

GLOBAL JOURNAL OF ENGINEERING SCIENCE AND RESEARCHES MEESEVA CHATBOT

G.Ratna shree^{*1}, Ch.Avanthika, K.Pawani², Dr.B V RamanaMurthy³ and Mr.C Kishor Kumar Reddy⁴

^{*1,2,3&4}Stanley College of Engineering and Technology for Women, Hyderabad

ABSTRACT

The chatbots are the computer programs which enables the interaction between the human and bot. This paper is all about chatbot's application on meeseva. In olden days people used to go government office to know about information to apply something. As generation moves on IT plays essential role .the total information can be gathered using internet. Our bot helps you from not referring more than one website to collect details. They can easily access the information from the Meeseva bot instead of searching more websites. By using our Bot the other services can also been done like bill payment, and also the application form to apply anything .It helps the user by not moving to the meeseva centers to know the information to apply .The require documents also be specified by the Meeseva bot.

Keywords: Documents, Applicationform, Billpayment, Chatbot,

I. INTRODUCTION

A chatbot (also known as chatter bot,) is is a computer program or an artificial intelligence which conducts a conversation via auditory or textual methods. Such programs are often designed to convincingly simulate how a human would behave as a conversational partner, thereby passing the Turing test. Chatbots are mainly used in dialog systems for various practical purposes including customer service or information acquisition. Some chatbots use sophisticated natural language processing systems, but many simpler ones scan for keywords within the input, then pull a answer with the most matching keywords, or the most similar wording pattern, from a database.

The term "ChatterBot" was originally coined by Michael Mauldin (creator of the first Verbot, Julia) in 1994 to describe these conversational programs. Today, most chatbots are accessed via virtual assistants such as Google Assistant and Amazon Alexa via messaging apps such as Facebook Messenger or via individual organizations' apps and websites. Chatbots can be classified into usage categories such as conversational commerce analytics, communication, customer support, design, developer tools, education, entertainment, finance, food, games, health, HR, marketing, news, personal, productivity, shopping, social, sports, travel and utilities.

Chatbots are a clear manifestation that Artificial Intelligence (AI) is moving the hype. We see that more and more business applications where chatbots with self-learning capabilities can interact with humans in natural way. We can also observegrowing sophistication and accuracy of AI which makes chatbots more robust and suitable for a larger range of applications. At the same time, there are also still challenges to overcome. Improvements in natural language understanding or moving towards a more flow-based conversations instead of only “single shot” dialogues are steps that will require more time, investment and research.

A Chatbot may be as simple as basic pattern matching with a response, or it may be a sophisticated with artificial intelligence techniques with complex conversational state tracking and integration into existing business services.

Chatbot has many features and they are implemented in many ways .our project is about the meeseva bot today's world is totally in hands of human like a type of smart phone. We are here to implement the meeseva bot to meet the user requirements and it helps a lot to gather the information. The meeseva bot helps to collect the details i.e., (document required) to apply any service which has been done by the meeseva centers locally like to view the required docs to apply aadhar.here our meeseva bot also does bill payment like (electricity bill,waterbill etc..).

The another service is about application form our meeseva bot also views the application form that which the user wants to apply example aadhar application form. So, our meeseva bot helps the customers a lot to collect the information rather than going to any meeseva center .

II. LITERATURE SURVEY

The interaction of chatbot and the user plays a vital role in today's world. The chatbot has many applications in many fields like in agriculture, industry, business etc., Our bot is totally user friendly bot. it helps in many ways to the user. The Meeseva bot gives an efficient and appropriate information to the user. Before MeeSeva started, Government service delivery systems were manual and opaque. Citizens recalled memories of difficulties in accessing Government offices mired in tedious office processes and longer time lags in service delivery. Scenes of overcrowded government offices with unfriendly employees combined with chronic absenteeism, inefficiency in service delivery, long queues, resultant delays and rent seeking were common. In addition, the focus in administration was more on following procedures and keeping records than catering to the needs of citizens; thus losing the vision and treating citizen as subject rather than object of development.

