

Smart Medicine Reminder: An Innovative Solution for Enhanced Medication Management



OUR TEAM

Department of Electronics and Communication Engineering
Techno International New Town



JENIFA KHATUN

JEET CHATTERJEE

ABHIPSA CHAKRABORTY

SAMPREETI DASGUPTA

PROF. VIVEKANANDA MUKHERJEE

First Author

Co-Author

Co-Author

Co-Author

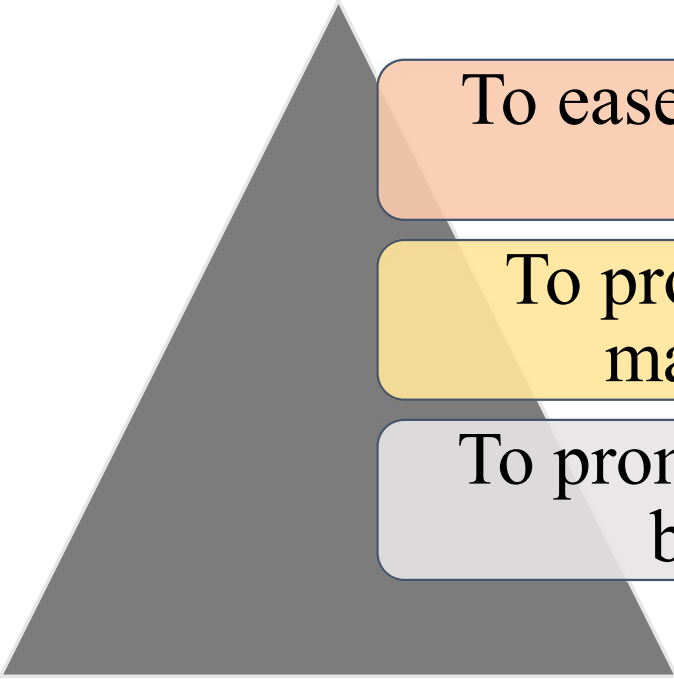
Correspondence Author

BROAD OUTLINE

- Objective
- Target Audience
- Theoretical Background
- Formulation
- Circuit Diagram
- Prototype
- Result and Discussion
- SWOT Analysis
- Future Scope
- Conclusion
- Reference

OBJECTIVE

This is a Smart Medicine Reminder System which is a vital solution in elderly care, addressing medication lapses amid busy schedules, sensory impairments, and cognitive challenges.

