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DIA-BOT-ICS

YOUR PERSONAL HEALTH ASSISTANT

PROBLEM STATEMENT

HEALTHTECH

DIA-BOT-ICS, a medical assistant, helps a diabetic person by prescribing particular drugs, food and even exercises.

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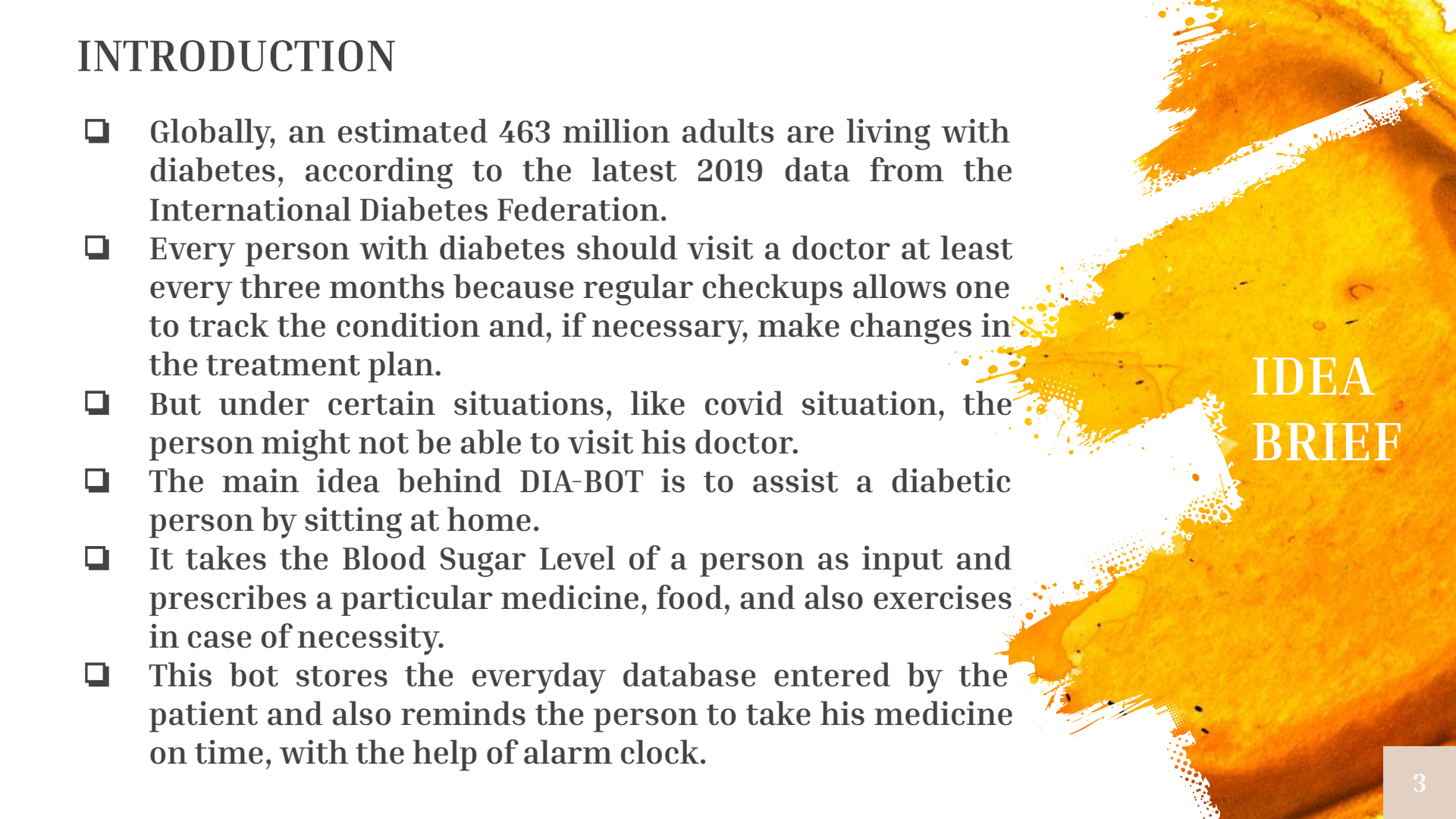
INTRODUCTION

- Globally, an estimated 463 million adults are living with diabetes, according to the latest 2019 data from the International Diabetes Federation.
- Every person with diabetes should visit a doctor at least every three months because regular checkups allows one to track the condition and, if necessary, make changes in the treatment plan.
- But under certain situations, like covid situation, the person might not be able to visit his doctor.
- The main idea behind DIA-BOT is to assist a diabetic person by sitting at home.
- It takes the Blood Sugar Level of a person as input and prescribes a particular medicine, food, and also exercises in case of necessity.
- This bot stores the everyday database entered by the patient and also reminds the person to take his medicine on time, with the help of alarm clock.