Meanwhile, the Information Technology and Communication infrastructure was growing at a brisk pace. Information Technology is generally being considered as an essential and indispensable instrument to accomplish the objective of rejuvenating existing Government Service delivery mechanism for good Governance. eSeva was started to provide bill payment services for various Government Departments and Private organizations in urban parts of the State..

Our meeseva bot does conservation and provides the efficient info according to user needs. There is no scope to pay the amount from bot because we are not connected to the online payment service it is our future implementation plan. Our bot views the application form and required documents only to apply for any service which has been done by the meeseva centers but we cannot apply through bot.

Here the human interaction with bot is mostly important. The user has to give the valid questions to meet his needs with the meeseva bot. The bot also responses to the given question quickly with viewing the efficient information.

The meeseva bot does mainly three services which helps the user interact with bot more effectively. The services like billpayment ,required documents and application form.The user need not go to the meeseva center's or any government offices to collect the information. The websites also provides the information but user needs to refer more websites here the time wastes.

The bill payment service can be done through the bot like electricity bill etc., but we are not connected the payment to online because its official it is our future plan to integrate our bot to online.

The user can collect the information as in the form of required documents which helps to apply anything. For example if the user needs to apply the ration card he doesn't know what are required to apply for it. Our bot provides the details effectively to the user that he need not be search in many websites.

The bot also provides the application form on which he has to fill the details to apply something. In before days the people used to go the meeseva center's or government office to get application form. The bot helps user to get the application form within hands by not reaching to the meeseva center or any government office.

ELIZA creator, Weizenbaum regarded the program as a method to show the superficiality of communication between man and machine, but was surprised by the number of individuals who attributed human-like feelings to the computer program, including Weizenbaum's secretary.^[2] Many academics believed that the program would be able to positively influence the lives of many people, particularly those suffering from psychological issues and that it could aid doctors working on such patients' treatment. While ELIZA was capable of engaging in discourse, ELIZA

could not converse with true understanding. However, many early users were convinced of ELIZA’s intelligence and understanding, despite Weizenbaum’s insistence to the contrary.

One in all the first chatbots was ELIZA , that was designed around a pattern matching approach. ELIZA was supposed to sound like totally different persons, e.g. sort of a therapist. Later, the ELIZA inspired chatbot ALICE was introduced. ALICE was enforced supported a scripting language referred to as AIML2, that is next to RiveScript3, that is presently among the foremost used languages for chatbots. more modern chatbots, like Rose, mix chat scripts with question understanding to raised mimic domain specialists [1]. Recent approaches have additionally thought-about try the mix of RDF and chatbots, e.g., [2, 3, 9]. thanks to the dearth of house, we tend to refer the interested reader to [1, 7] for more references.

III. PROPOSED CHATBOT

Architecture of NODE-RED:

1. Log in to your IBM Cloud account and create a new Node-RED application.

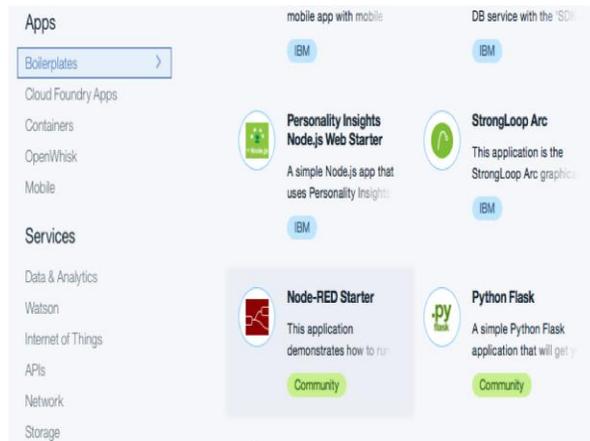


Fig 1.IBM cloud

- 2..Give your application a name and click **CREATE**.

