Artificial Intelligence(Chat BoT's)

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Abstract- Chat bots aren't new technology – simple bots have been in use for years. Artificial intelligence involves two basic ideas. First, it involves studying the thought processes of human beings. Second, it deals with representing those processes via machines like in Our case it is using Chat Bot(*which is Task Specific BoT*)made using Microsoft Azure and BoT Framework with Integration of Chat fuel and Luis (*Language Understanding Intelligent Service*)
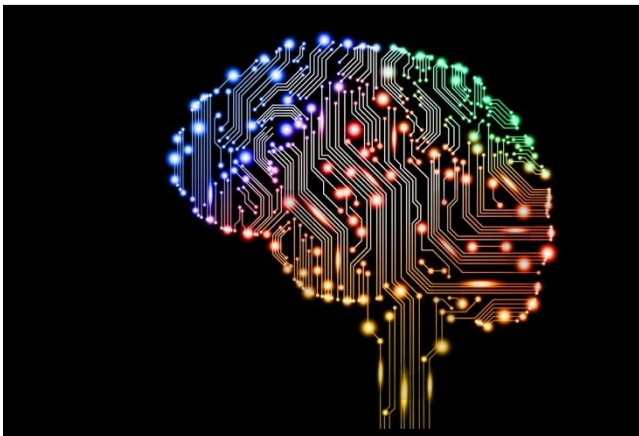
I. INTRODUCTION

Fig 1: Artificial Intelligence.

This white paper is an introduction to the terms, characteristics, and a service associated with Artificial intelligence (AI) is the intelligence exhibited by machines or software which a human can do or Beyond Human Being like Checking and Booking Hotel Tickets in Normal Chat like Human Language and Understanding it as well as giving Intelligent Answers or Suggestions if it's not able to provide a specific answer.

The paper introduces our **Own Designed Algorithm** which transfers the updated query to LUIS. It Pre-Sorts the user Query then it passes this query to LUIS ,Our Algorithm is in Beta Version and hence it needs Improvements and Error Correction but it Servers as a Great ease

to the LUIS System which is developed by Microsoft and used as a Major Backend .

II. CHAT BOT USING AI

*Def.*An area of computer science that deals with giving machines the ability to seem like they have human intelligence or the power of a machine to copy intelligent human behavior[1] .

Def. of Chat BoT: Short for chat *ro*bot, a computer program that simulates human conversation, or chat, through artificial intelligence. Typically, a chat bot will communicate with a real person.

Day by day Chat Bots are getting popular and Humans are adapting and using chat bots, the Social Media Platform like Messenger , Slack have already set up the play-Ground for the Bot's They are widely Used because it's convenient to Use them without even opening Google or Going to their Website or Application .i.e. if you are on Facebook them You can Chat by using Messenger and Slack also without interrupting the Current Process.

III. OUR INNOVATION AND RESEARCH

A. Introduction To Our Bot.

We developed a Chat BoT using AI named Locate_My_Destination which is currently deployed on Messenger Platform of Facebook and also on its Independent Stand-Alone Website.

B. Implementation Tools & Techniques

We Used Tools like Microsoft BoT Framework[2] for our BoT and Hosted it on Microsoft Azure[3] and we used API.AI[4] and Chat fuel[5] for internal processing and C# for Programming and Json Query for API calls & we used our own Algorithm for Human Language detection and Conversion named Human Chat (i.e. No LUIS)

We developed the BoT using the Microsoft BoT framework and added Natural Language Response Using the our own Algorithm Made by us(Human Chat) then we Connected Human Chat to Messenger so that It converts the Human Language to Appropriate Keywords and Nouns and Verbs and then send to Microsoft Azure Cloud Seeking a reply. Then the Azure takes Appropriate Actions Defined by us i.e. calling API or Giving a Text Reply or Generating an Image.

The BoT uses Google Customized Search API as well as Google Map API , Yahoo Map API and Bing Search API's for Determining and Searching Location in Accurate way it also uses Facebook's Graph API's for Authentication and Determining User Profile .
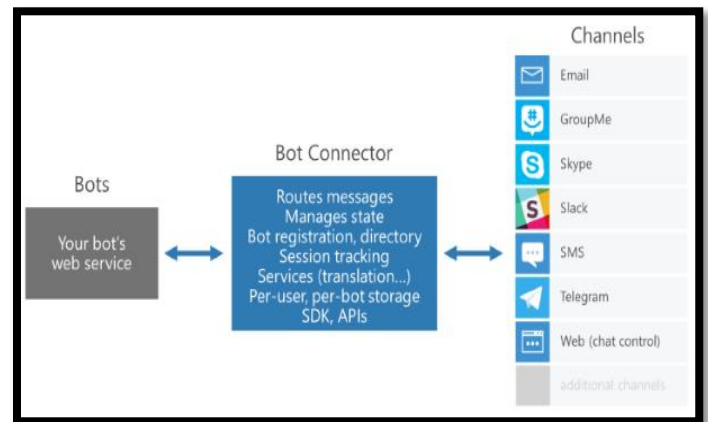
C. Working of Locate_My_Destination BoT

Fig 2: BoT Framework.

