SMART INDIA HACKATHON 2022

BIOSPLINTER
PROBLEM STATEMENT - AUTOMATIC DRUG DISPENSER

Ministry/Organization Name/Student Innovation: SIH

PS Code:SIH1503S

Problem Statement Title: AUTOMATIC DURG DISPENSER

Team Name: BIOSPLINTER

Team Leader Name: SWATHI.R

Institute Code (AISHE):7125

Institute Name: PPG INSTITUTE OF TECHNOLOGY

Theme Name:

Idea/Approach Details

Describe your idea/Solution/Prototype here:

☐ The never-ending queue in hospitals is a nuisance that patients have to go through. Along with the problems being faced by patients due to suffering from diseases, standing and waiting in long queues adds on as a challenge for them to face. This leads to inconvenience to patients at physical as well as mental level. Although in this direction, some steps have been taken by the hospital management system which makes it convenient for patients to consult with doctors by registering and taking an appointment prior to the visit to hospital. But, patients still face inconvenience at the mediciner Developing a QR Code drug ATM muy resolve the situation at hand, there Page 6 + ents. A QR code in the prescription will be used to dish out the right drug from the ATM. The drug ATM should be able to dispense wide range of Ayush Medicines available in a hospital/pharmacy

Describe your Technology stack here:

☐ For the purposes of promoting an understanding of the principles of the invention, reference will now be made to the embodiment illustrated in the drawings and specific language will be used to describe the same. It will nevertheless be understood that no limitation of the scope of the invention is thereby intended, such alterations and further modifications in the illustrated device, and such further applications of the principles of the invention as illustrated therein being contemplated as would normally occur to one skilled in the art to which the invention relates.

Idea/Approach Details

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Describe your Use Cases here

☐ In the preferred embodiment, twelve storage compartments are arranged in a ring about a wheel which is rotated at a constant speed over a 24-hour dispensing cycle. A patient preloads the storage compartments with all pills prescribed to be taken during the 24-hour period, loading pills into individual storage compartments according to a loading code corresponding to the respective administration schedules of the different types of pills. The pill dispenser then automatically sequentially empties the storage compartments into the cup and, upon detection of any pill in the cup, alerts the patient to take the dispensed medicine. Each time a patient receives an alert signal during the course of the day, the required response is the same, namely, to remove the cup from the pill dispenser, take the medicine contained therein and return the cup to the pill dispenser. Removing the cup clears the light path again and the alert signal ceases, and when the cup is returned to the pill dispenser empty, the light path remains clear for detection of the next pill delivery

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Describe your Dependencies / Show stopper here

A pill dispenser according to the invention may be preloaded by the patient himself or may be preloaded by someone assisting the patient once a day, thereby minimizing or totally eliminating the possible confusion as to when to take the prescribed medicine and what dosages to take.

In another embodiment, a preloadable storage canister is provided which may be preloaded by a pharmacist and simply inserted into the pill dispenser by the patient for automatic pill dispensing.

Team Member Details

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Team Mentor 1 Name: Dhivya parameswari

Category (Academic/Industry): B.E   Expertise (AI/ML/Blockchain etc): Block chain   Domain Experience (in years):   1.9 yr

Team Mentor 2 Name:

Category (Academic/Industry): B.E   Expertise (AI/ML/Blockchain etc):   Domain Experience (in years):

AUTOMATIC DRUG DISPENSER

Dispensing includes preparing and giving medication for a client to take later, taking steps to ensure the pharmaceutical and therapeutic suitability of the medication for its intended use, and taking steps to ensure its proper use. Nurses dispense with or without the involvement of a pharmacist.

An automated medication dispensing machine (ADM) is a computer-controlled machine that stores, dispenses, and tracks medications, also known as an automated medication dispensing cabinet

APPLICATIONS

Application : Automatic dispensing machines (ADM) or (automated drug cabinets) a Application :
Automatic dispensing machines (ADM) or (automated drug cabinets) are a computerized drug storage and dispensing device used in the health care settings like hospitals and nursing homes, and are located at the point of care (the ward, ICU, ED) rather than in the central pharmacy. computerized drug

PROBLEM   DESCRIPTION

The never-ending queue in hospitals is a nuisance that patients have to go through. Along with the problems being faced by patients due to suffering from diseases, standing and waiting in long queues adds on as a challenge for them to face. This leads to inconvenience to patients at physical as well as mental level. Although in this direction, some steps have been taken by the hospital management system which makes it convenient for patients to consult with doctors by registering and taking an appointment prior to the visit to hospital. But, patients still face inconvenience at the mediciner Developing a QR Code drug ATM muy resolve the situation at hand, there Page 6 + ents. A QR code in the prescription will be used to dish out the right drug from the ATM. The drug ATM should be able to dispense wide range of Ayush Medicines available in a hospital/pharmacy

PROBLEM SOLVING

An automatic drug dispenser is a device that helps individuals manage their medication schedules by dispensing the right dose of medication at the prescribed times. These devices can be programmed to provide reminders, track doses, and improve medication adherence. They are particularly useful for people with complex medication regimens or those who may have difficulty remembering to take their medications on time. Some advanced models can also connect to smartphones or healthcare systems to provide additional support and monitoring.

Here using Additinal advanced technology Like face detection now a days For solving inconvenient in scanning QR code and we alao adding some alarming system for taking medication in correct time