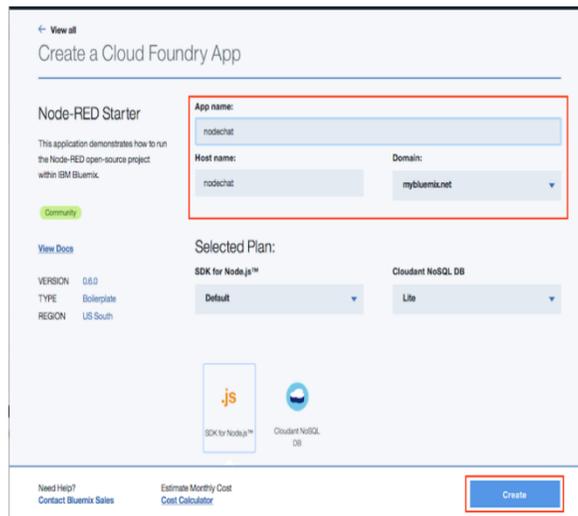


Fig 2.creation of app

3. From the IBM Cloud dashboard, navigate to the Overview page for your application, then click the **Visit...** link to launch Node-RED's main page. It can take a while for the application to start; the green circle and "Running" text will be visible when it's ready to try.

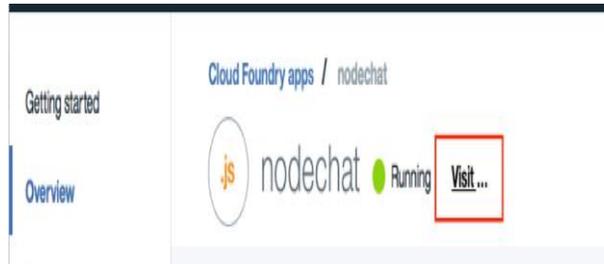


Fig 3.App Status

4. The first time you visit the site, you will be asked to do some basic configuration. Once that's done, you can click **Go to your Node-RED flow editor** to open the flow editor.

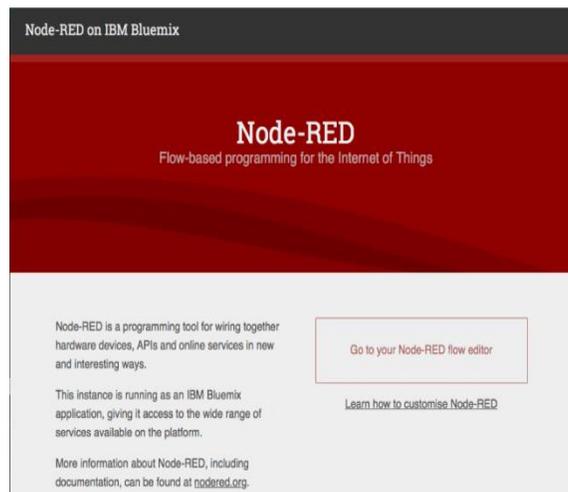


Fig 4. NodeRed editor

5. You should see a blank flow where you can start building your app. When using Node-RED we build our apps using this graphical editor interface to wire together the blocks we need. We can simply drag and drop the blocks from the left menu into the workspace in the center of the screen and connect them to create a new flow.

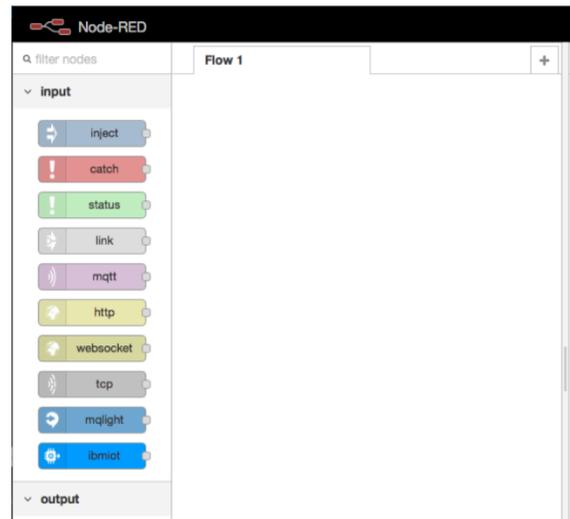


Fig 5. Nodered window to create

6. In the node-red first select the input node inject and give the name as hello, Now from the output node select the debug node and give the name as msg.payload
7. Connect the output of hello to input of msg.payload .The msg called successfully injected will appear on the screen now deploy it you will get a message as deployed successfully.