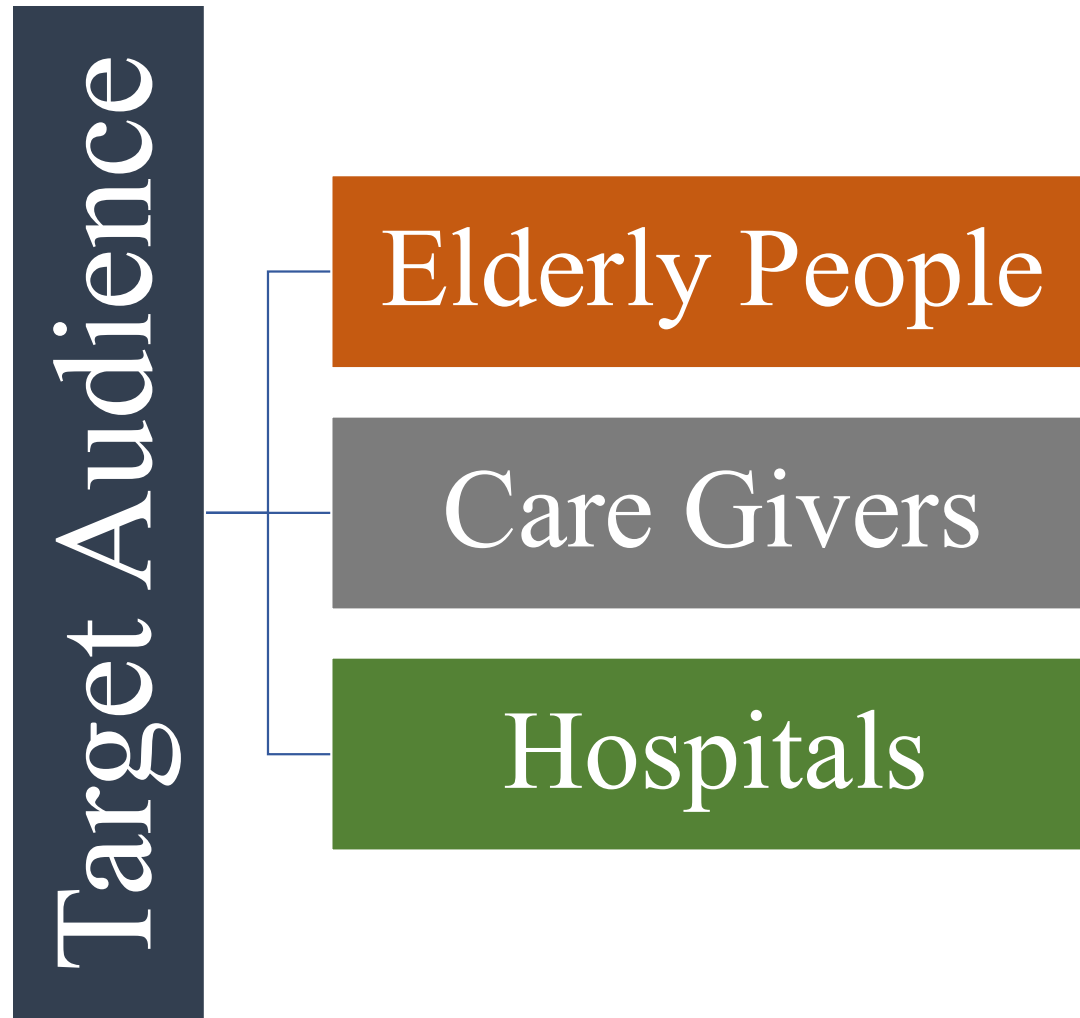


To ease up medication for older people

To provide effective hospital management facilities

To promote self dependency for bed ridden patients

TARGET AUDIENCE



THEORITICAL BACKGROUND

- This Smart Medicine Cabinet will remind the patients about the medication regularly as required time.
- The cabinet have three buttons to set it for once, twice, thrice as per requirement of the patients and one button to turn off the alarm system.
- At the scheduled time, the alarm will buzz and the LED will glow and the details of the dosage will be appeared on the cabinet screen.

