

# **PERSONAL ASSISTANCE FOR SENIORS WHO ARE SELF-RELIANT**

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## **LITERATURE SURVEY**

### **INTRODUCTION**

Today's life is full of responsibilities and stress. So people are prone to diseases of different types and it is our duty to make ourselves stay fit and healthy. If the patient stays at home then he or she might get someone to look after him/her but when one is not at home, is out of the city or state away from home then it is hard for the family members to call them and remind them their dosage timings every time.

The remarkable problem is that patients forget to take the proper medicines in proper proportion and in proper time. Medication adherence, which refers to the degree or extent to which a patient takes the right medication at the right time according to a doctor's prescription, has recently emerged as a serious issue because many studies have reported that non-adherence may critically affect the patient, thereby raising medical costs.

To avoid this problem, this Personal Assistance For Seniors Who Are Self-Reliant 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 Cloud 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.

## **ABSTRACT**

This project mainly focuses on creating a personal assistant app for seniors who are self-reliant. It helps the people using voice commands to know about the medicines and their dosage at correct time. These details will be stored in the IBM Cloud DB. If the medicine time arrives the web application will send the medicine name to the IOT Device through the IBM IOT platform. And it also notify the patients about the proper medications.

## **REFERENCES**

1. My MediHealth is a medication reminder system for children. It runs on mobile devices such as smart phones, providing user interfaces for configuring medication schedules and user alerts for reminding users about the time and type of medication according to the configured medication schedule.
2. Some systems use sensors, radio-frequency identification (RFID), or motion detection technologies to ensure that patients actually take their medication.

**3.** Park et al proposed medication reminder synchronization system based on data synchronization. It transmits OMA (open mobile alliance) DS (data synchronization) based messages containing the patient's medication data and the device configuration data to a remote manager/medical staff. It also synchronizes data (including medication schedules) modified/generated by these personnel in the medication server.

**4.** Prasad B has discussed the approach of Medicine reminder pro. It is a free application which supports up to 15 reminders. User can select them in either repeating or non-repeating alarm patterns. Any hourly time interval between alarms can be selected, starting from the minimum of 1 hour. At the scheduled time, application will produce a notification with an alarm, vibration or LED indication.

**5.** Zao et al have developed Wedjat – Smart Phone Application which tries to avoid medicine administration errors.

There are many loopholes for existing systems. The few are listed below:

- i.** Some of the systems have a default alarm tone so the users cannot change them.
- ii.** The scheduled reminder suggests any kind of medicine, dose of medicine, etc. automatically without doctor's prescription, which can cause harm to the patients
- iii.** Lastly, many of the systems available require special hardware which need to be purchased.