Fig 6. Deploy message

8. Now again successfully inject “hi”.In the IBM cloud ,go to resource list and create resource. Now drag the assistant from IBM Watson through search filter.
9. Edit the injected node hello as “hi”and click on done.
10. Now, connect the assistant node to msg.payload and hello. hello input to input of assistant and output of assistant to input of msg.payload by changing the username as api key and giving password.
11. Change the service endpoint and workspace from edit function node copy the function and by clicking on the done it will be done.

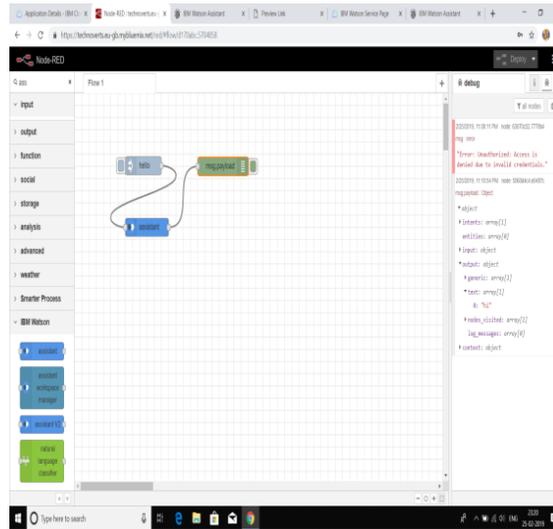


Fig 7. Creation Flow1

12. Now drag the function called output parsing and connect it to output of the assistant and input of the msg.payload .
13. Now, go to dashboard's header and then go to manage palette. After completing the above process go to user settings nodes and select the palette. Now install the node-red dash-board and click on install.
14. In the node properties give group name as home and size as auto the example as text and click on done.
15. Now, drag the form from search filters and connect the assistant input to form output. Create a new function and connect the new function to form output and to the input of assistant node.
16. Now, the two text nodes are onto the screen and connect the text nodes with the output of node name as input parsing and other one with the name bot to the output of output parsing.

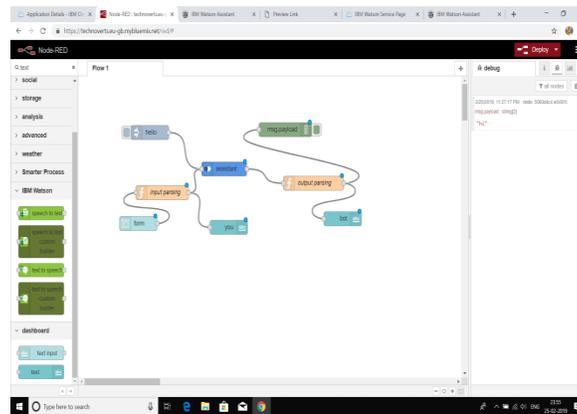


Fig 8. Creation Flow2

17. Now, go to debug and give label as bot and you. Value format as {{msg.payload}} and click on done. After the above process completes create a new node and give it as form. On the right side of the screen click on dashboard and go to layout and click on home. Now, deploy the total block.
18. Now, drag the audio out by searching it in the search filter and connect its input to output of output parsing. Now again deploy the total block.
19. Dash board is on the rightside of the screen and go to edit audio out node. Give TTS voice as shown in the figure and click on done.

