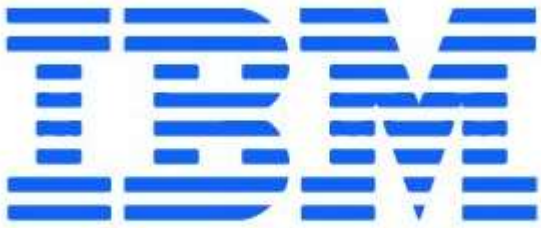


IDEATION

IBM Nalaiya Thiran

Team 11

Team Members	Evaluator's
Syed Hassan K Gowshalya S Shobana S Sudhan R	**Mentor**: Dr.S. Kumarganesh **NT Faculty Mentor:** Mr.G. Rajamanickam **NT Evaluator:** Mrs.R. Saranya **SPOC:** Mrs.T. Devika

PERSONAL ASSISTANCE FOR SENIORS WHO ARE SELF-RELIANT

Abstract:

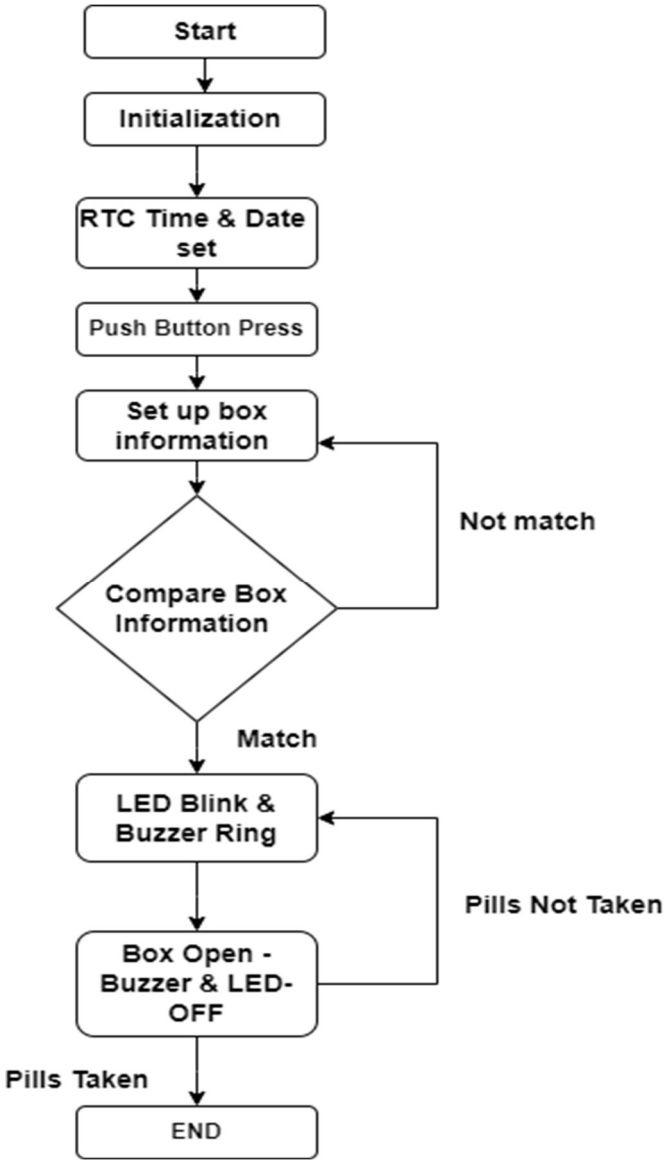
The main goal of our project is to create a Smart Medicine Box for users who take medicine regularly and their medicine prescription is very long because it is difficult for patients and their caregivers to remember. Elderly patients also suffer from problems of forgetting to take their pills at the right time, which causes certain health problems for patients with permanent diseases like diabetes, blood pressure, breathing problems, heart problems, cancer, etc. We have seen these problems in hospitals and in people around us. , who have such diseases, so based on these two problems, we created a smart first aid kit that solves these problems by setting the schedule of prescribed drugs using buttons as indicated on the prescription. The current time will be stored in the RTC module, and the notification time will be stored in the EEPROM. Therefore, at the time of taking the medicine, the system generates an alert sound and displays a bright light in certain pill boxes. The patient can thus know the specific number of boxes from which to take the medication. All pill boxes are pre-loaded into the system for what the patient needs to take at that time. And our system has the quality to sense whether the patient has taken the pills out of the box or not. Another advantage of our system is the ability to sense if the patient tries to delay the medication administration time by suddenly opening and closing the medicine box to stop the sound. Compared to other devices available in the market, they are able to generate sound at once and then stop. The end result of our system thus provides a quick cure to the patient's health using our advantageous system.

KEYWORDS: Smart medicine box, old age patients, Permanent diseases, Setting up timetable, Bright light, Notification sound, Sensing capability.

Introduction:

In everyday life, most people need to take medicines that were not there in the last few years and the reason is that diseases are increasing in a big way. So sooner or later many people will encounter these diseases. Some illnesses are temporary illnesses, while many are permanent life-threatening illnesses. Life-threatening diseases mix with the human body in such a way that they can never leave the body and multiply rapidly. People's life span has become shorter due to these diseases and to overcome or to live better, we have to take medicines regularly and also in large quantities. We have to be on the advice of the doctor who tells us to take the required pills in the required manner so that patients face problems like forgetting the pills to take at the right time and also when the doctor changes the prescription the patients have to remember the new medication schedule. This problem of forgetting to take pills at the right time, wrong use of medicines and accidental ingestion of expired medicine causes health problems for the patient and leads to an unhealthy life. Our project is to create an Arduino-Uno based smart medicine box that uses a real time clock. A new expected feature in our project is that our system is sensitive to whether the patient has taken the medicine or not, and therefore cannot delay the time he needs to take the pills. The patient must take the pills from the box at the right time, otherwise our systems will make a loud noise until the medicine is taken out of the box. This notification feature adds years to a patient's life and that's why this thing is not available in any device which is a must these days.

Methodology:



As shown in flowchart when time & date are set through push buttons, devise will continuously compare the real time & set time. If the time is matched, LED will blink & buzzer will ring. It then senses the box is opened by the user or not. If box is opened, LED & buzzer stops and if it is not opened, LED will continuously blinks & buzzer will continuously ring.