

## **Ideation Phase**

### **LITERATURE SURVEY ON THE SELECTED PROJECT & INFORMATION GATHERING**

#### **Personal Assistance for Seniors Who Are Self-Reliant**

The advent of digital technologies has substantially transformed the healthcare landscape over the past few years. IoT plays a major role in all the fields especially in healthcare sector. It has applications in healthcare that benefit patients, families, physicians, and also self-reliant people. IOT implementation is one of the most disruptive and potentially impactful advancements in the healthcare sector. It has the potential to bring about significant improvements in the healthcare ecosystem. It can help improve outcomes by improving the experience patients have at each stage of their treatment.

#### **Existing solutions:**

Sometimes elderly people forget to take their medicine at the correct time. They also forget which medicine He / She 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 database. If the medicine time arrives the web application will send the medicine name to the IoT Device through the IoT platform. The device will receive the medicine name and notify the user with voice commands.

### **Technical papers:**

- [1] A. Sawand, S. Djahel, Z. Zhang, and F. Na. Multidisciplinary Approaches to Achieving Efficient and Trustworthy eHealth Monitoring Systems. Commun. China (ICCC), 2014 IEEE/CIC Int. Conf., pp. 187–192; 2014.
- [2] R. J. Rosati. Evaluation of Remote Monitoring in Home Health Care. in 2009 International Conference on eHealth, Telemedicine, and Social Medicine; 2009, pp. 25–27
- [3] Tran N, Coffman JM, Sumino K, Cabana MD. Patient reminder systems and asthma medication adherence: a systematic review. J Asthma 2014; 51: 536-43.
- [4] Boeni F, Spinatsch E, Suter K, Hersberger KE, Arnet I. Effect of drug reminder packaging on medication adherence: a systematic review revealing research gaps. Syst Rev 2014; 3: 29.
- [5] Heneghan CJ, Glasziou P, Perera R. Reminder packaging for improving adherence to self-administered long-term medications. Cochrane Database Syst Rev 2006;1:CD005025.