1. User Types a Message and then Clicks Send on any Platform it may be integrated to Messenger(Its live on Facebook) .

2. The Message is Sent to the Azure Cloud from Where Our Human Language Algorithm comes into Picture and It Segregate the Subjects and Intends and forward a Request for an Action to ChatFuel .

3. ChatFuel Matches Keyword and Calls Appropriate API's or API.AI Using Json Query and Accepts the reply from the API's. The code accepts the Response and converts it into GUI

4. After the API replies a frame is formed and Data is Formatted and then Sent to User.

5. The message can be sent by Using Any platforms i.e Different Social Media or Website The BoT is coded in C# and developed in Visual Studio 2015, backed by Microsoft Azure BoT Framework.
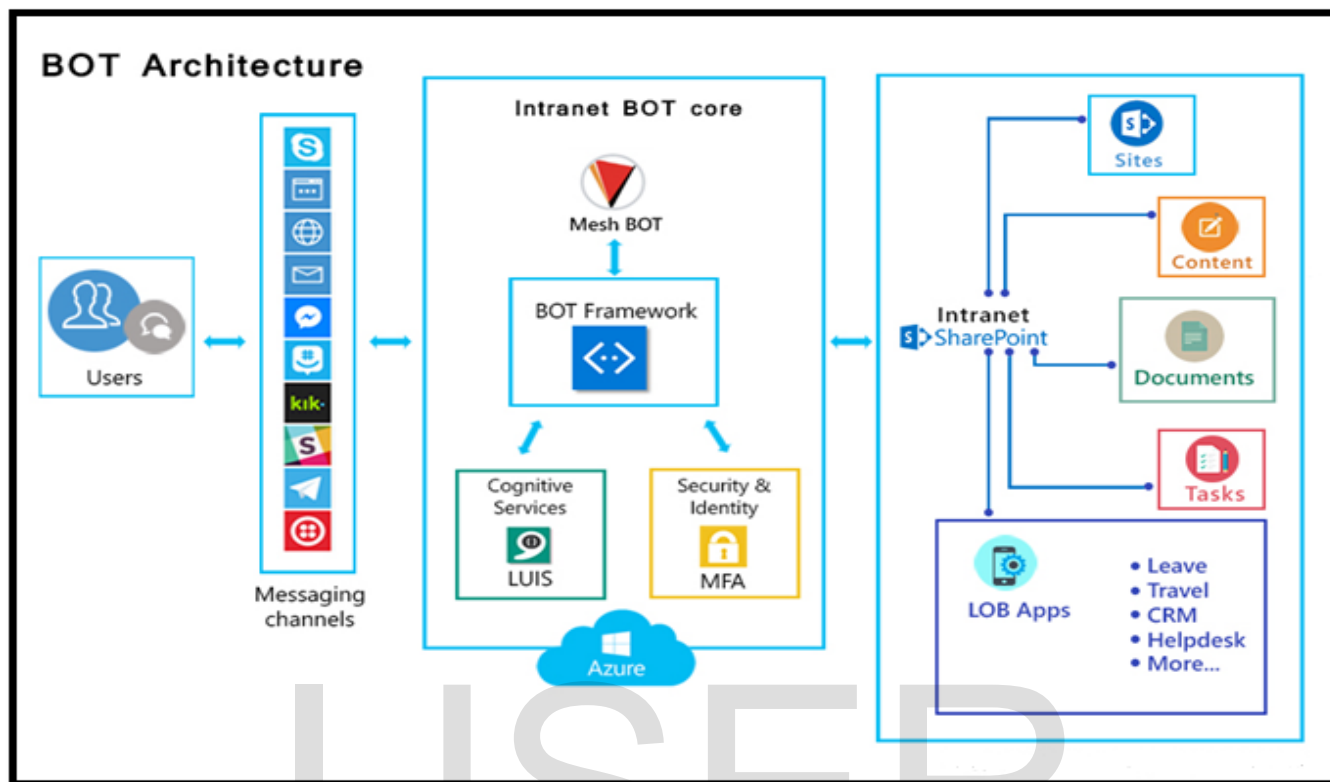
IV. FUTURE ENHANCEMENTS

Fig 3: Future Enhancement's

This Chat BoT can be used to Control the Whole Internet of Things (IOT) and it is on the verge of Replacing Customer Support by BoT's

V. CONCLUSION

We can conclude that due to the Rising concern of data and maintaining it (Big Data Technologies) the User can Use Chat BoT(AI based Technologies) to do Different Tasks From just one integrated Chat Application and without Installing any Additional Software or App and AI and ML have already found ways to make things Simple and Intelligent. We have demonstrated the Possibility by integrating Google Maps, 3d maps and Other Search Engines in just a Facebook messenger BoT live on web which will help user find location.

Sound's *Interesting let*'s *Try it then*,
https://www.facebook.com/Book_At_Me-370795476632709/

REFRENCES

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[2] https://dev.botframework.com/

[3] https://azure.microsoft.com/en-us/get-started/

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[5]https://dashboard.chatfuel.com/#/bot/5879f78ae4b0ee9c5c59e187/structure/5879f78ae4b0ee9c5c59e19a

Images references:

www.google.co.in & https://in.pinterest.com/