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Self-Diagnosis with Advanced Hospital Management

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Abstract: ***In the case of an epidemic, it is impossible to consult a doctor about minor ailments. This program helps to get recommendations from doctors. So that people can be treated for minor ailments at home. The main purpose of self-examination in a high-quality hospital management system is to provide self-examination to patients, if hospitals are not available in nearby areas. This program will be developed using one of the heuristic search methods in artificial intelligence which means greedy local search.***

The program provides additional space, which means that the patient can communicate with the appropriate physician by chatting online. The patient can receive appropriate suggestions for his or her problem. In fact, in self-examination this app makes a report about the patient's health status. That report may include the patient's disease name, level of symptoms and strength and the recommendation provided by the program. This proposal can be in two ways. The first suggestion would be a suitable drug based on the level of Weight Loss; the second proposal would be a meeting of specialist doctors which means that his illness may be in serious condition.

It offers suggestions on some of the preventable diseases that mean minor problems with some pills. This can be helpful for patients who are far away from the hospital and for doctors and for working with patients inside or outside the hospital. The administrator can update medications in the database regularly. We can create a suggestion box for patients to improve the app

Keywords: Self-test, Intensity level, Curable disease, Critical disease.

I. INTRODUCTION

A self-assessment program with a high hospital management system to provide self-assessment to patients, if hospitals are not available in nearby areas. This app is developed using one of the heuristic search methods in artificial intelligence which means greedy local search.

The program provides an additional facility, where the patient can contact the appropriate physician through an online chat or discussion forum. the patient can receive appropriate suggestions for his or her problem.

In fact, in self-examination this app makes a report about the patient's health status. That report may include the patient's disease name, level of symptoms and strength and the recommendation provided by the program. This proposal can be in two ways. The first suggestion would be a suitable drug based on the level of Weight Loss; the second suggestion would be a special doctor's meeting which means that his illness may be in serious condition.

This plan can help the hospital management, as it contains a plan to charge patients from the time of admission to the hospital. Payment of patients means payment of doctors, rooms, facilities, staff.

II. LITERATURE SURVEY

A. *"Design hospital resource and patient management system based on real-time data capture and intelligent decision making"*

Author(s): Musa, A. Lancashire Bus. Sch., Univ. of Central Lancashire, Preston, UK Yusuf, Y, Meckel. Systems and Informatics (ICSAI), 2014 International Conference One of the major challenges existing hospital management systems face is around operational efficiency and wait times between different processes, departments and persons. This paper highlights such limitations of existing systems and proposes a RFID (Radio Frequency ID) and wireless sensor based, location and information management framework that facilitates real time tracking of hospital assets, personnel and patients as they move through pre-set procedures as part of daily activities of the hospitals.

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B. "Study on information system of health care services management in hospital"

Author(s): Daiping Hu, Antai Sch. of Manage., Shanghai Jiaotong Univ., China Weiguo Xu Huizhang Shen; Mengyu Li. Services Systems and Services Management, 2015. Proceedings of ICSSSM '05. 2015 International Conference This paper reviews the HIS (Hospital Information Systems) which are widely used in many hospitals in China mainly to provide easier and faster way for daily medical tasks /activities with a GUI and provides for overcoming some of the limitations of HIS,e.g. HIS aims at improving quality of health care services but do not have way of evaluating /measuring those.

C. "Specification of a Reference Model for the Domain Layer of a Hospital Information System"

Author(s): Gudrun Hübner-Blodera, Elske Ammenwertha, Birgit Brigl b, Alfred Winter b a Institute for Health Information Systems, UMIT – University for Health Sciences, Medical Informatics and Technology, Hall in Tyrol, Austria b Institute for Medical Informatics, Statistics and Epidemiology, University of Leipzig, Germany, ENMI, 2015. Many enterprise projects get scrapped due to high costs involved in initial planning requirement gathering and design phase. The costs in this phase become unmanageable due to lot of unknown factors. Like lack of Subject area expertise, lack of knowledge on different Hospital enterprise functions 1) Patient admission 2)Patient Treatment planning 3)Order Entry 4)execution of diagnostic and treatment procedures 5)administrative documentation 6)billing 7) Clinical documentation 8) discharge and 9) referral to specialized medical institutions, lack of knowledge /experience on the entities types involved (example: patient, Clinical finding) , their roles and responsibilities and the relationships /associations between different enterprise function and /or entity types.

