Medical Store Automation

Vaishali C Sanap[1], Jinendra.Bafna[2], Ruchika.Bhoite[3], Kalyani Darekar[4], Karuna.Murumkar[5]

[1]Lecturer, Dept. of Computer Engineering, A.I.S.S.M.S. Polytechnic Pune, Maharashtra, India

[2,3,4,5] Student, Dept. of Computer Engineering, A.I.S.S.M.S. Polytechnic Pune, Maharashtra, India

---***---

Abstract: *Medication in today's world is of great importance. With the advancements in technology, automation is required everywhere to save time and efforts. "MEDICAL STORE AUTOMATION" is one such automation, which is purely automation system which will play an important role in health care. We have implemented "automatic drawer opening system or cabinet system with stock inventory". The main objective is to find the place of the required medicine by automatically opening that drawer to save time in searching. This paper presents a system called the Medicine place finder and Auto Inventory Management System, with the updating of the medicine stock.*

Keywords—Java, Database, automation.

1.0 Introduction

In day to day life medical field is having great importance. Every day we found crowd at the medical store. The seller alone has to do duty of providing not only the appropriate medicine but also in time. In traditional medical system the medical system the medication is done by remembering the place of medicine. Hence, many of times it happens that he can't find the required medicine in time. Hence now there is need to develop the new system which will overcome all above problems of the traditional medical storage system and reduces burden on workers.

So, the new automatic system "MEDICAL STORE AUTOMATION" is developed which is purely embedded system, where we are going to apply "automatic drawer opening system or cabinet system with stock information". This requires preparation of medical data with its rack address by using visual basic software.

2. RESEARCH METHODLOGY

2.1 Literature Survey

The Medical Supplies Division (MSD) is the main pharmaceutical division under the direct administrative purview of the Central Government, where national requirements of all medical items are procured, stored and distributed. In addition to supplying the medicines, there are 37 major hospitals under the Central Government to which medical items are supplied directly by the MSD. The MSD consists of four units, stores and a wharf section.

2.2: Problem Identified:

Pharmacy management is the process of managing the medicine stock and selecting the suitable medicine to the illness that is prescribed to the patient or customer. The core of pharmacist profession is the maintenance of quality and the subsequent implication for patient care.

Selecting suitable medicine for particular illnesses usually takes time and makes the patient or customer waiting in case of unavailability or finding substitute medicine. For the medicines stock management, the pharmacist keeps on checking manually, which requires lot of time. Our proposed system with LCD display, displays information of stock so that quantity of each medicine is easily available to shop owner.

The domain of this project is one of the "Embedded system technologies" in Healthcare application to help the pharmacist for managing their stock and select the medicine using computer program and find the place of tablet automatically.

3.0 Problem Definition and Proposed Work

1. To assist the medical shop keeper in capturing the efforts spent on their respective working areas.

2 keep track of all the activates of the medical agency

3. Security of data

4. Maintains of stock

5. Handling clients and dealers

3.1 Project Plans

The task of the Working group has been to assist the Medical Products Agency in formulating a guideline for classification of medical information systems used in health care, based on the Medical Device directives and applicable standards. Implicitly, the classification system shall also describe the role for the notified bodies, and when they shall be consulted. The mapping and proposed guidelines shall also be helpful for other authorities, manufacturers, distributors, procurement officials and users within health care organizations to follow the Medical Device directives

