A Project report submitted in partial fulfilment of the requirement for the degree of

Bachelor of
Technology in
Computer Science Engineering
on

INTELLIGENT SYSTEM FOR HEALTHCARE EDUCATION

Submitted By

Bhargava H.S (18BCS018)

Palshini B (18BCS062)

Raghu Prasad J N (18BCS073)

Vivek S (18BCS111)

Under the guidance of

Dr. Uma S

INDIAN INSTITUTE OF INFORMATION TECHNOLOGY DHARWAD

Certificate

This is to certify that the work contained in the project report titled INTELLIGENT SYSTEM FOR HEALTHCARE EDUCATION by Bhargav H S (18BCS018), Palshini B(18BCS062), Raghu Prasad J N(18BCS073), Vivek S(18BCS111) was completed during the VII semester - IV Year as a Minor Project II under the guidance and DR.Uma S.

Signature of Supervisor

Dr.UMA S,
HOD CSE

Declaration

We declare that this written submission represents my ideas in my own words and where others' ideas or words have been included, we have adequately cited and referenced the original sources. We also declare that we have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in our submission. We understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

Bhargava H.S (18BCS018)

Palshini B (18BCS062)

Raghu Prasad J N (18BCS073)

Vivek S (18BCS111)

Approval Sheet

This project report entitled INTELLIGENT SYSTEM FOR HEALTHCARE EDUCATION by Bhargav H S (18BCS018), Palshini B(18BCS062), Raghu Prasad J N(18BCS073), Vivek S(18BCS111) of Indian Institute of Information Technology, Dharwad is approved for the degree of Bachelor of Technology in Computer Science and Engineering.

Supervisor

Dr. Uma S
HOD CSE
Computer Science & Engineering,
IIIT Dharwad

Head of Department

Dr. Uma S
Computer Science & Engineering,
IIIT Dharwad

Abstract

Many medical errors are due to the fact that people in charge of patient or elder's medication have to deal with sorting huge amounts of pills each day.

This medication pill box is focused on patients who frequently take medications or vitamin supplements, or attendants who deal with the more seasoned or patients.

Our smart pill box is programmable that enables medical caretakers or clients to determine the pill amount and timing to take pills, and the service times for every day.

The pillbox will remind clients or patients to take pills utilizing sound and light. The warning of pills should be taken will be shown by an android application which is held by the patient.

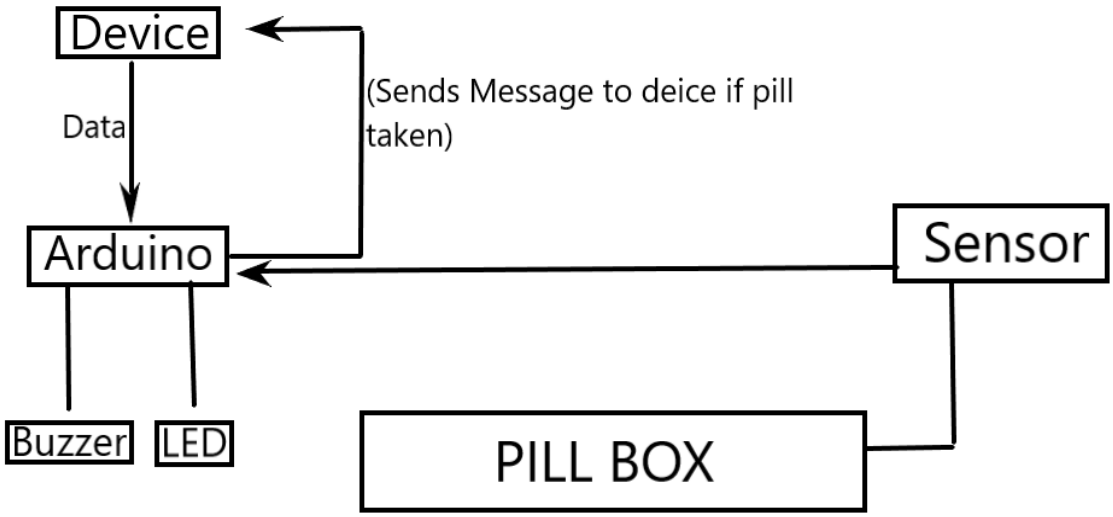
Problem Statement

As pills have taken such an important role in everyday life there has been the past years an increase in the number of medical neglect cases related to incorrect medication given to patients.

Several problems related to the high number of pills nowadays are prescribed to patients are found in hospitals or in retirement homes. In these places one of the main jobs is to give out to its patient the correct pills. Managing, sorting and giving out the pills to each one of the patients can sometimes have a high chance of error, with a patient or resident receiving one or more incorrect pills.

Finally, there are situation where taking an incorrect number of pills is a matter of the patient's inexperience and/or ignorance. No matter the cause, it has been proven that there is a significant risk of people ending up swallowing the incorrect medication or dose.

Block Diagram



Requirement

Software: Android studio, Java, Eclipse.

Hardware: Arduino Uno, Sensors, Bluetooth HC-05, Buzzers, LED, Pill box.

References

- http://paper.ijcsns.org/07_book/202007/20200719.pdf
- https://www.researchgate.net/publication/349899849_IoT_Based_Pill_Reminder
- https://digitalcommons.aaru.edu.jo/cgi/viewcontent.cgi?article=1080&context=fcij
- https://create.arduino.cc/projecthub/makersupv/smart-pill-dispenser-07a43f
- https://www.google.com/url?sa=t&source=web&rct=j&url=https://www.medacube.com/technology/&ved=2ahUKEwi13_P2vMHyAhVNVH0KHc1_APIQFnoECDYQAQ&usg=AOvVaw0NsWNA8w8cHx7ECWDZogUw
- https://www.researchgate.net/publication/273515272_Smart_Pill_Box
- https://www.sciencedirect.com/science/article/pii/S2314728818300230
- https://www.google.com/url?sa=t&source=web&rct=j&url=https://www.maxiaids.com/t/pillboxes&ved=2ahUKEwi13_P2vMHyAhVNVH0KHc1_APIQFnoECBMQAQ&usg=AOvVaw0ezrdvM45ysxrMCN4KUxNj

Conclusion

The aim of this study is to build a Smart Pill Box for Medicine Reminder and Monitoring System. When the pill time has been set, the pillbox will remind clients or patients to take pills utilizing sound and light. The warning of pills should be taken will be shown by an android application which is held by the patient. Contrasted and the conventional pill box that requires clients or attendants to stack the crate each day or consistently. This model can aid in help elders to take their medication.

Thank You

Bhargava H.S (18BCS018)

Palshini B (18BCS062)

Raghu Prasad J N (18BCS073)

Vivek S (18BCS111)