PERSONAL ASSISTANCE FOR SELF-RELIANT PERSON

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LITERATURE REVIEW:

These days, taking medications on time is more crucial than ever because the human body requires certain medicines to prevent infections and other disorders while also giving the barriers and challenges. The elderly people requires a timely remainder to take their medicines. The urgent need is to create a system that allows physicians, caregivers and workers to oversee their elderly people's health. It is laborious to nurture daily multiple medications. The Senior Citizen's is at prominent risk for medication-related problems.

The existing system uses IOT devices to set remainders, which will periodically remind them to take their prescription. It will send SMS notifications to mobile phones if a person is not carrying an IOT device and an email alert if a person is carrying a laptop, defined in the paper[1]. An IOT device that can get the schedule from the cloud that has been provided by a doctor's medication will remind the medicines in time and help to treat the illness or contamination the person is experiencing.

Another existing reminder system, that will generate alarms to the person as an intimation to take the medicine. An elderly person frequently has to take a number of medications at various times. Due to the fact that it is not as straightforward as it may be for a younger individual, the elderly may discover it challenging to remember to take the suitable prescription at the ideal time each day. It may be difficult for them to remember which medication to take at the proper time, to remember to take them, or to distinguish one pill from another due to their poor vision and the similarity in the forms and colors of the pills[2].

A pill dispenser that sends information to the cloud storage and a real-time visualization tool over the Internet utilizing a wireless connection. An online database for this project is created using Google Sheets, and the Freeboard.io platform is utilized to display the status of several pill dispensers[3].

In another way[5],the IOT-Based Smart Medicine Reminder Device, the Android phone and the Raspberry Pi-3 board plays a really important part in terms of the hardware used to develop the device. The IOT-Based Smart Medicine Reminder Device mobile application will be created on cloud servers. The name, specifications, and recommended dosage for the patient are among the information needed for the pill. In addition, data on pill amount and drug usage will also be collected from the IOT Channels[5].

Since pills have become such an integral part of daily life, there has been an increase in medical neglect cases involving improper medication given to patients in recent years. One example is the nurse who gave a patient a paralytic instead of an antacid that the doctor had prescribed, which resulted in the patient's death. After witnessing so many of these occurrences, it is clear that it is essential that the right medication be given at the right time by the right person; failing to do so might subject the patient to a number of harmful circumstances, ranging from minor health problems to death.

An aged person often has to take a variety of different medicines at various times. The elderly may find it difficult to remember to take the proper medication at the right time each day since it is not as simple as it could be for a younger person. Due to their impaired vision and the similarity in the shapes and colors of the pills, it may be challenging for them to remember which pill to take at the right time, to remember to take them, or to identify one pill from another.

PROBLEM STATEMENT:

The existing smart medicine reminder device's inability to assist patients who are prone to forgetfulness and also lack of a voice reminder is the problem. The main objective of this model is to address the mentioned issues by inventing and developing a tool that will allow the owner to track each pill they take in an easy and straightforward manner without the need for complicated training on their part. Sometimes elderly people forget to take their medicine at the correct time. They also forget which medicine they should take at that particular time. And it is difficult for doctors(caretakers) to monitor the patients around the clock. To avoid this problem, this medicine reminder system is developed. An app is built for the user (caretaker) which enables him to set the desired time and medicine. These details will be stored in the IBM Cloudant DB. If the medicine time arrives the web application will send the medicine name to the IOT Device through the IBM IOT platform. The device will receive the medicine name and notify the user with voice commands.

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