FORMULATION

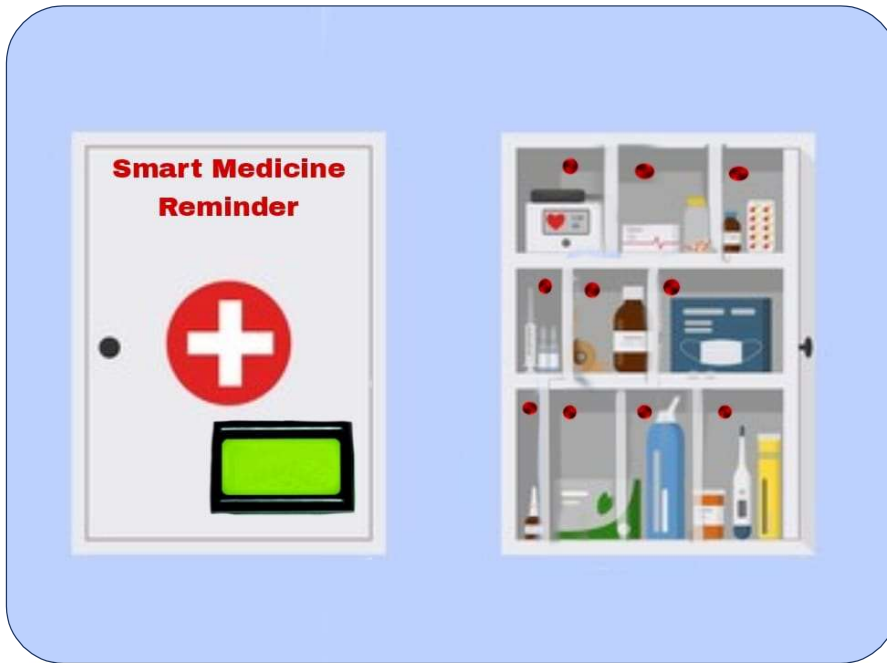


Fig: Smart Medicine Reminder cabinet, with LCD display, buzzer and LED Lights.

