VIDYALANKAR INSTITUTE OF TECHNOLOGY

Affiliated to University of Mumbai

Wadala(E), Mumbai - 37

A MINI-PROJECT REPORT

ON

" Course Enquiry Assistant "

(Course – Intelligent System Lab)

Submitted by

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2020-2021

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CERTIFICATE

Certified that the mini-project work entitled **" Course Enquiry Assistant "** is a Bonafede work carried out by

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The report has been approved as it satisfies the academic requirements in respect of mini-project work prescribed for the **course- Intelligent System Lab**.

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Faculty In-Charge

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TABLE OF CONTENT

ACKNOWLEDGEMENT

At the very outset of this report, I would like to extend my sincere & heartfelt obligation towards all the personages who have helped me in this endeavour. Without their active guidance, help, cooperation & encouragement, I would not have made headway in the project.

I am extremely thankful and pay my gratitude to my faculty Prof. Amit Nerurkar l for his valuable guidance and support on completion of this project presently. The project is an excellent example of Artificial Intelligence in real life that helped to improve way of thinking and solving problems with the help of different algorithms.

Last but not least, gratitude goes to all of my friends who directly or indirectly helped me to complete this project.

Abstract

Recently, education is becoming more accessible to a wider group of people through technology. The concepts of artificial intelligence and machine learning have provided substantial assistance in the field of education.

The chatbot's functioning depends on natural language processing that helps users to submit their queries. The chatbot answers all the queries related to the courses and other details and sends appropriate responses to help the users. This conversational system is built using Google Dialog Flow which is a natural language understanding platform used to design and integrate a conversational user interface into web applications.

1. INTRODUCTION

1.1 Problem statement

To build a chatbot which can answer all the queries of a customer and whenever a customer does an enquiry, it automatically sends the customer the course details.It also has small talk features in case the user has some trivial questions for the bot.It also supports commonly asked Faqs.

1.2 Scope

The user can interact with the chatbot like a real person in charge of the communication . The chatbot asks consulting questions to which the user has to reply. The user can clear all their doubts related to courses offered in the institute.

2. PROPOSED SYSTEMS

2.1 Requirements

Hardware – Laptop/Desktop

Minimum configuration – Core i3, 2GB Ram, 200MB free space

Software – Google Dialog Flow,Telegram (For deployment)

