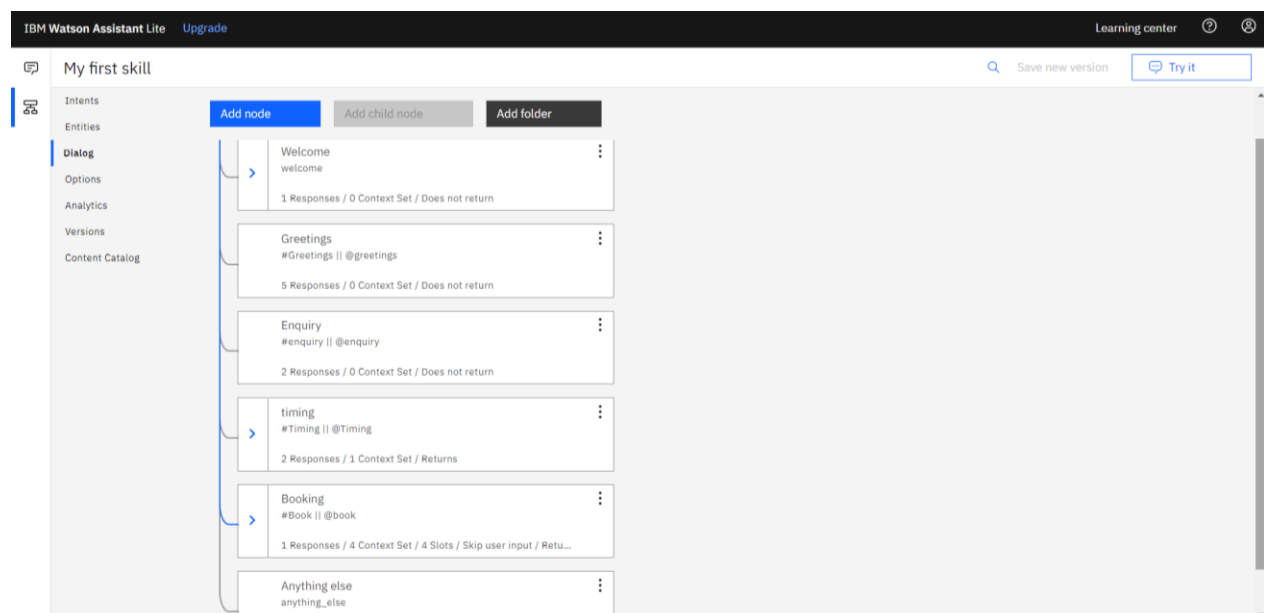
IBM Watson Assistant Lite Upgrade Learning center ?

My first skill Save new version Try it

Intents Entities My entities System entities Dialog Options Analytics Versions Content Catalog

Entity (8) ↑	Values	Modified Tl
@book	book	7 days ago
@email	email	19 hours ago
@enquiry	offers, movie list	14 days ago
@greetings	Good afternoon, Good evening, Good morning	15 days ago
@payment	Card, UPI	5 days ago
@Seats	Transformers, Sami 2, Lion King, Avengers, Love mocktail, Enthiran, Frozen 2, Aladin	14 days ago
@Time	10:00 AM, 12:40 PM, 6:00 PM, 3:20 PM, 9:20 PM	14 days ago
@Timing	show time	14 days ago

Dialog:



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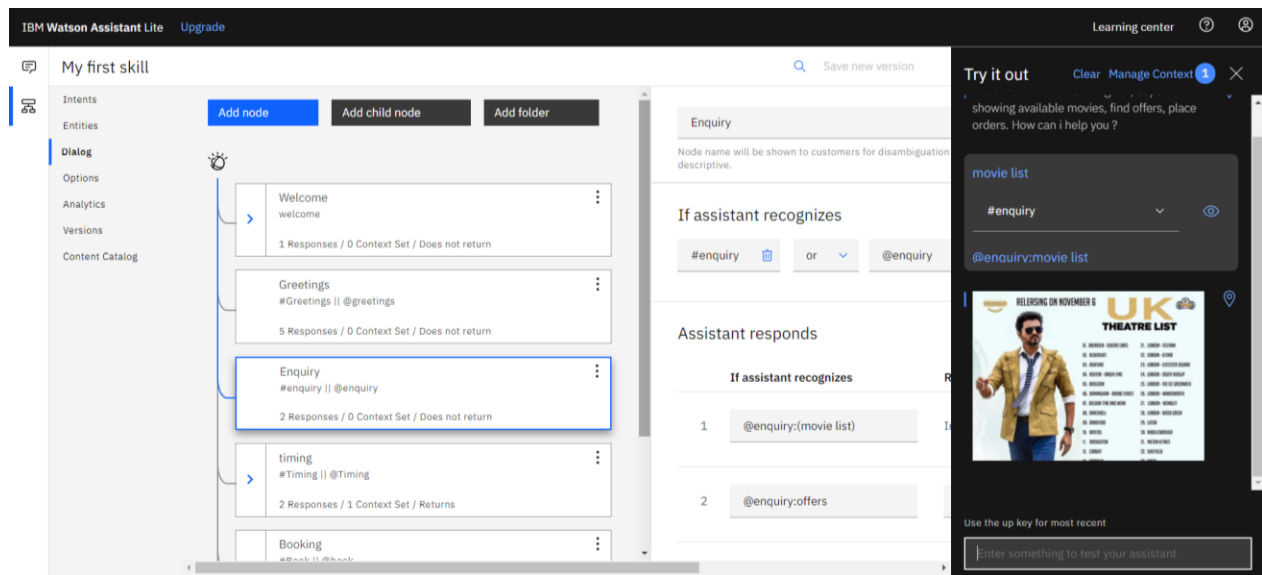
My first skill Save new version Try it

Intents Entities Dialog Options Analytics Versions Content Catalog

Add node Add child node Add folder

- Welcome
welcome
1 Responses / 0 Context Set / Does not return
- Greetings
#Greetings || @greetings
5 Responses / 0 Context Set / Does not return
- Enquiry
#enquiry || @enquiry
2 Responses / 0 Context Set / Does not return
- timing
#Timing || @Timing
2 Responses / 1 Context Set / Returns
- Booking
#Book || @book
1 Responses / 4 Context Set / 4 Slots / Skip user input / Retu...
- Anything else
anything_else

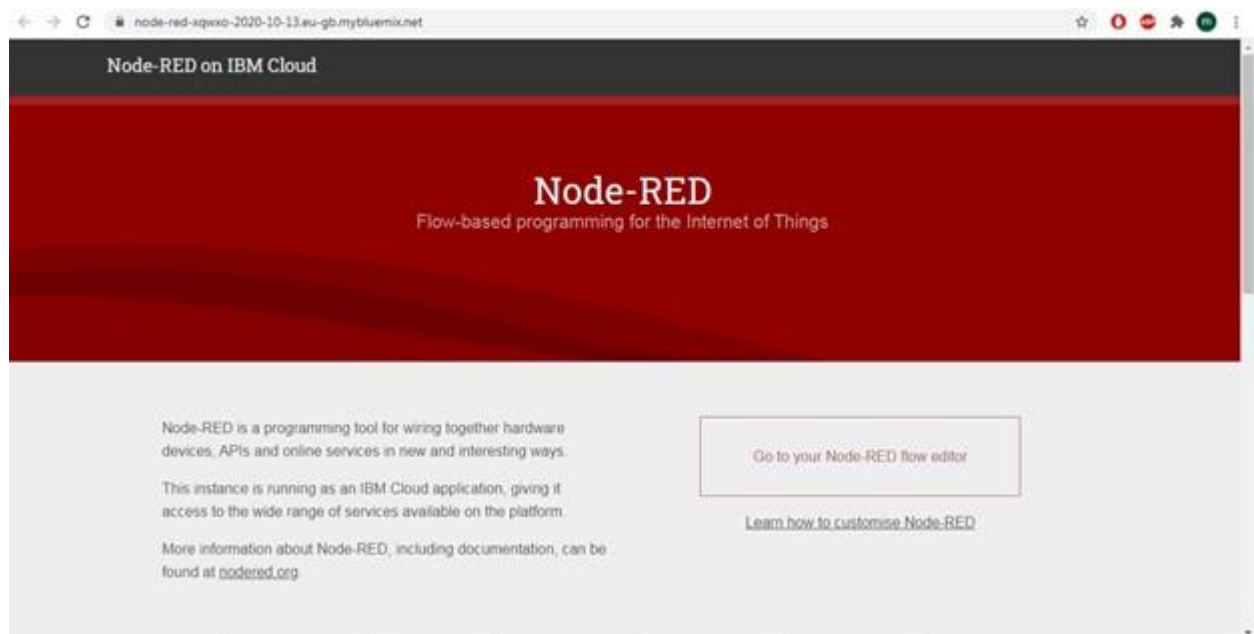
Working Movie Ticketing Chat Bot:



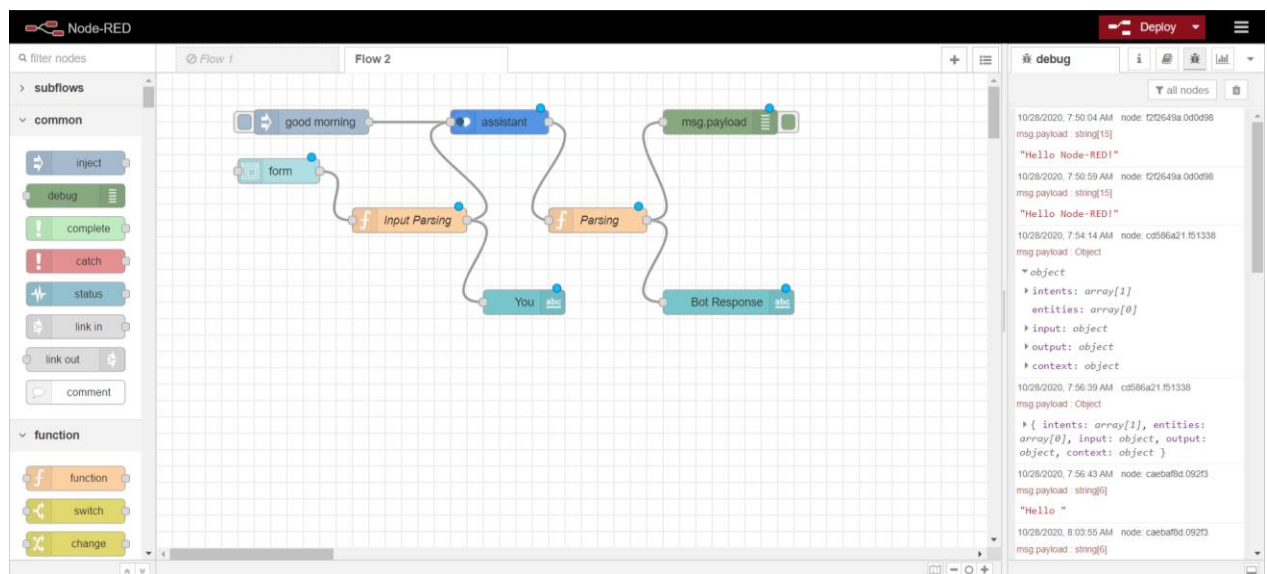
2.Node-Red:

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:

Booking

Movie Ticketing Chat Bot

Enter user input *

hi

SUBMIT CANCEL

You **hi**

Bot Response **Hello**

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.