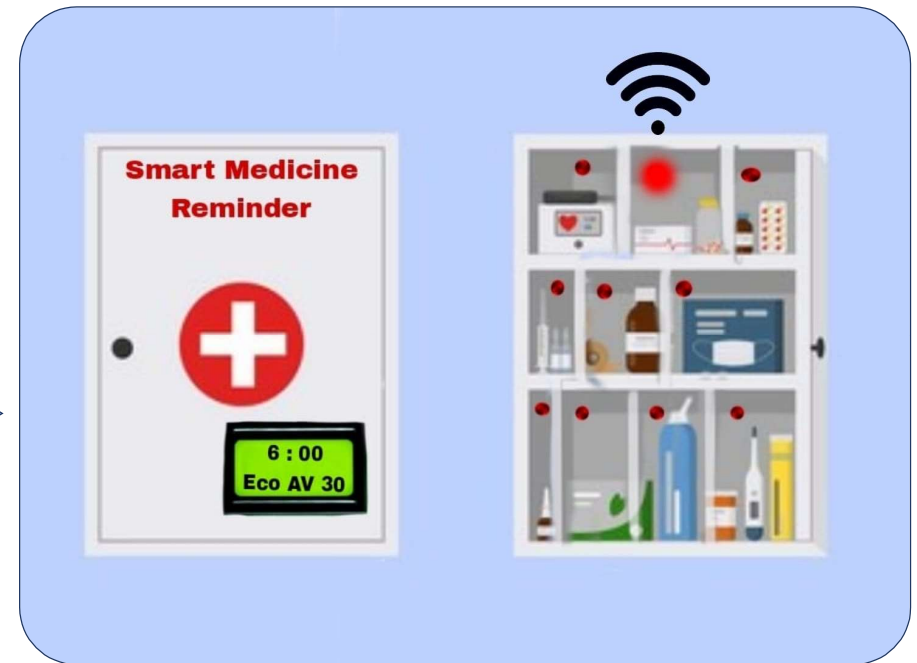
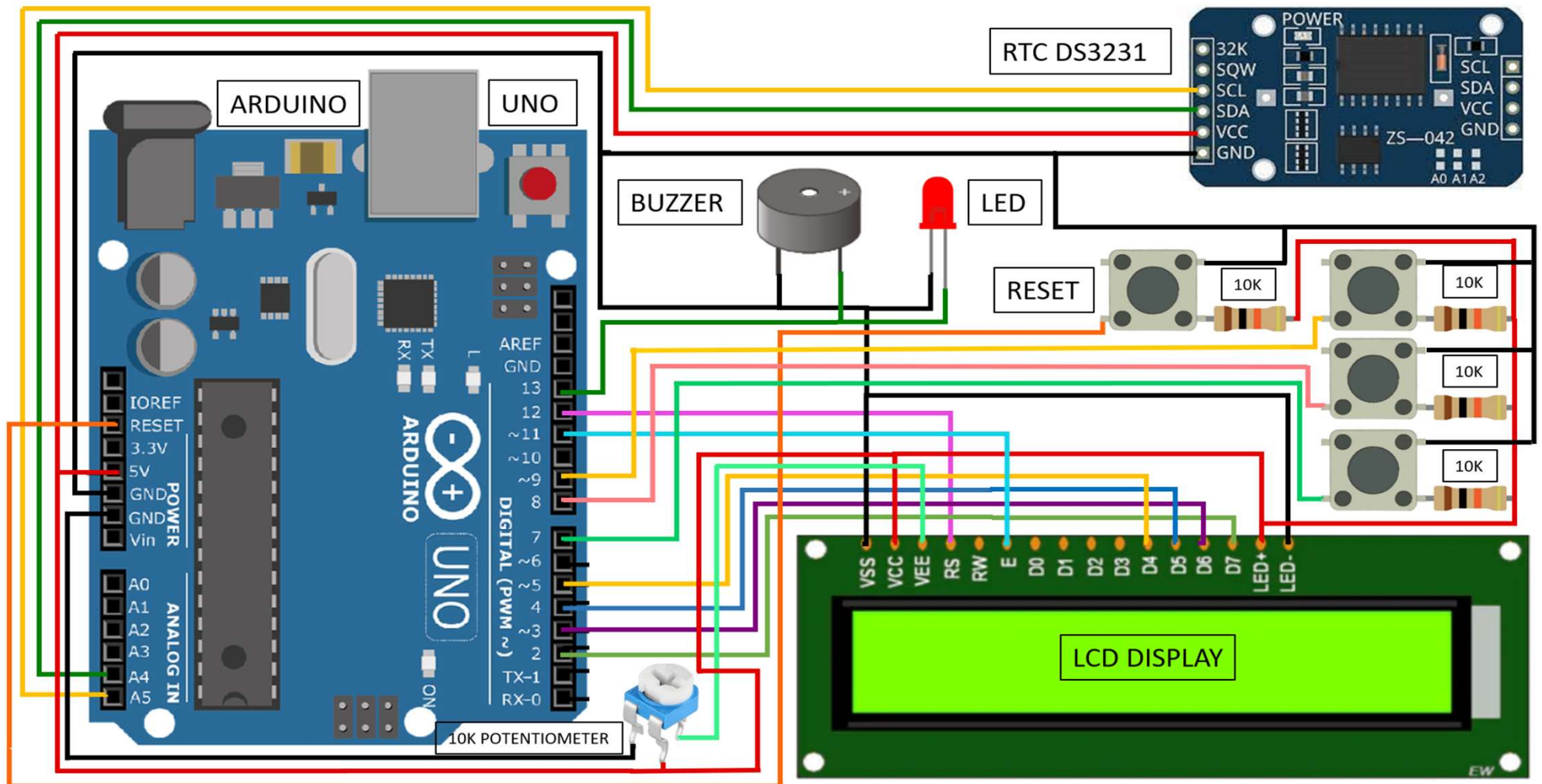