2.2 Implementation

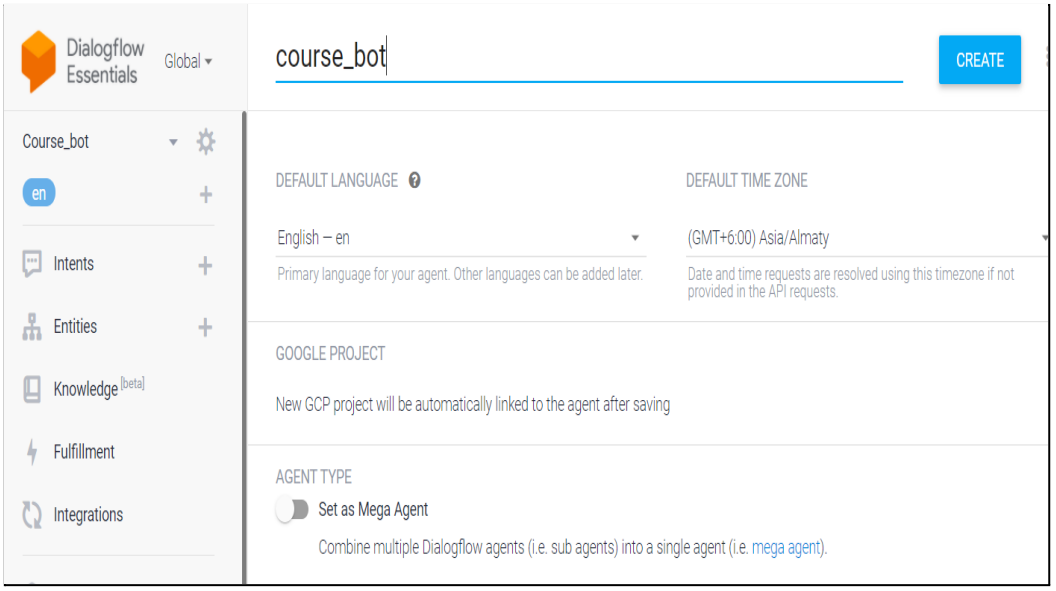
A. Dialog Flow configuration

STEP 1: Log in to Dialog Flow

https://dialogflow.com/

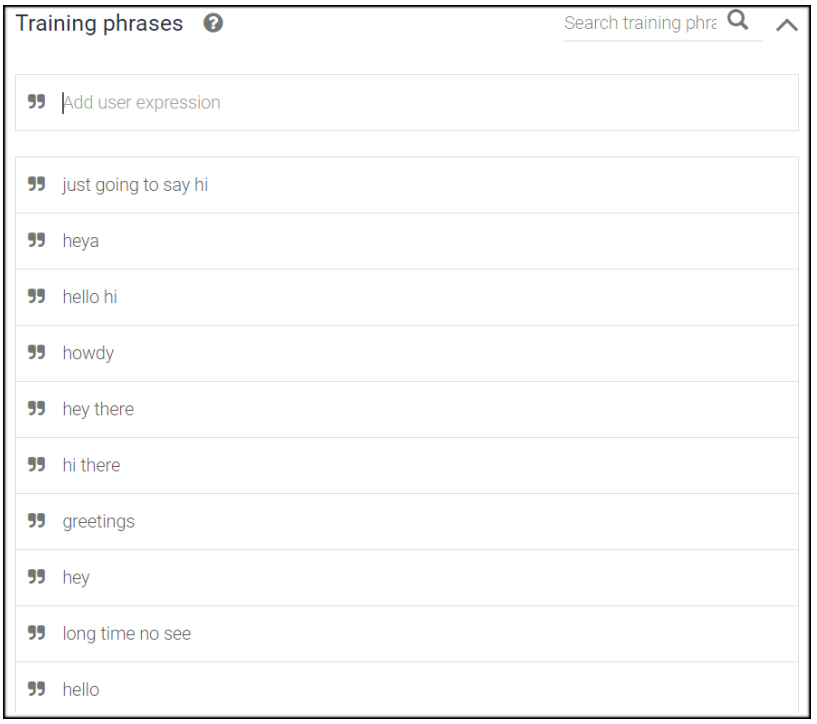
STEP 2: Create a new agent

Choose a name for your new bot and the default time zone. Keep the language in English. Name chatbot as Course_Bot. To take advantage you can create new projects that will enable cloud permissions.



