Blood bank Management System Using Logical Chat Bot

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Abstract
The major purpose of this project is to create a software system that will automate the blood bank administration system without the need for human participation.A Chatbot allows a user to ask inquiries in the same way they would to a real person.Instead than hurrying to arrange blood, the patient's family can just contact the bot in an emergency.The bot gathers all essential donor and acceptor information.Patients must ping the bot whenever blood is necessary for them.The bot provides information on the donor once the details have been entered.The bot programme was created with Uipath community edition.For expanding the dialogue, we use Google Dialogflow.To map the work done in the lab, we use chatbot.uipath.com.
Keywords: Donor, Acceptor, Blood, Chatbot, Reply, Userquestion.

I . INTRODUCTION
To create an application for blood financial institutions can be beneficial for patients who are indeed of blood. The goal of developing a device is to minimize the situation of speeding for arranging the blood. In the emergency scenario the patient's families can remain with the affected person and without difficulty arrange the blood rather than speeding for arranging the blood. Chatbot is a computer software designed to simulate dialog with human users, mainly over the internet. This is the bot application so we just ping the message the bot[1]. The bot will respond soon. As nicely as want of arranging the blood with required details of the donor will be displayed. The data will be accumulated via the bot itself. The donor has to register his/her details in the bot. The exact are stored in the database. Once the sufferers ping the required details the related response will be displayed. We use two software programs such as uipath studio and google dialogflow.

II. LITERATURE SURVEY
2.1 A Hybrid approach develops and integrates Chabot in health informatics systems
In this paper, they developed the chatbot for health purposes. The bot uses a hierarchical method for parsing queries. They boost a chatbot that seeks free-form natural language queries by its users for blood and associated services such as a listing of blood banks, live bloodstock, blood donation camps, etc. A chatbot is made up of two parts, one is the Frequently Asked Questions (FAQ) section which handles the FAQ and the other is the custom area for the queries of the users.

2.2 Chatbot-based healthcare service with a knowledge base for cloud computing
In this paper, they advocate a chatbot-based healthcare service with a knowledge base for cloud computing. The proposed method is a cellular health provider in the shape of a chatbot for the provision of quick treatment in response to accidents that may take place in day-to-day life, and additionally in response to modifications of the conditions of patients with continual diseases. A chatbot is a sensible conversation platform that interacts with users through a chatting interface, and when you consider that its use can be facilitated by using linkages with the important social network service messengers, well-known users can without problems get the right of entry to and acquire a number of fitness services. The proposed framework enables a smooth human-robot interaction that supports the environment-friendly implementation of the chatbot healthcare service.[7]

2.3 A self-diagnosis medical chatbot using artificial intelligence
The medical chatbot was developed to reduce healthcare expenditures and increase access to medical information.The proposed concept is to create a medical chatbot that can diagnose disorders and provide basic information about them before consulting a doctor using Artificial Intelligence.Only when a chatbot can diagnose and provide basic information on a number of ailments does its true worth become apparent.Certain chatbots serve as scientific reference books, allowing the person with the ailment to have a better understanding

of their situation and improve their health.Patients can talk to a text-to-text diagnosis bot about their medical issues, and the bot will give them a personalized diagnosis based on their symptoms.As a result, humans will need to think about their health.

2.4 Chatbot system and method with contextual input and output messages.
A Desktop application list appendix is supplied through EFS with this application. A portion of the disclosure recited in this software carries fabric that is Subject to reproduction right protection. Specifically, the pc program listing appendix and perhaps different portions of the application can also recite or comprise supply code, facts, or other functional text. The information is hereby incorporated by reference as if set forth in full in this application for all purposes. The copyright proprietor has no objection to the facsimile copy of the practical text; otherwise, all copyright rights are reserved.

III. PROPOSED SYSTEM
By the use of this software humans who desire to donate their blood can register in this application with the aid of providing their details. When you ping the bot it will display the donors list and their details. The user can communicate with bot easily[2]. This utility can assist their donor households to stay with their patients. We can also add the voice recognition feature.

IV. KEY RESULTS
The major reason for a computerized blood bank system is to simplify the technique of searching for blood in the emergency. A chatbot is a software program and this simplifies the conversation via messaging applications, websites, etc. It is the most superior technological know-how that creates interaction between humans and machines. It is a person friendly system. We include a section of Uipath and dialogflow for creating an application. Uipath studio is an automation tool used to create the automation process. Uipath Orchestrator is a web-based application. It helps you to manage the robotic process. We use google dialogflow to control the conversation in the chatbot[3].

The donors have to register their details in the bot and their important points are saved in the database. Once the patient needs the blood he/she desires to ping the bot. They have to give the details about the blood group required and their place. Once the details are entered the bot collects the data from the database and displays the details about the donors.

