

# **PERSONAL ASSISTANCE FOR SENIORS**

## **WHO ARE SELF-RELIANT**

### **IDEATION PHASE**

#### **LITERATURE SURVEY**

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<b>Project Name</b>	Personal Assistance for Seniors who are Self-Reliant
<b>Maximum Marks</b>	4 Marks

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## **SUMMARY:**

There are many senior people around us who are the victims of many different disease. And those people were prescribed to take medicine regularly on time. Most of them suffering from dementia, amnesia, ect. So these people are overlook by someone to take care of their health. Maintaining daily medication or pills become very difficult for old people. To over comes these hurdles the new technologies were introduced for elder people to remind the medicines to be consumed on time.

## **INTRODUCTION:**

In modern society, most of the time people remain busy in their daily life schedule. It is true that they give more preference to their work than taking care of their health and parents health. Several diseases like diabetes, blood pressure is nowadays very common. Maintaining daily medication become very difficult for old people. Sometimes younger is faced with the same problem. There are many people especially the elder ones in our family who need constant help to monitor their health. But it is not always possible for us to remind them of their medicine's dosages every time. For this purpose,

there needs to be some facility for us which monitoring elder ones and take care. Nowadays we are all used to live a technology-based life. We can use this technology in a way that will be beneficial for us. IoT may be helpful to monitor real-time condition and IoT can be a powerful and effective paradigm to store data collected by sensors devices to the cloud. In our project, the IoT enabled device will control the overall monitoring system. And developed an android application which help patients by reminding medicine in take time and so on.

## **PROBLEM STATEMENT:**

Senior citizen or Elders may often fail to consume their medication whether it was from forgetting to take the medicine, from taking medicine at the wrong time or even from taking too much medicine. Therefore, the family members or caretaker has to remind them to take the pills on time. So, we have focus on those elders who having difficulty to take medication on time independently. We tried to design and to aid elders with managing their medical prescriptions, through a reminder app they will use to look at and manage their medications. The Pill Reminder will facilitate users to require the right medication on time.

This system provides a real time monitoring system that allow related people or family members, doctors, hospital management to monitor the elders's activity remotely

## **RELATED WORK:**

There are various medication systems which are in use currently. They depend on various stages and ideas. There is a medicine update framework,

- a) My MediHealth which has been created for children. It is made available on mobile phones such as personnel digital assistance. It is a mobile application that gives Graphical User Interface to design drug schedules and alarm system to remind the patients, about time and other details.
- b) Prasad B has proposed an Application, 'Medicine update expert'. This App has a limit of 15 updates. A patient can select these updates while rehashing or Non-rehashing caution designs. Between the two caution designs at a time should be selected. The duration between two caution designs should be at least one hour. A reminder shall be delivered at the schedule time. This reminder could be caution vibration or LED sign

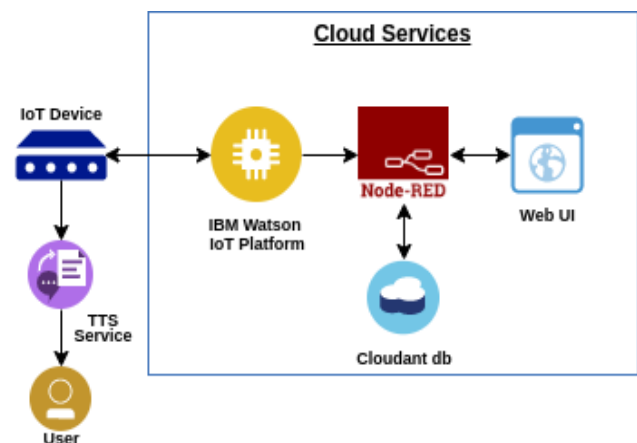
- c) The novel framework designed by Ray, helps to monitor the health of old people at their residence places through this H3IoT system. Again, according to Al Majeed et al. (Home Tele Health by IoT, 2013], IoT helps in real time monitoring of health condition. The related devices can sense, transfer data and do analysis in order to perform healthcare process. In this proposed system, they are using cost effective feasible algorithm to minimize the complexity in order to process huge data. These data are being generated by imaging devices, sensing devices and Human interaction
- d) Huang et al. [2014] proposed an intelligent Pillbox system for elderly people. The purpose of this work is to provide safe and secure medication on time
- e) Al-Haider et al. have recently proposed a "Smart Medicine Planner for Visually Impaired People" Their proposal may helpful specially for blind and elderly person to manage the daily medicine dosage. Dispensing and Alarming are two main parts of their whole system. Google Cloud is being used to store the recorded voice and recognizing in the

application. Raspberry Pi3 with Bluetooth connections are being used to communicate between their Smart medicine planner and voice box.

## PROPOSED SYSTEM:

There is a ideas that has to be implmented in future. The basic ideas is creating an app which is built for the user (elder or caretaker) which enables by them or caetaker 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., we introduce a smart medicine reminder system based on IoT. And other way, create a Android platform. For our system, we need to implement a reminder system which provides an alarm when it is time for taking medicine. Along with that, there is an android application where the user can set their medicine time. In the application, there will some feature that help the user to know more details about their medicine. It keeps track for the medicine which means how much medicine they have to take they can be fixed in the

application. The device setup consists of an IoT enabled pill box having multiple compartments, each having a lid to open, and an IR sensor attached to it. The system of pill box includes of IR sensors for observance and reported the state of medication, that frequently checks whether the medicine is taken or not. Whenever the medication is loaded into the pillbox it'll be updated the medicine data and saved in database. The Arduino device fetching real time data and send it to the application



## Technical Architecture

## CONCLUSION:

We have demonstrated a mobile application that generates alarm signals to remind a patient to take medication. We focus on helps patients and improving the monitoring system. The application Medicare is easily accessible.