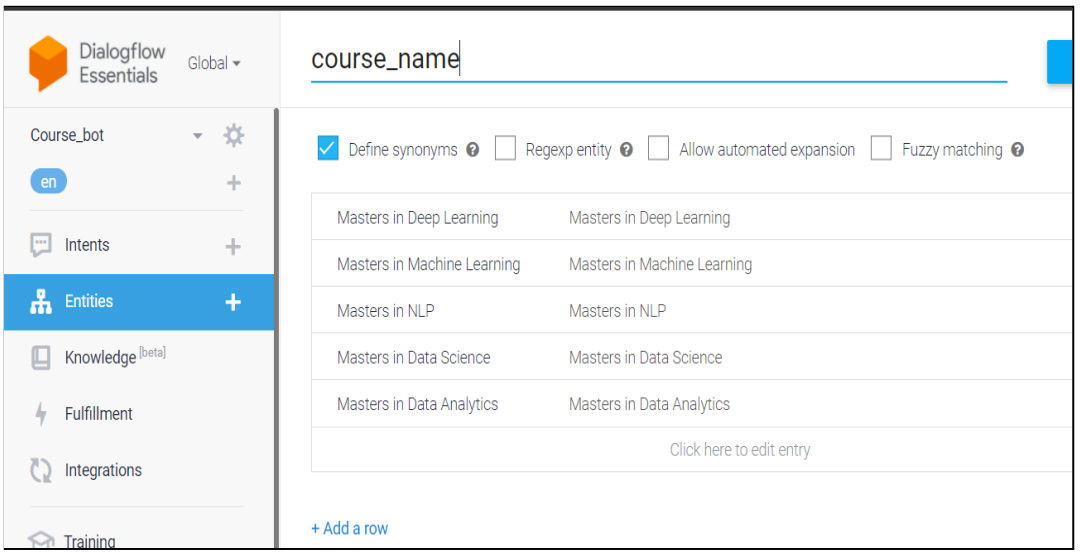
STEP 3: Create Intents

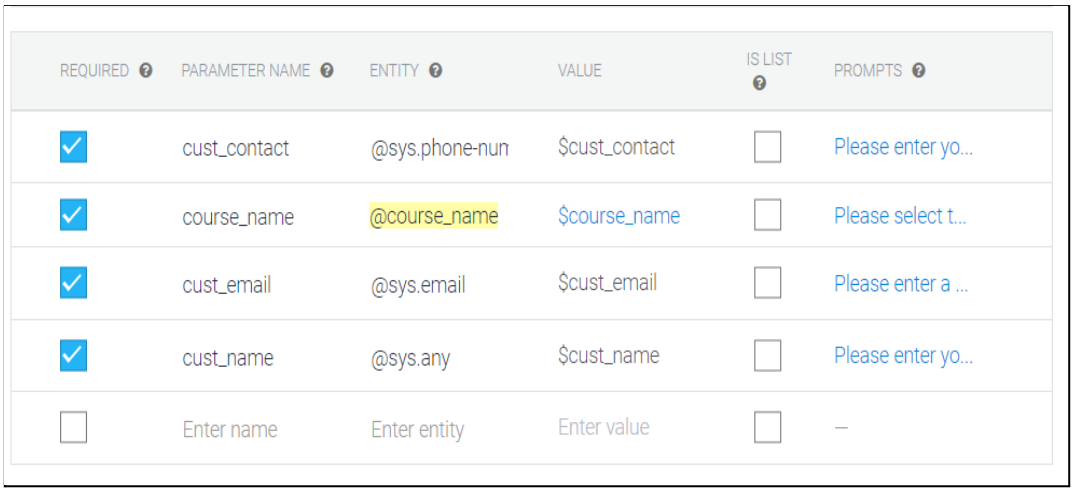
Intents are used to understand the intention behind user response. Dialog Flow tries to understand the context of conversation. Click on intents and add keywords in training phrases that the user may enter. After that create a response for added intents. Given below is default welcome intent.



To create follow up intents select Add follow-up intent. This enables chatbot to ask questions continuously and the user replies can be the same but for different context. This is the power of follow-up intents. Fallback intent helps to add response upon some invalid user input. There are many more such.

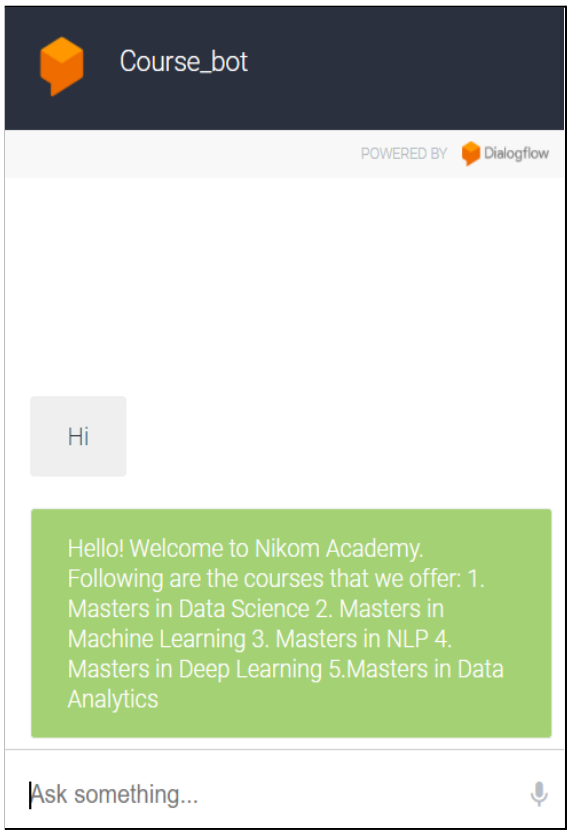
Entities are a mechanism in Dialog Flow for identifying and extracting useful data from natural-language inputs. We have created custom entities and used them in our intents. Prompt can be added if response is not valid.