20. After the audio out is connected drag a switch .Edit switch node by giving data base as marriage events. Now, connect the one output of switch to marriage events and other to bot. Now again connect the output of marriage event to input of bot. Debug the above function and edit the function node which is dragged on to the screen by giving the name as database parsing .After the name is given as database parsing then select the function msg.payload=msg.payload events;
21. In the node properties give the name as subscribe and click on done .Connect the database parsing to events clock output and output of database parsing to bot input. Now, again deploy the function .Now dialog box default occurs click on submit.

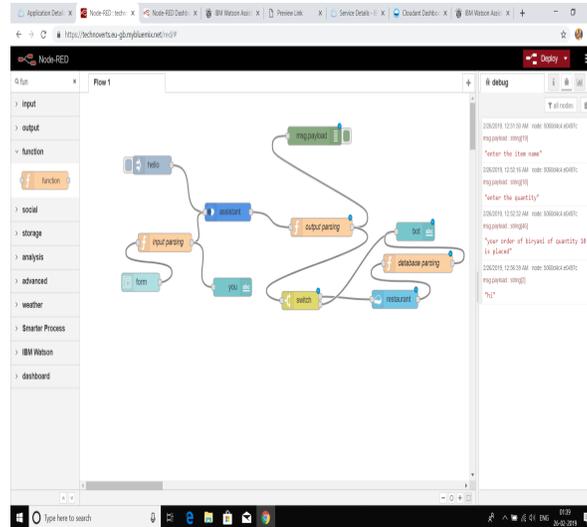


Fig 9: Creation Flow 3

22. Now login into your facebook account by giving the user name and password.
23. Now after logged into the facebook account click onto the create page and select the community creation and name the page and click on create.

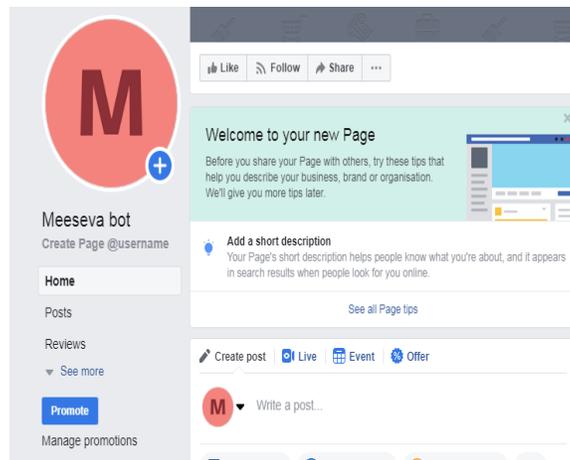


Fig 10. Facebook integration

24. After the page creation click on (...) then select view page as visitor by this step we enter into the Meeseva page.
25. Then get back to the node red tab and select the clipboard from right side of dashboard. then click on import.