D. "Developing Effective Hospital Management Information Systems: A Technology Ecosystem Perspective".

Author: Dr Christopher Bain MBBS, Master Info. The author of this paper focuses more on needs of hospital manager and the ecosystem in which he/she operates. The internal and external Environment shaping factors ESFs that bear an impact or association on daily hospital activities and decision making process that the hospital manager has to go through in each situations. Some of the challenges that this ecosystem needs to work on are high demand pressure, greater customer satisfaction level and low profit margins. This paper more so contributes to Planning, Design and development aspects of any Hospital management system by highlighting ESFs that should be considered. The external and internal factors the author mentions are: The public at large, Law and policy makers, Funders, International Journal for Research in Engineering Application & Management (IJREAM) ISSN: 2494-9150 Vol-01, Issue 11, FEB 2016.

III. OBJECTIVES OF THE PROJECT

A. Develop and build a system that gives the patient self-examination, if hospitals are not available in nearby areas. To give a suggestion by calculating the degree of stiffness.

B. Develop a system that produces a report on the patient's health status. That report may include the patient's disease name, level of symptoms and strength and the recommendation provided by the program.

IV. IMPLEMENTATION

The implementation is a phase of the project in which the formation of theology is transformed into an effective program and gives hope to the new system of users that it will work effectively and efficiently. It includes the stages of careful planning, the investigation of the current system and its implications for implementation, the development of mechanisms to achieve change, the evaluation of change rather than the method. Apart from the planning phase a major task is to prepare for the implementation of user education and training. The startup process begins with preparing the system launch program.

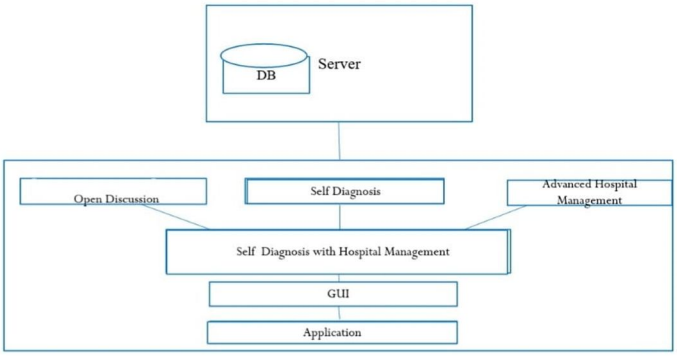


Fig1: Structure of system

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V. PROBLEMS WITH THE EXISTING SYSTEM:

The current system only helps hospital administrators but does not help outpatients or remote patients. Therefore, the existing system does not help ordinary people. Provision of hospital facilities in remote areas is proposed for self-assessment through the proposed Advanced Hospital Management System.

VI. PROPOSED SYSTEM:

Self-diagnosis through the Advanced Hospital Management System will be useful for people who are far from hospitals. This program is useful for patients who can get medical advice, patients can put their own questions and doctor's answers to the patient's problem.

VII. MODULE DESCRIPTION

A. Self-Diagnosis

There are 2 small modules available in this module namely, Treatable Diseases, and Critical Diseases. The user must choose either of these two. Various questions will be raised by the system. the user has to answer questions. Based on user-defined responses the self-evaluation system will show user-related medications / suggestions.

Similarly, treatable and severe diseases and the Self Diagnosis system show a variety of symptoms.

The administrator will update the database when changing any questions or medications related to various diseases. The administrator will have his or her username, password to perform a database update.

A self-assessment program with a high hospital management system to provide self-assessment to patients, if hospitals are not available in nearby areas. This app is developed using one of the heuristic search methods in artificial intelligence which means greedy local search. The program provides an additional facility, where the patient can contact the appropriate physician through an online chat or discussion forum. the patient can receive appropriate suggestions for his or her problem.

In fact, in self-examination this app makes a report about the patient's health status. That report may include the patient's disease name, level of symptoms and strength and the recommendation provided by the program. This proposal can be in two ways. The first suggestion would be a suitable drug based on the level of Weight Loss; the second suggestion would be a special doctor's meeting which means that his illness may be in serious condition.

B. Advanced Hospital Management

This plan can help the hospital management, as it contains a plan to charge patients from the time of admission to the hospital. Payment of patients means payment of doctors, rooms, facilities, staff.