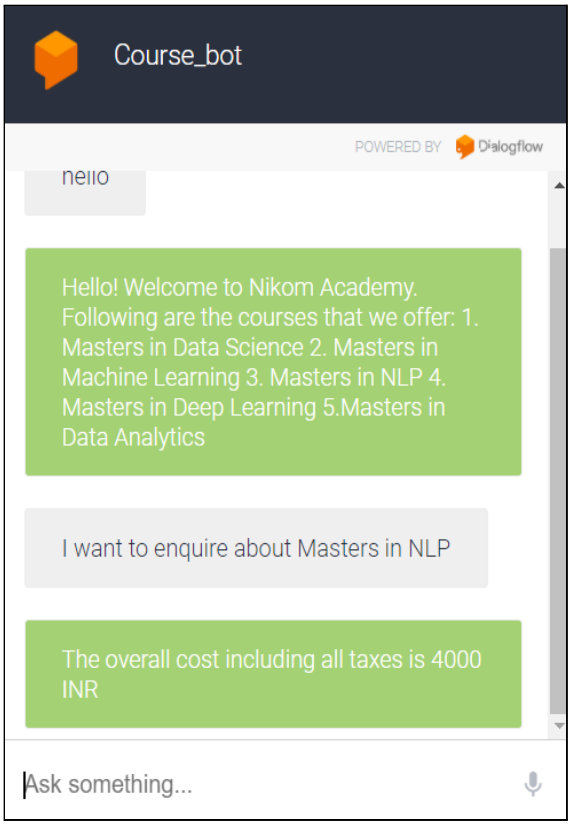


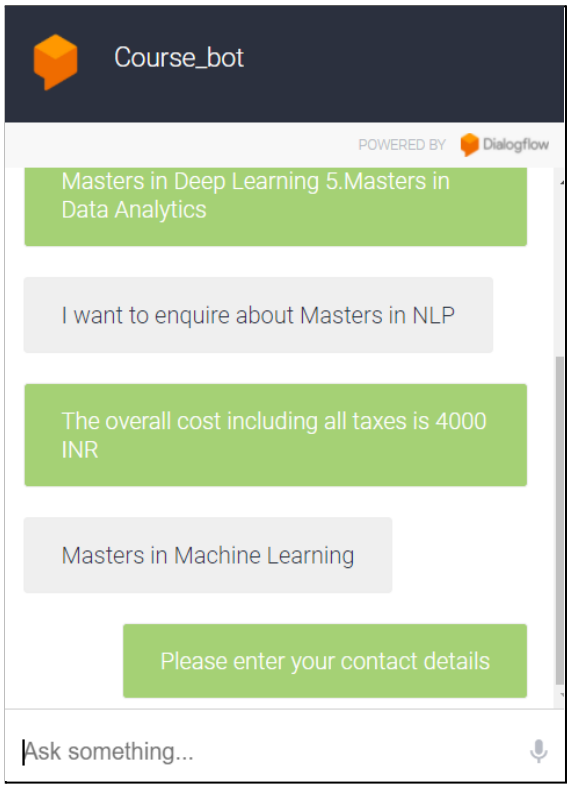


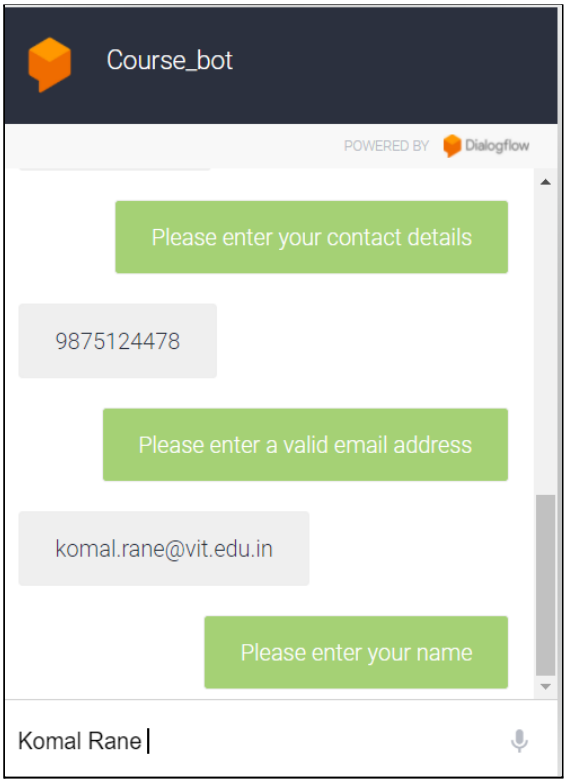
2.3 Results

Response from chatbot:

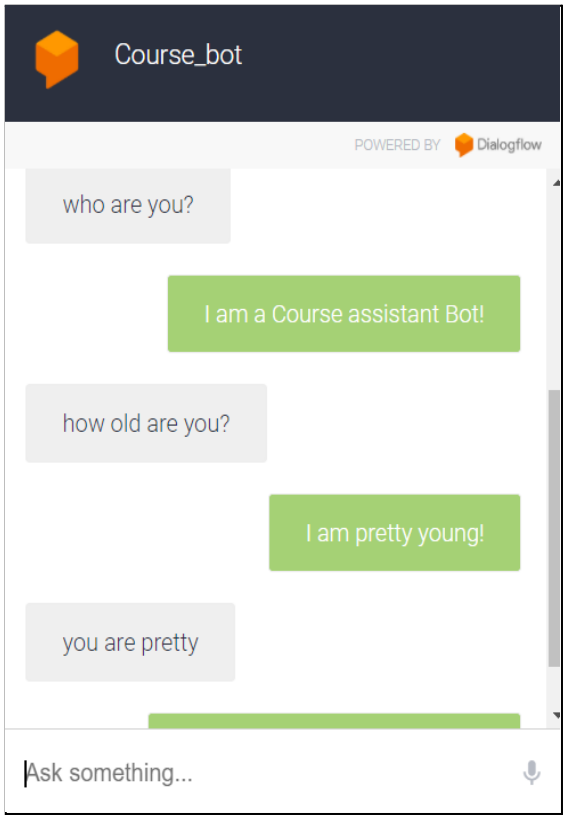


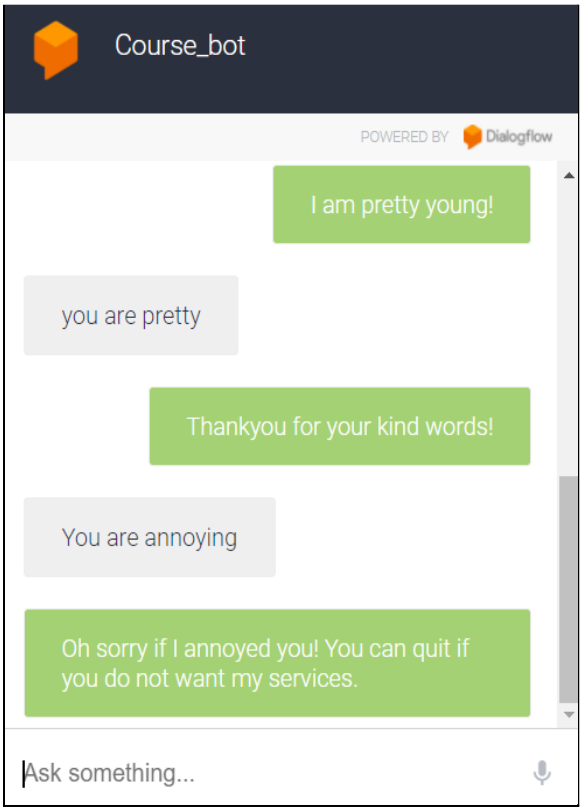




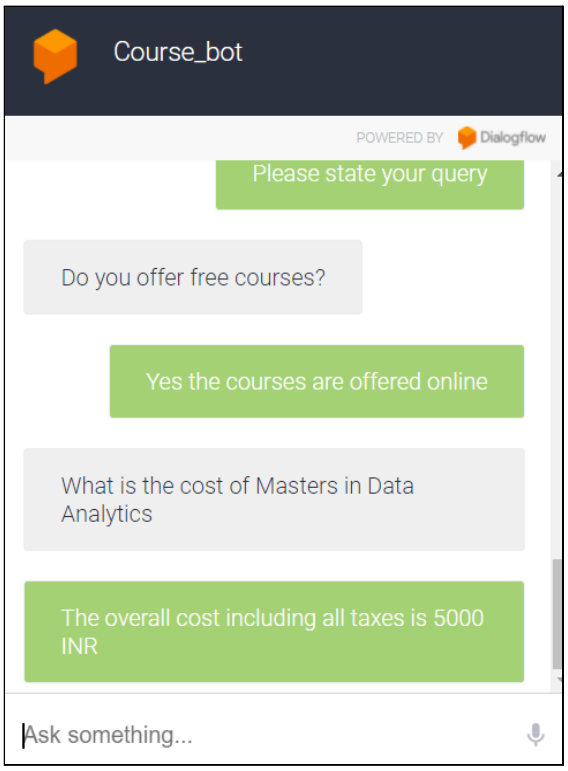


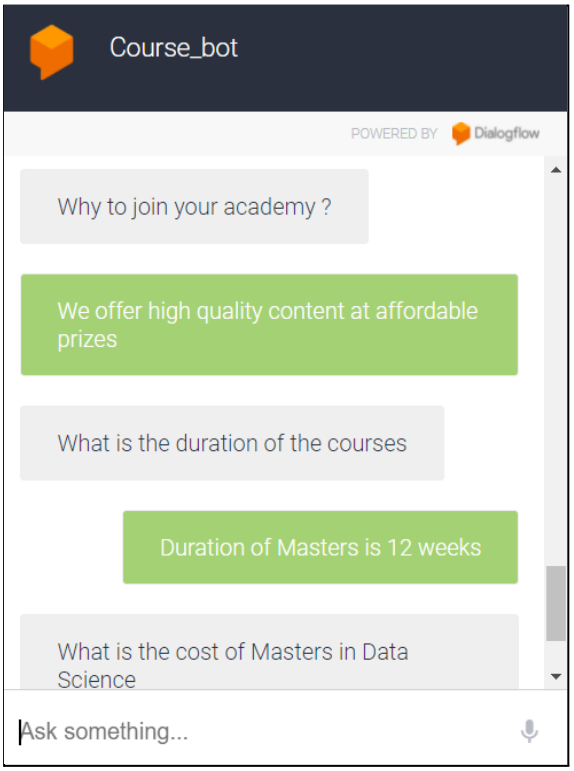
Small Talk Output





FAQS





3. CONCLUSION AND FUTURE SCOPE

The concept of natural language processing of Google Dialog Flow is used to create interactive chatbots. The intents and entities in Dialog Flow help to determine the intention of the user and provide a valid response.It can prove to be a great assistant to handle online traffic related to course enquiries in and across large educational institutes .

By taking the advantage of the extensibility of the system in future it will be used as voice and face recognition to mimic a counsellor, also interacting with the user at deeper levels. A feature of searching nearby available tutors can be integrated to make a real time project. The system can be integrated with mobile devices with the help of applications like WhatsApp, telegram, Facebook messenger, etc.

We believe that this approach is incorporated into existing strategy in the field of education and will provide assistance to the students and other users.

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