26. A small window appears on the screen and paste the code which is predefined given by facebook and click import.

27. Now paste the pattern of nodes codes below to the nodes created by us carefully.

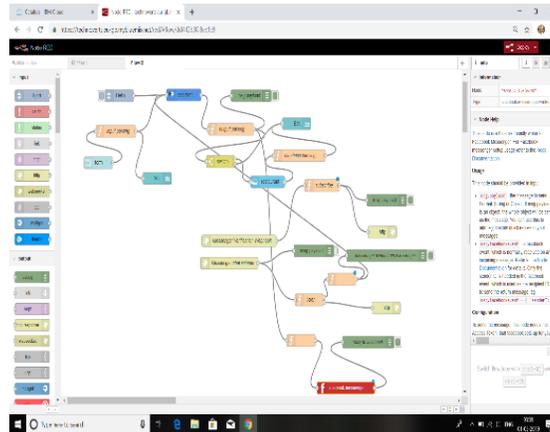


Fig 11. Creation Flow 4

28. You can use your bot as integrating with the facebook by messaging.

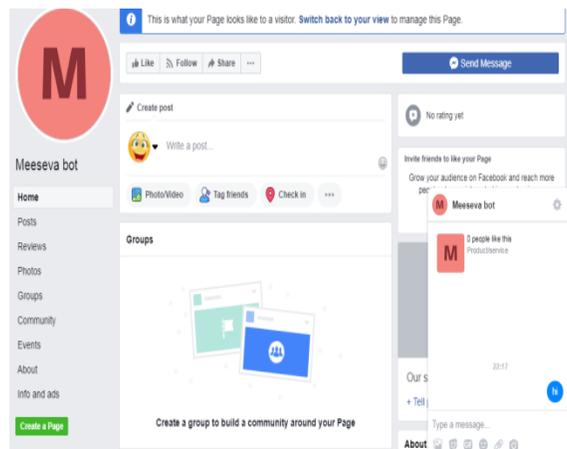


Fig 12. Facebook messaging

IV. RESULTS AND DISCUSSION

The result can be viewed with the help of IBM cloud log in. After log into the cloud then to the IBM Watson assistant in that click the assistant then a window appears. Click on preview link then a new tab opens with a bot view.

Now you have to interact with the by using questioning and answer role with help of messaging.

The above figures shows the output window for different questions from user and related answers from the bot.

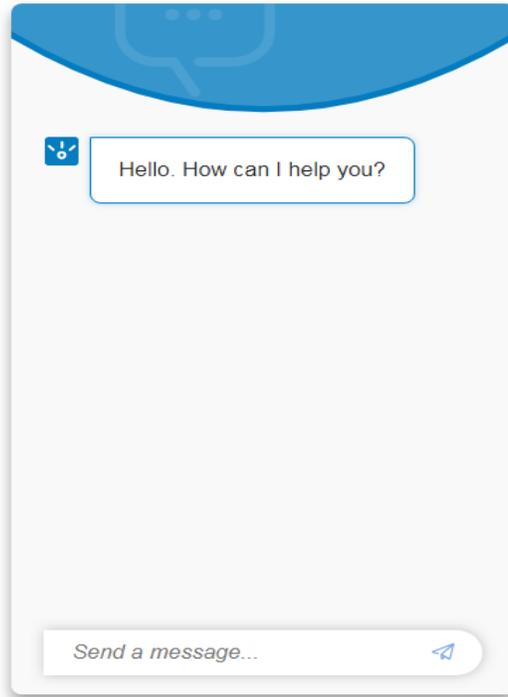


Fig 13.output 1

Now type the message “hi” and click on enter then above fig appears.

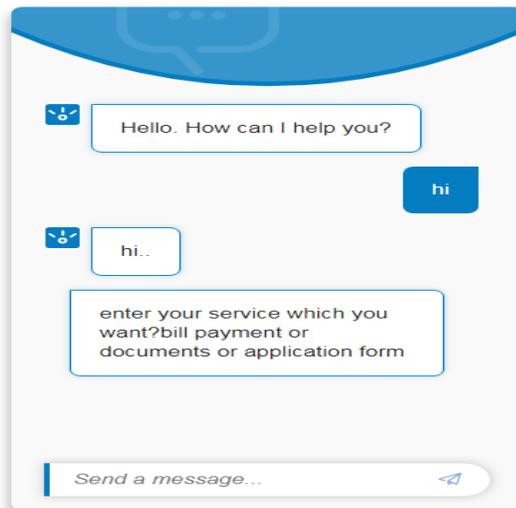


Fig 14.output2

Now type the service you want example type electricity bill click enter.