Microsoft SQL Server Management is a comprehensive programming environment that allows you to configure, manage, and administer the SQL Server database engine.Database programmers love it and use it frequently.The SQL Server Management Studio can handle a wide range of database-related activities.To develop and operate databases, we'll be using the 'Database Engine.'Other server types include Analysis, Reporting, and Integration Services.The system and server names are identical.
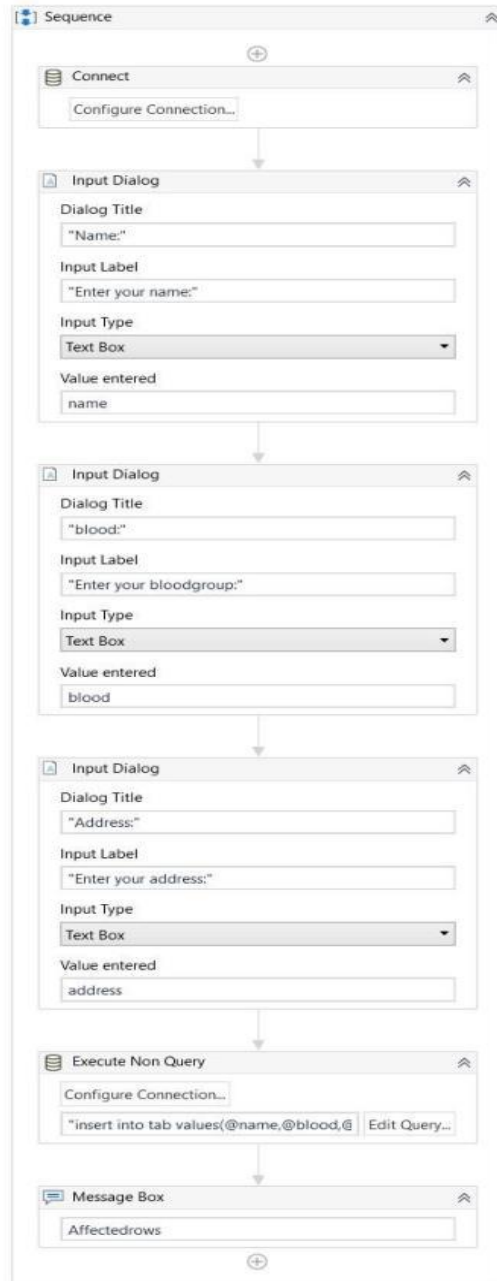
In this the above workflow is created for the blood donors to register themselves in the bot. The donor has to register their details such as Name, Blood group, Address, Phone number. Once the donor enters the details the details are stored in the database. The donor's details will be stored in the database. We have joined the uipath and sql server database in the uipath workflow process. Once the details are entered it will be stored in the database[4]. The uipath is used to create a workflow for the automation process.
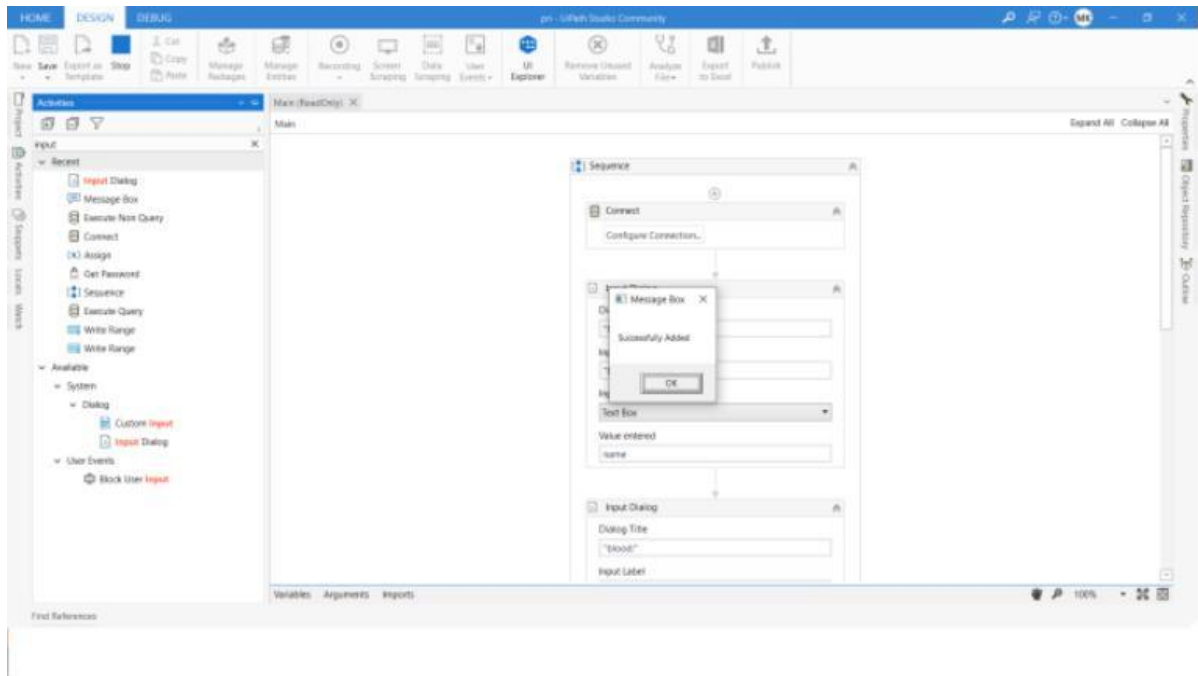
Once the details are entered it will be successfully added to the database. Then the user can register through the chatbot. And their data will be stored.
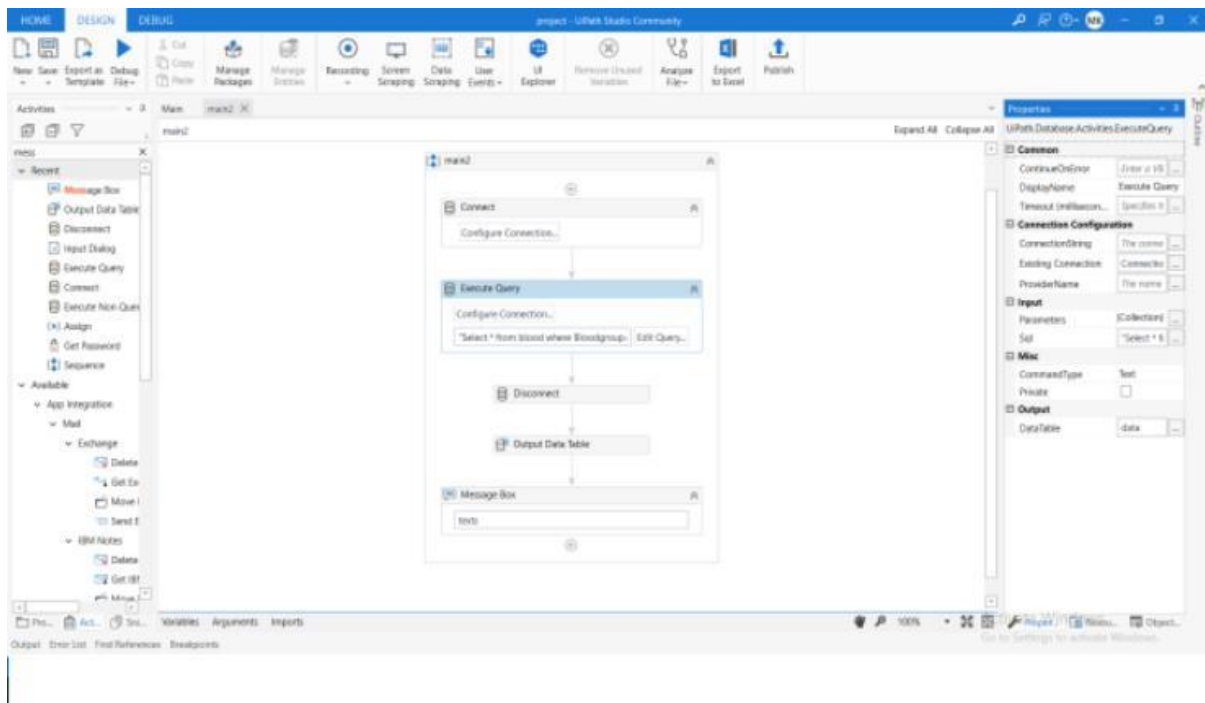
Once, As per their details given the result will be details will be displayed in the bot. When the patients need the blood they have to ping the bot, they have to give the details such as their Blood group and their location. In this, we have connected the Microsoft SQL server and the uipath and we have to create a workflow to search the user question from the database and give the result in the chatbot[5].