---

This system provides the information of the medicine that is sold along with stock. The modules involved are medicine management module, medicine selector module, selling process module, medicine list module, statistic of medicine sales module, monthly report module.
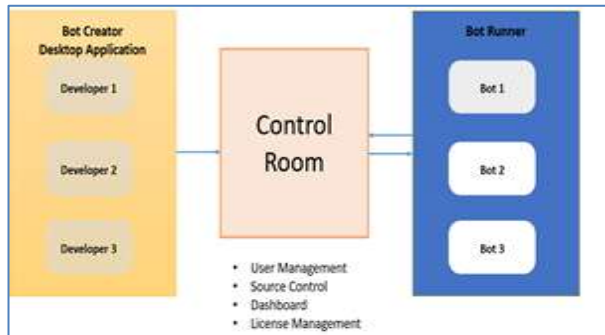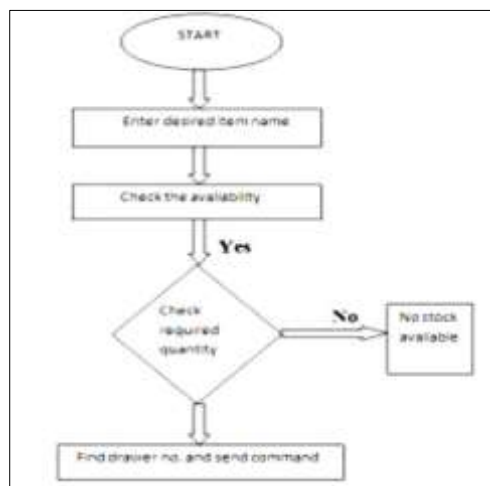
3.2: System Architecture

Fig1.1:System Architecture

3.3 Flow Chart

Main Functions:

1. Studying the consolidated annual requirements of medical items

2. Placing indents for annual requirements of medical items with State Pharmaceutical Corporation (SPC)

3. Receipt of medical items from SPC and storage

4. Distribution of quarterly requirements of medical items to Regional Medical Supplies Division and the institutions under the Central Ministry

5. Maintenance of an effective drug management information system

6. Monitoring of consumption pattern of medical items

7. Quality assurance of medical items

8. Attending Drug Review Committee meetings of hospitals

9. Coordinating with sectorial and inter-sectorial agencies concerned with medical items

10. Management of donated medical items ¾ In-service training for staff at different levels

11. Organizing and attending SPC–MSD meetings to discuss supply of out-of-stock medical items

12. Support, review, revise and disseminate rules, regulations and procedures to ensure scientific management of medical supplies

13. Stock Control Unit: responsible for estimating drug needs, ordering pharmaceuticals, monitoring and controlling drug supplies, negotiating transactions with SPC and overseeing local purchase of drugs

14. Stores: in charge of receiving, storing and issuing items

15. Computer Unit: activities include developing software, maintenance of records of supply, storage and distribution of medical items and the maintenance of computer systems. The MSD has a Local Area Network to support inventory control functions and MIS

16. Supply Branch: This section oversees the certifying of vouchers for payments to SPC and other suppliers, preparation of annual price lists and purchase and supply of cancer drugs from President's Fund

17. Purchasing Unit: responsible for local purchase of medical items and certifying of medicines.

4.0 Conclusion

The domain of this project is "Software system technology", in Healthcare to help the pharmacist for managing their stock and select the medicine using computer program and find the place of tablet automatically. Medical store automation will help to reduce time as well as burden on shop keeper or workers.

5.0 REFERENCES

1Adrain P. "Sensors have expanding opportunities for use in wearable devices for health monitoring", 2005.

2.AHIMA Task Force. "A Vision of the e-HIM Future." Chicago: AHIMA, 2003. Available at http://library.ahima.org/xpedio/groups/public/documents/ahima/bok1_020477.pdf (accessed June 28, 2004).

3. Alpati, Sam R. (2008). Expert Oracle Database 11g Administration. The expert's voice in Oracle. Apress. P. 170.

4.Amarasingham R, Diener-West M, Weiner M, Lehmann H, Herbers JE, Powe NR: Clinical information technology capabilities in four U.S. hospitals: testing a new structural performance measure. Med Care 2006, 44(3):216-224. PubMed Abstract

5.Amarasingham R, Pronovost PJ, Diener-West M, Goeschel C, Dorman T, Thiemann DR, Powe NR: Measuring clinical information technology in the ICU setting: application in a quality improvement collaborative. J Am Med Inform Assoc 2007, 14(3):288-294. PubMed Abstract

6.American Hospital Association. "Forward Momentum Hospital Use of Information Technology," AHA, 2005. Available   at http://www.ahapolicyforum.org/ahapolicyforum/resourc es/content/FINALN onEmbITSurvey105.pdf p. 3 (accessed March 4, 2006).

7.B. Glover and H. Bhatt, "RFID Essentials", O' Reilly Media, Inc. 1005 Gravenstein Highway North, Sebastopol, CA 95472, Jan 2006, pp. 54- 169