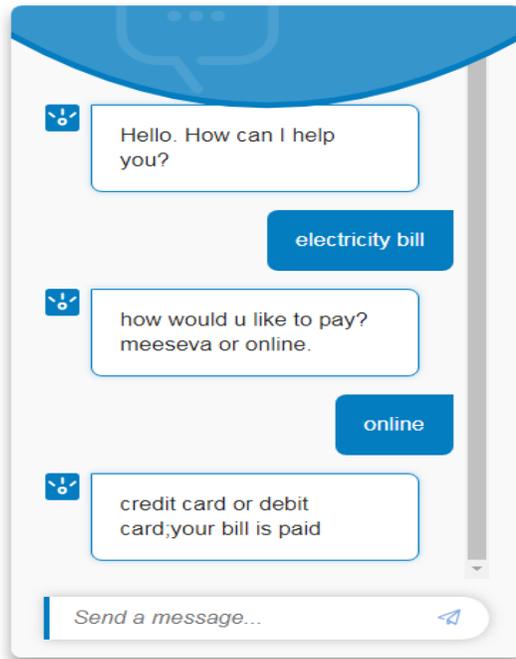


Fig 15. Output 3

Other service as to view the required documents type the name for which you want example aadhar card and click enter.

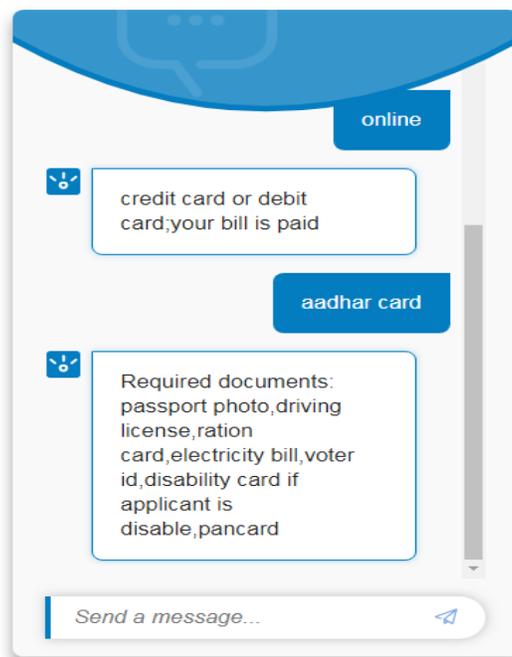


Fig 15.output 4

Last service by the bot is application form type the name for which you want application form example type aadhar form click on enter

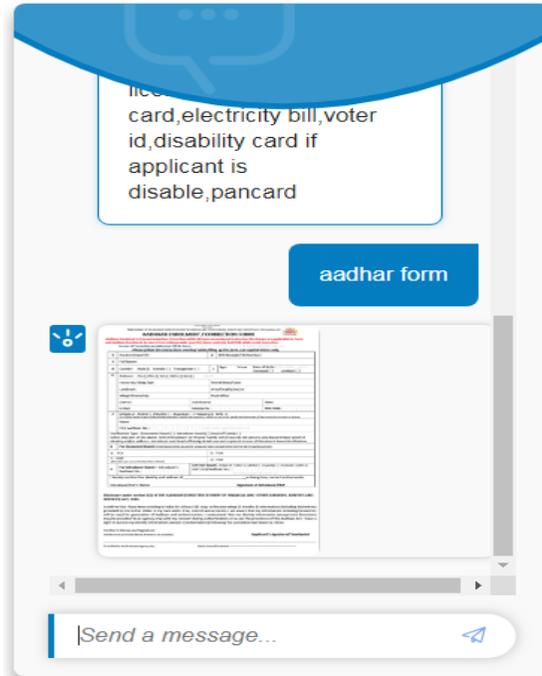


Fig 16 output 5

V. CONCLUSION

The meeseva bot provides an effective information to the user requests .the bot is user friendly .Meeseva bot provides services on bill payment, required document specification and application form. By all these three services user can interact. Here the bill payment is difficult because bot connecting to website linking is difficult it is our future implementation. Meeseva bot provides the details like required docs to apply something. As if the government changes the details then updating of bot requires time. The meeseva bot also provides the application form it is the most advantageous service to the user. Everything is depended on the user questioning it should be valid and semantic. The basic work can be carried forward to develop advanced AI theories and systems. Moreover, there is utter requirement for new theories to emerge and develop, especially in a challenging field like Artificial Intelligence.

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