1) *Doctors Module:* This module is accessible to doctors to view online reports on the various activities described in this module. Doctors can quickly diagnose clinical trials, treatments quickly and can diagnose, treat the patient as soon as possible. The various services in the module are as follows

Sign in

View Labs Reports

2) *Clinical Module:* This module is accessed by lab specialists to store patient clinical trial data in a database.
3) *Admin Module:* This section is available to administrative users of the Hospital system to keep Hospital records, details of various hospital departments, ward details, patient details including patients and outpatients.
4) *Reports:* This is achieved by the previous office for payment purposes. In-Patient and Out-Patient may take Report

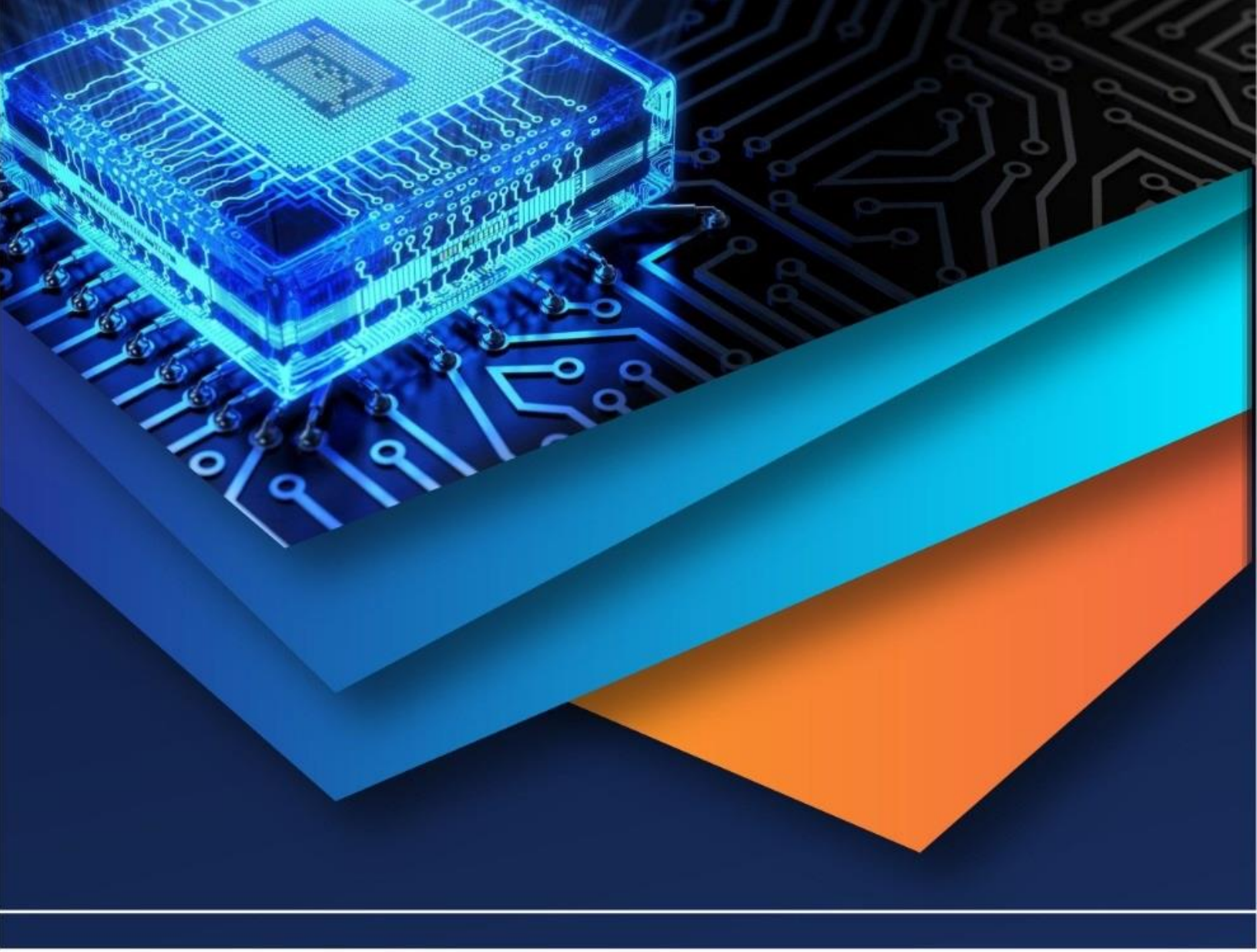
VIII. CONCLUSION

The system is used by the people who are in remote areas and this system is also used by the people who are far away from hospitals.The system also provides computarized self test to the users and suggesting the appropriate medicines / suggestions ton their problems.

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