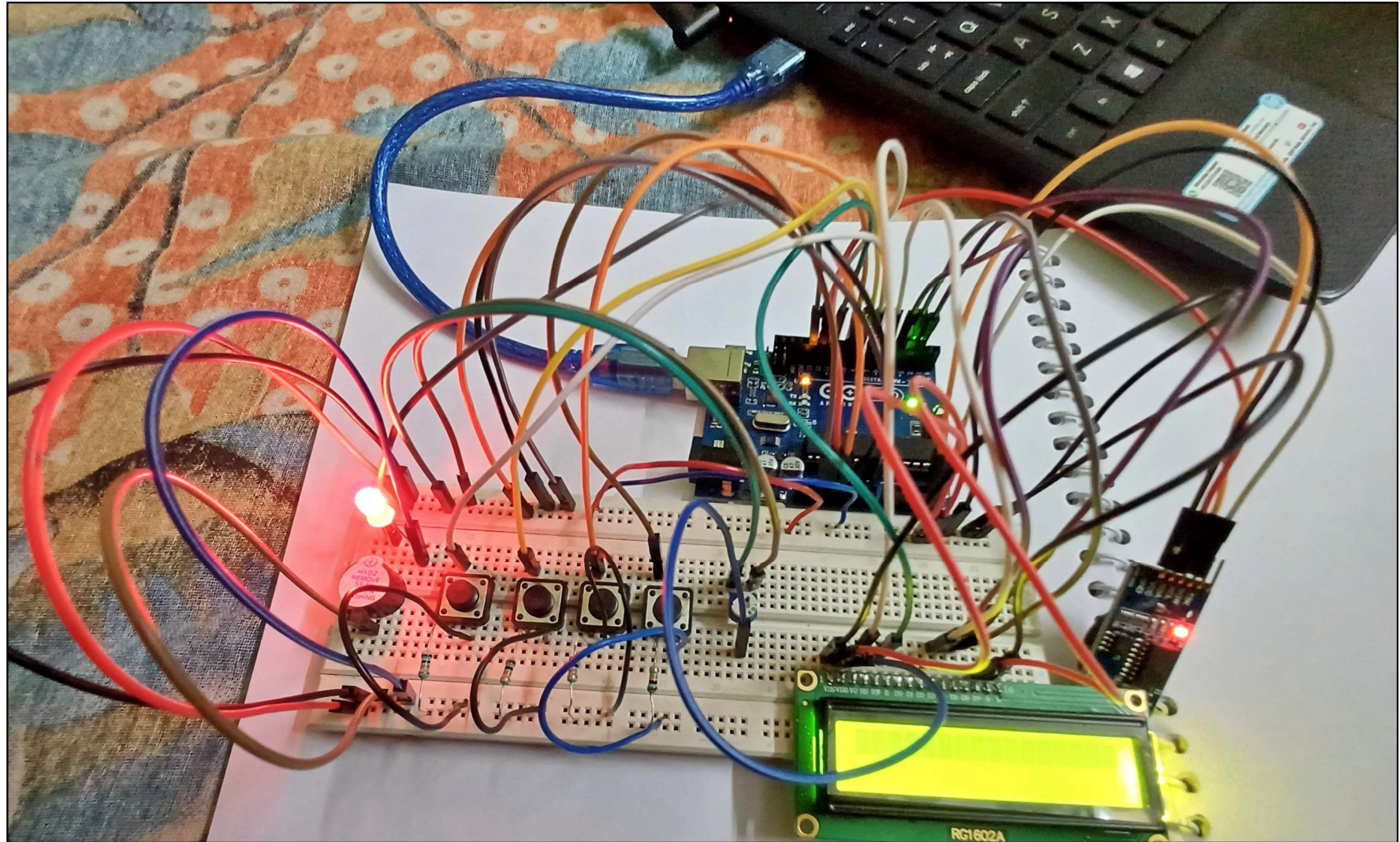


