**Project Design Phase-I**

**Literature Review**

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| Date | 15 October 2022 |
| Team ID | PNT2022TMID11797 |
| Project Name | PersonalAssistance for SeniorsWho Are Self-Reliant. (medicine reminder) |
| Maximum Marks | 2 Marks |

**1. Sultan Ahmad, Mahamudul Hasan, Gouse Pasha Mohammed, Mohammad Shahabuddin, Tasnia Tabassum, Mustafa Wasif Allvi “IOT BASED PILL REMINDER AND MONITORING SYSTEM” Department of Computer Science, College of Computer Engineering and Sciences, Prince Sattam Bin Abdulaziz University, Al-Kharj, Saudi Arabia in International Journal of Computer Science and Network Security (IJCSNS) VOL.20 No.7, July 2020**

Many people in our community suffer from chronic illnesses. The majority of them had dementia. Some people fail to prioritise their health. People are compelled to succumb in frequent health-related problems due to the lack of an expert system. An internet of things (IoT)-based reminder system has been created by analysing the data. It is intended to help the patient who forgets to take their medication. An Android application and an IoT-enabled gadget make up the suggested system. It mostly focuses on patients with dementia. But everyone benefits from it. Patients won't have to be concerned about taking their medication every day. When it's time to take your medication, the programme will notify you. The smartphone programme is employed for maintaining a database of medication information and reminding patients about their medication routine. For system-wide system monitoring, we employed an Arduino device with IoT capabilities. The infrared (IR) sensor allows the device to determine if a patient has taken their medication or not. We have made an effort to create a system that will assist patients in effectively managing their medical treatment.

**2. N Chandana, Mayur Kumar, Megha, Guruprasada Shridhar Hegde, K Shashi Raj “IOT BASED MEDICINE REMINDER AND DISPENSING MACHINE” Department of Electronics and Communication Engineering, Dayananda Sagar College of Engineering, Bangalore, India.**

In this project, medication reminder and distribution devices are designed and developed using the healthcare system as a model. This novel technique is suggested due to the pandemic condition since patients receive medication from nurses and doctors to relieve pain, strengthen immunity, and lessen symptoms. However, this poses a threat to the healthcare heroes. time doctors provide the medicine to patients, hence a system that could store the doses of medicine for a full week was developed. Assuring separation from patients and nurses as a result. For future reference by doctors, the information regarding when the medication is administered is kept on an SD card. This device can also be utilised in homes where elderly people need assistance from a caregiver to administer each dose of their medication because they forget to take it on time. Patients benefit from knowing when to eat and exercise because some drugs need to be taken at specific times before or after meals.

**3.Prafulla, Dehankar Manisha, Guru Shubhada, Sachin Patil, Nandkishor Bankar Department Journal of Infectious Diseases &Preventive Medicine Review Article “MEDICINE REMINDER AND MONITORING SYSTEM FOR SECURE HEALTH USING INTERNET OFTHINGS” Fadanvis of Shalya Tantra, Datta Meghe Ayurvedic Medical College Hospital and Research Centre, Nagpur, India.**

The Internet of Things (IoT) is a network of internet-connected gadgets that automatically collect and transmit data through a wireless network. IoT examples include smartphones and wearable gadgets like smart watches and fitness bands. Four elements make up the Internet of Things: sensors, network connection, analytics (cloud), and applications. Poor control of diseases like hypertension and diabetes, which ultimately results in problems, is mostly caused by non-adherence to therapy. Apps and smart devices that remind you to take your medication might be quite useful in resolving this issue. Applications on smart watches and other devices can track a person's heart rate, blood oxygen level, body temperature, blood pressure, ECG, and more. These parameter readings can be sent to a doctor who is linked to the internet. In urgent situations, a doctor can act right away by prescribing the right medication. IoT utilisation is therefore essential for tracking an individual's health. With the aid of internet-connected smart gadgets, patients with the COVID-19 epidemic are monitored and treated remotely. Using this technology, the health care sector may overcome its lack of skilled human resources. The public sector's health services will benefit greatly from it. Adopting this technology in India is imperative given the economic growth of IoT in the global health care sector.

**4. Abhishek Madankar, Akhilesh Agrawal, Vedant Yede “IOT BASED ADVANCE PILL REMINDER SYSTEM FOR DISTINCT PATIENTS” in 2021 Fifth International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC)Dept. of E and TC Engineering, Y. C. College of Engineering, Nagpur, India.**

When it comes to loved ones, humans strive to keep them fit and healthy at all times. But what if they forget to take their medicine and become ill as a result? Hence, many patients require medication at the health care center, and it is difficult for us to remind each patient to take medicine at a specific time. Traditional way requires lot of human effort to remind the patient to take medicine. But in this digital era, humans make use of machines to do certain works. Pill remainder has a wide range of uses, including use by patients at home, doctors in hospitals, and a variety of other settings. This paper presents a working of advance pill remainder setup, which can remove asymmetry in taking medicine dosages and remind the patient to take medicine at prescribed time and particular number of dosages. In this approach, the users are switching from human memory to automated supervision.

**6.Balachandra Rao, Preetham M Nayak, Sachin S Nayak “MEDICATION REMINDER AND MONITORING SYSTEM USING IOT” in International Journal Of Current Engineering And Scientific Research (Ijcesr)Issn (Print): 2393-8374, (Online): 2394- 0697, Volume-4, Issue-6, 2017 Department of MCA, NMAMIT, Nitte, Karkala, Udupi District.**

The idea of digital world where the different types of sensors and local processing connected to share information is used in many industries nowadays. There are various products which are developed based on these ideas. Healthcare industry is one where lot of improvements is taking place. The proposed system consists of an IOT enabled medicine box which gives timely messages for the patients about their medication time. It alerts the patients to take medicines at the proper time. The medicine details can be recorded in the mobile application by the patient himself or by the caretaker of the patient. The system helps to preserve track of medicine intake, stock of medicine and so on.