PHY1901 – IIP

Digital Assignment 2

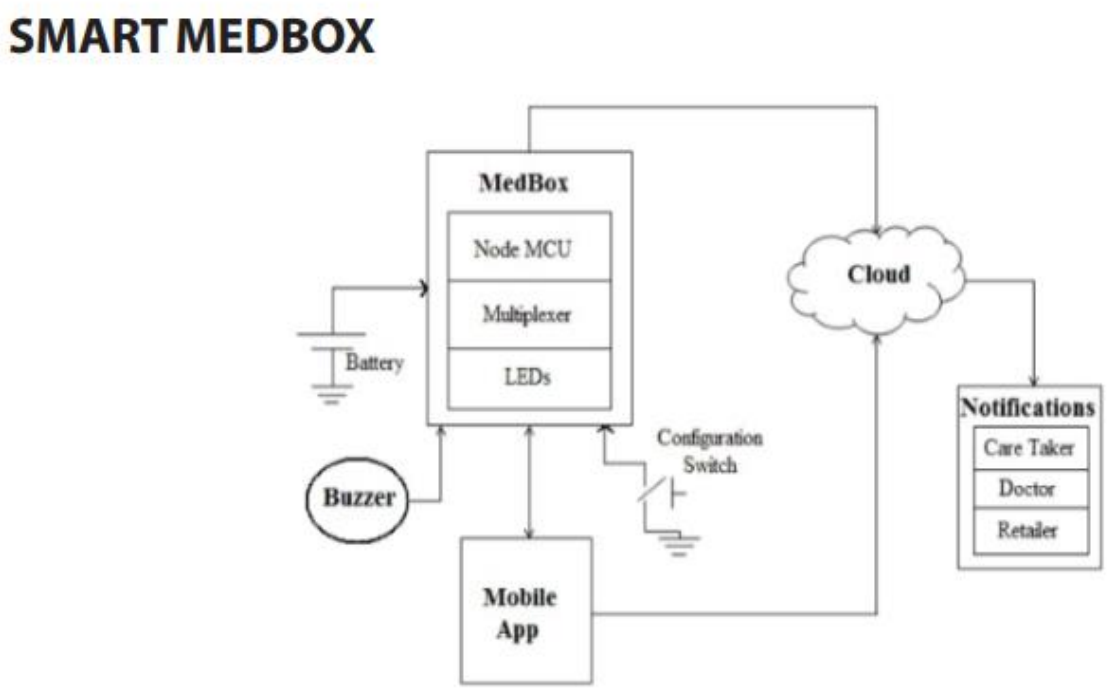
Name: V R Lenin Vasan

Reg no: 20BCE1892

How will this idea help:

- Basic needed healthcare facility at rural areas, at feasible rate.
- Avoiding misuse of medicines incases of suicides.
- Labor-free, easily accessible with Aadhaar cards.
- It avoids many death cases from the rural area if they how to access it.
- A software is implemented that consists of a online interface for doctors to provide prescriptions electronically and a database to store patient information and prescriptions**.**
- To get the medicines one must authenticate himself by providing his user credentials.
- There are two interfaces for the portal, an android application and a website, users can access either and check all their details after yielding their user credentials.
- In elderly people as age ascends the capability of remembering things subsides. So that they won't follow regular medication. The presence of caretaker cannot be expected at every time.
- The health of elders deteriorates. An IoT application in the health platform is proposed here, which involves LEDs and Buzzer to indicate the variations in medicine slot like counting the number of tablets a patient is consuming, alarms give alert at set reminder time.
- A mobile application is used to feed scheduled data or doctor's prescription in smart med box.

Working Principle of Smart Med box:



Problem statement:

This dispensing machine might be efficient in many ways but it does not eliminate all possible errors. It's still possible for the pharmacy to stock the wrong medication. Physicians can pick a similar-looking drug from another drawer.

Since this machine is an electronic device, it can malfunction at any critical time. Healthcare facilities must be prepared for emergencies. They should have separate kits containing resuscitation and critical care drugs.

Currently, worldwide aging and regularity of persistent diseases are flattering a broad concern. Numerous countries are undergoing hospital restructuring by reducing the number of hospital beds and escalating home healthcare, which is envisioned to perk up health care quality, has fascinated wide-ranging attention.

In order to track the physical status of the elderly and, in the meanwhile, to keep them healthy, the proposed idea will be helpful. IoT expands the Internet into our everyday lives by wirelessly connecting various smart objects, and will bring significant hangs in the way we live and interact

with smart devices. The new wave in the era of computing will be outside the sphere of the conventional.

Internet of Things (IoT) is a network where many of the objects that surround us will be networked in one form or another. By using this technology, the health statistics of medication are observed. In this process of encryption, the schedule data or doctor's prescription are sent to MED BOX through mobile app. The LEDs are placed for indication and buzzer for alarm alerts and reset button is used to count for medicine in cloud platform.

The existing techniques to the market for the reminder include a MED BOX. But this does not help in checking the medicine. This proposed idea is a valuable solution to the medical non-compliance problem. The innovation scheme to help patients keep trail of their medicine consumption through a series LED alarm indicator signal and audio alarm indicator signals.

Focus of the project:

- Prospective customer survey / study should be planned in order to understand Indian users for such a machine.
- Block diagram would be detailed out for each block and module development would be started.
- The Aadhar card module implementation should be confirmed by the government.
- Legal, medical and administrative aspects would be studied for feasibility study and further changes in design.
- Further hurdles would be funds, timely resource availability & formation of think-tank team.
- As Result of this project the people would be able to access the Medbox 24*7.
- It provides OTC medicine for general symptoms like fever, High B.P, headache and sprain and first aid along with prescribed medication.
- This machine can be installed at bus stations, railway stations and streets of the city.
- Drugs can be made available in affordable rates.
- Each person accessing the machine can use their Aadhar ID by which the user can be identified.

MEDBOX aims at closing this gap by collating quality, open-access, practical documents such as clinical guidelines, assessment checklists or textbooks on one homepage, thereby allowing real-time access for humanitarian practitioners. The challenge is to better apply what we know already by allowing easy access to what is available. In addition, MEDBOX will generate innovative generic checklists for humanitarian practitioners for all aspects of work.

In the run of this process, we came to understand that the invention can best take shape if we had a functioning internet platform to work with rather than theory alone. The design of the webpage was a challenge as it had to follow the claim that a library homepage can be colorful and pleasant for the user to be browsing through and at the same time be practical and easy to navigate. After satisfactory accomplishment we decided to launch MEDBOX.

The website is functional and had at that time 800 key humanitarian documents uploaded. The archive system underwent several tests before more documents were uploaded. This included the editorial side (backend), the search engine and the capacity of users to find MEDBOX documents through commercial search engines (such as google).

In order to stock the online archive with relevant documents we initially started with a collection of fairly undisputed key guidelines such as the Sphere Handbook, many WHO guidelines and those from international NGOs such as MSF, Oxfam, Save the Children, Action against Hunger, and the Red Cross and Red Crescent Movements (IFRC and ICRC). We reached out to all major organizations also because we needed to receive legal permission from the authors to re-publish PDF documents according to international 4 copyright laws.

The biggest innovation of MEDBOX is the vision of producing an easy-to-use survey tool that can be applied for assessments, monitoring and evaluation purposes. The invention stage was characterized by a lively cooperation with Doctors without Borders y, who were keen on piloting a checklist for hospital evaluation through MEDBOX. Registered users have the option to set up their “own MEDBOX”, saving documents of interest in a closed area of the webpage. The registration is a three-step free of charge process that allows users to administer documents of their interest in a way well known from the windows explorer.