Fig: The cabinet along with the scheduled time, alarming with the LED and buzzer.

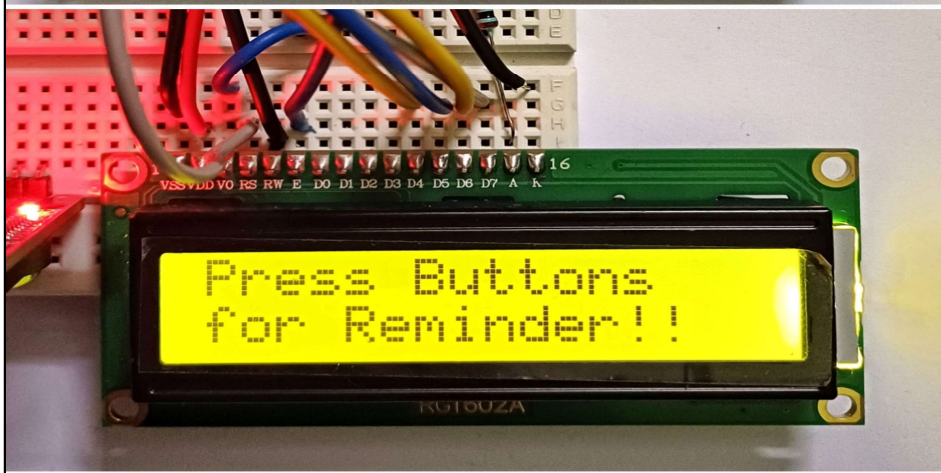
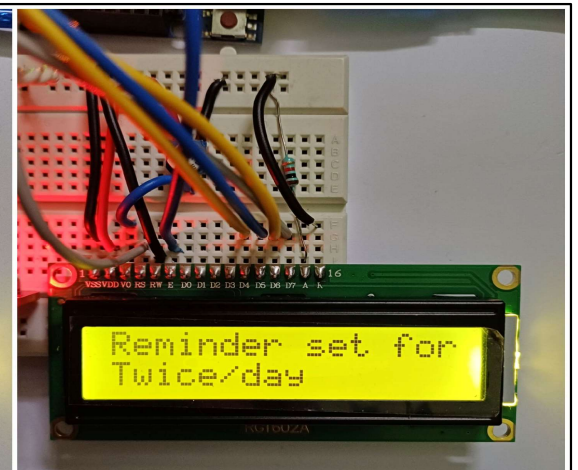
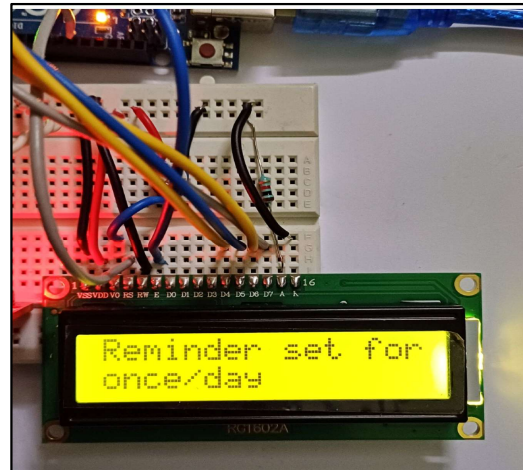
CIRCUIT DIAGRAM