TECH STACK

Software Requirements

Arduino IDE
Embedded C language
64-bit intel core processor
8 GB RAM

Hardware Requirements

Arduino UNO
LCD Display
Recording Device
Speaker
Keypad

UNIQUE FEATURE

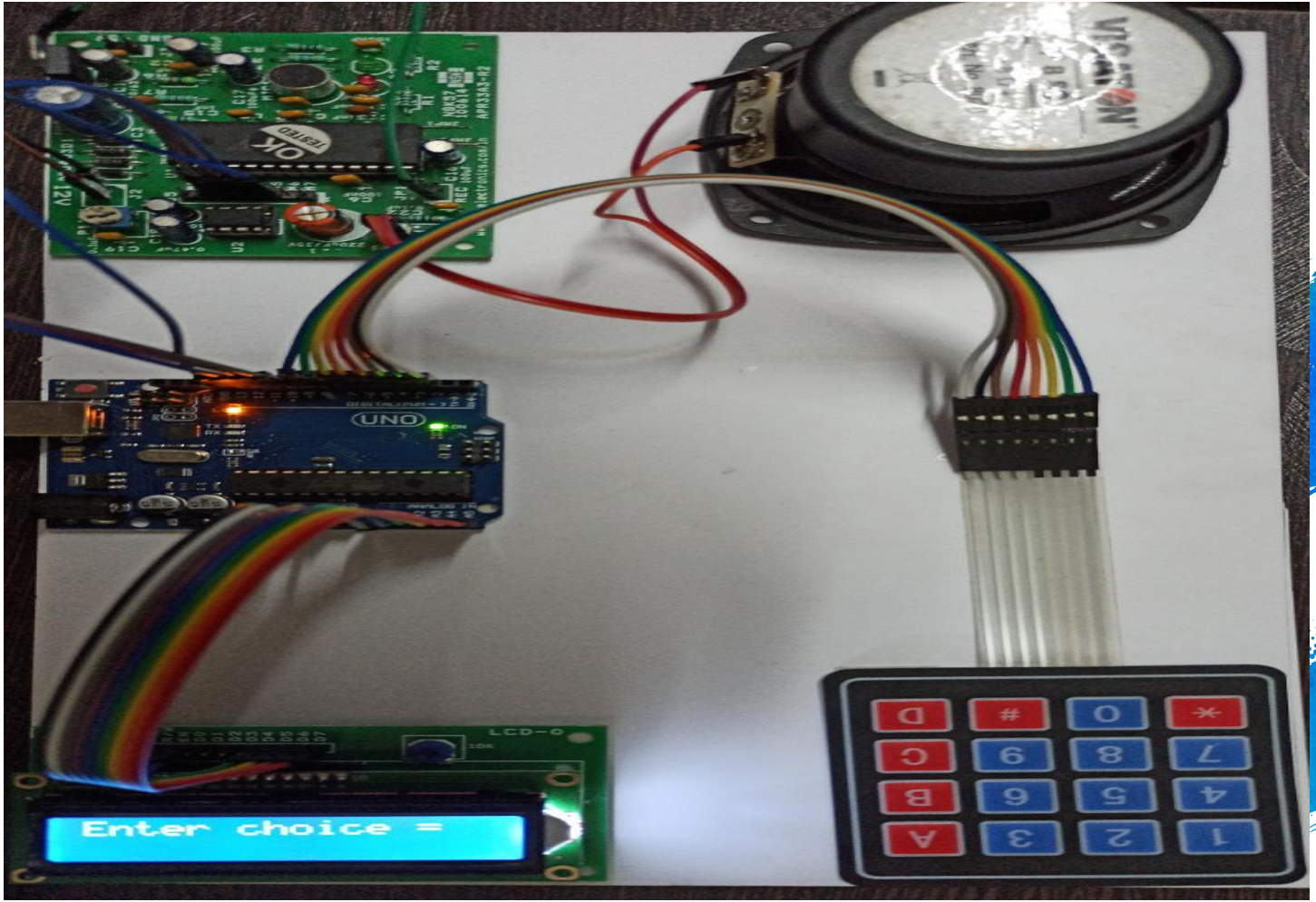
- A person can set an alarm in Bot to remind to take medicine and food. This feature is very important when it comes to a patient on insulin.
- The next feature is that in case of emergency the Bot itself will suggest nearest doctor. In case the doctor is not available the bot will advice to take necessary precautions to avoid further problems.
- To make it more advanced a camera is added to check whether the person ate his food or not.

WORKING

- We have used Arduino, for working with hardware and software.
- The software code is written in embedded C language in Arduino IDE.
- The display shows for different Blood Sugar Levels and the patient has to input his Sugar Levels.
- The audio which related to that level is given output from the speaker.

- The Arduino UNO is connected to the display and Keypad, from where the input is given and it is also connected to the recorder.
- For recording we have used custom voices and the same is output coming from speaker.
- The speaker is connected to the recording system.

HARDWARE CONNECTIONS



REFERENCES

1. Related Base Paper.
   https://www.researchgate.net/publication/266872926_Designing_a_Chatbot_for_Diabetic_Patients

2. Audio recording and playing tutorial using Arduino UNO.
   https://youtu.be/WYrJ8X7fo6o

3. Arduino UNO interfacing and usage.
   https://www.youtube.com/watch?v=W6UENgS_UR4

4. Source code to add reminder.
   https://circuitdigest.com/microcontroller-projects/arduino-medicine-re

THANK YOU!