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IGL Facebook Chatbot

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# Introduction

The IGL HandsOn Facebook Chatbot project aimed to help the trainees develop a Chatbot in the developer mode. This Chatbot helps answer simple FAQs, provide details on IGL events, and provide a carousel of videos of a musician when requested by the user.

More specifically, the Chatbot provides the following responses for inputs given by the user:

1. Input – hello

Response - Welcome to IGL, Here are few things I can help you: IGL Description, Events information, Artists Information and Upcoming Events and Services

1. Input – IGL

Response - InstaGana Live! (IGL) is a Service helping Indian Music Communities around the globe to help them exhibit their musical talents (Vocal or Instrumental) on Live Stage Events. During this process, we help Charities, Schools and families with innovative programs and services.

1. Input – Chennai/Palakkad/Dublin (Place of event)

Response –

Found Matching Event...

Date 05/21/2016

City Dublin

Country USA

Host Vipin, Prakash

Theme Malayalam

Status Past

1. Input – (Name of singer)

Response – A carousel of 3 videos that contain links to the respective videos of the singer

# Project Description

## Hardware Components

1. Laptop

The Laptop has 2 Command Prompts open – one runs the program and the other runs ngrok. When the Chatbot is being used, an indication of the messages and responses can be seen in the Command Prompt window that runs the program.

1. Mobile Phone/Laptop

The same Laptop or a Mobile Phone is used to communicate with the Chatbot and test the program through Facebook Messenger.

## Software Components

1. JavaScript

JavaScript language is used to program the functioning of the Chatbot. The code is used to access JSON files for ‘FAQ and Events’ from AWS Cloud, mongo DB for the video clips, and the FB Chatbot API to access Facebook Cloud

1. Node.js

The IGL FB Chatbot is based on node.js

1. AWS Cloud

The AWS Cloud contains the JSON files, which have the FAQ and Events, and the mongo DB, which stores the IGL videos. The JSON files are accessed over HTTPS and the mongo DB is accessed through the IGL DB API.

1. Facebook Cloud

Commands are sent and received from Facebook through the Facebook API, which is a part of Facebook Cloud.

When the user sends an input, the program receives the command through the Facebook API. The node.js based program then processes the request. If it requires FAQ or Events, the program accesses it from the JSON files in the AWS Cloud over HTTPS. If it requires videos, the program accesses it from mongo DB in AWS Cloud through IGL DB API. The program then sends this back to Facebook Cloud via Facebook API, and the user gets the output.

# Key Learnings from the Project

Through this project, I learnt a lot about software development and the various stages it involves.

I was also introduced to Javascript, and got a good hold on the language through the several modules that were executed in the project. I was introduced to Facebook Developer, and learnt how to create a Chatbot using it. I also understood the important features of the developer.

I understood how Cloud infrastructure functions, and how JSON files, and mongo DB stored in the AWS cloud are accessed through node.js

Additionally, I learnt how to efficiently plan a project by dividing it into various modules and implementing and testing each of these one at a time before integrating them together.

Finally, I learnt other skills like writing a report, preparing a project presentation, documentation, etc.

Overall, this project has been a huge learning experience that would help me in college and all my future projects.

# Future Work

1. The Chatbot could be designed to be more interactive, perhaps by addressing the user by his/her name
2. The Chatbot could be designed to respond to other similar inputs from the user. For example, the Chatbot could be designed to respond to ‘hi’, ‘howdy’, etc. in addition to ‘hello’
3. The Chatbot could be extended to search for a particular keyword in the input, and provide a reply accordingly. For example, if the user enters ‘what is IGL’, the Chatbot should be able to pick out the keyword ‘IGL’ from it, and provide the response.
4. More features could be added like enquiring when the next event is, contact information, etc.

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