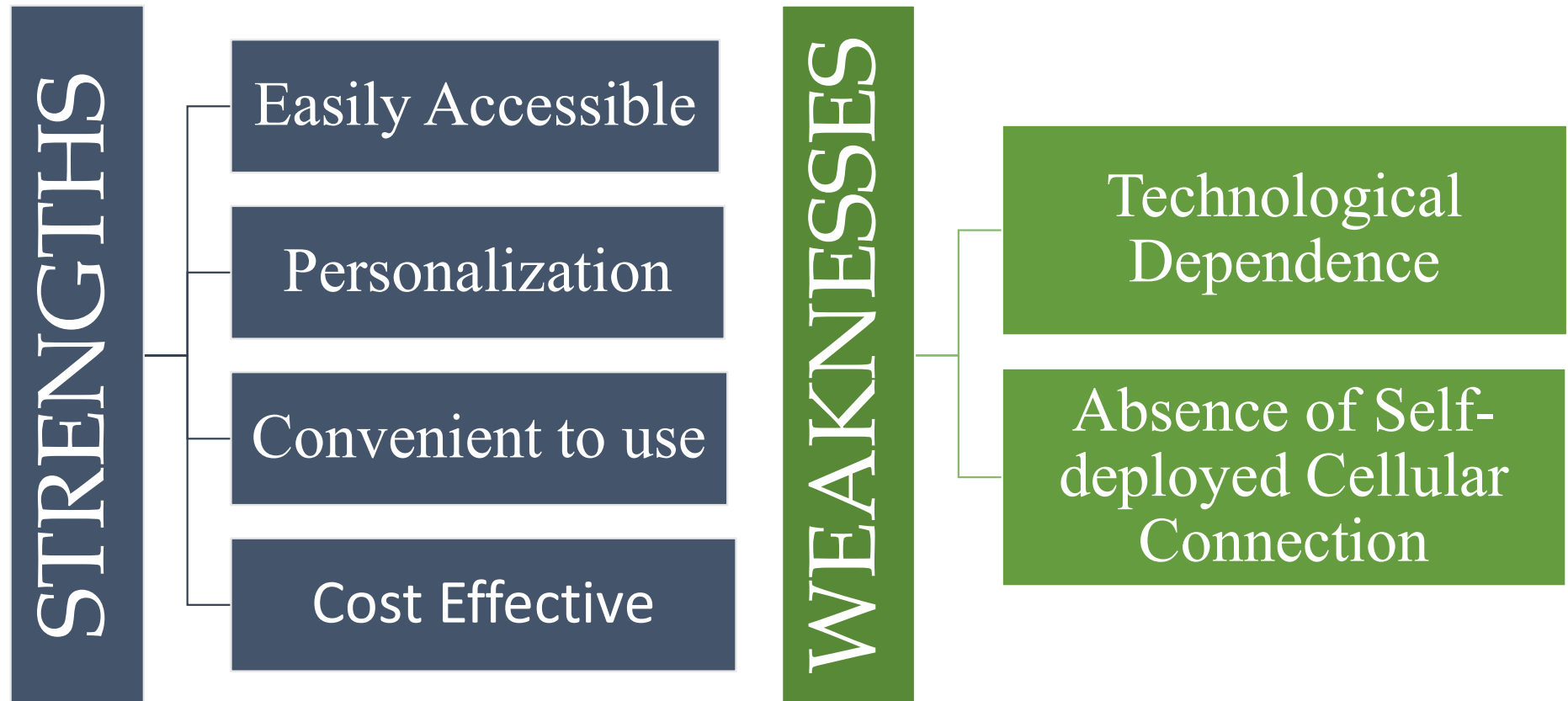
PROTOTYPE



RESULT AND DISCUSSION



SWOT ANALYSIS



SWOT ANALYSIS



FUTURE SCOPES

IOT Implementation

IoT enabled facility can be attached with the system so that it can be linked with an app.

Enabling Cloud Services

Integration with cloud services to enable remote monitoring and management of medication schedules to provide timely support and intervention.

Scalability

Targeting hospitals and healthcare facilities by providing scalable solutions for medication management.

CONCLUSION

The Smart Medicine Reminder prototype, built on Arduino UNO, offers a promising solution for enhancing medication accessibility. Its configuration can be easily managed through a mobile application, allowing for seamless setup via prescription scanning and generating regular patient reports. The system's versatility extends to hospital environments, where it can streamline record management and help mitigate potential nursing oversights.

REFERENCES

- 1) Al-Mahmud, Obaidulla, Kausar Khan, Rajdeep Roy, and Fakir Mashuque Alamgir. "Internet of things (IoT) based smart health care medical box for elderly people." In 2020 International Conference for Emerging Technology (INCET), pp. 1-6. IEEE, 2020.
- 2) Ranjana, P., and Elizabeth Alexander. "Health alert and medicine remainder using internet of things." In 2018 IEEE International Conference on Computational Intelligence and Computing Research (ICCIC), pp. 1-4. IEEE, 2018.
- 3) Kumar, Shawn Benedict, Wei Wei Goh, and Sumathi Balakrishnan. "Smart medicine reminder device for the elderly." In 2018 Fourth international conference on advances in computing, communication & automation (ICACCA), pp. 1-6. IEEE, 2018.

Thank You