After the procedure ends in the uipath then we have to map the uipath workflow and the google dialogflow by using the uipath and chatbot. Again, We have to map the connection between uipath and dialogflow. Then the chatbot will be created. Once we have to combine the chatbot into a social media platform such as whatsapp, Facebook etc.

4.1 UiPath

It is a Robotic Process Automation device that is utilized at the end of the process to eliminate excessive scale automation.It is used to eliminate human intervention by automating repetitive procedures using drag and drop.It's a visual designer that lets you develop automated workflow pre-activities.This automation will be used for both simple and complex activities, depending on the demands of the client.The Uipath software suite enables businesses to easily automate key processes.The Uipath transforms large tasks into a simple automation technique.Each format represents a valuable type of activity to do.Uipath was created by Daniel Dines in the year 2005.

4.2 Google Dialog Flow

It is a natural language understanding platform that makes it convenient to design and combine a conversation for web applications, bot, and related uses. Dialog Flow can assist in conversational commerce like Bots and it makes clients self-services to any work. It is a phase of the google cloud platform. Dialog Flow helps more than 14 Programming languages and it's additionally referred to as API.AI.[6]
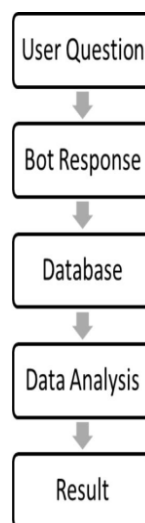
Flowchart for the bot application

VII. CONCLUSION

The project "Blood bank Management System Using Logical ChatBot" aims to play a critical role in saving people's lives and reducing panic in emergency situations[9].It may be used on any social media platforms, making the blood-looking procedure simple.

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