SPRINT-4

TEAM ID	PNT2022TMID44966
PROJECT NAME	PERSONAL ASSISTANCE FOR SENIORS WHO ARE SELF - RELIANT

AUTOMATIC MEDICINE REMINDER:

For older adults, managing medications can beaburden and could lead to medication non-adherence. To decrease risks associated with medication non-adherence, health care providers may recommend medication reminder apps as an assistive tool.However, these appsare often not designed with consideration of older adults' needs,capabilities, and limitations. To identify whether available apps aresuitable for older adults, we conducted an in-depth cognitive walk through and a heuristic evaluation of the most commonly downloaded medication reminder app. Findings revealed three main issues: 1) difficulty in navigation, 2) poor visibility, and 3)a lack oftransparency. We also selected the top five downloaded medication reminder apps and categorized user reviews to assess app functionality and usability problems. The results of our analysisprovide guidance for app design for older adult users to provide effective tools for managing medications and supporting patient/user health.

HOW SYSTEM WORKS:

In this system we have used Arduino for controlling the whole system.Working of this project is very simple. In this system **ds1307 real time clockchip** is used for running the time accurate and to prevent the time after light failureby using **3 volt li-on battery** connected with this real time clock chip at pin number3. **SDA** and **SCK** pin of real time clock chip is directly connected with**SDA**and**SCK**pinofArduino(**A5**and**A4**)respectively.These two pins should be pull-upusing 10K resistor.

When we start this system real time clock runs the time on 16×2 LCD.And if we want

to set alarm time for medication we have to press **set_mad** buttons which isconnected with pin number 8 of arduino. After pressing this button LCD shows **SetTime1.**And then we can selects the times we want to set for medication by using**INC** and **Next** button which is connected to pin 9 and 10 respectively of arduino.
After set time 1, LCD shows **set Time 2.** Now using previous process set the time again. And after second time set, LCD shows again **set time 3**. And set this time like previous. In this system “Group medicine” indication (**take group 1 medicine,takegroup 2 medicine and take group 3 medicine**) is used instead of medicine name.When any alarm occurs LCD indicates **Group medicine 1, Group medicine 2,Group medicine 3.**

Medication alarm time is also feed in **arduino’s internal eeprom** to save from losedata after light failure. And real time is continuously checked with saved **Arduino’sinternal eeprom** time. If any match occurs. LCD shows medication group name andbuzzer starts beeping continuously. Buzzer is directly connected with pin number 13of arduino for medication time indication.