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# Accounting, Book Keeping & Data Management for Hospital Using Python

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**ABSTRACT:** The motive of the project entitled as "HOSPITAL MANAGEMENT SYSTEM" is to computerize the Front Office Management of Hospital to evolve software which is user friendly easy, fast, and cost – effective. It is an integrated software that handles directions of clinic workflows. It can be entered utilizing a username and password. It deals with the group of patient's information, diagnosis details, etc. conventionally, it was done manually. The software has the facility to give unique ID for each and every patient and the staff. It covers all required modules right from patient registration, medicine details, doctors, ward, admin, store, bill payment, patient appointment, discharge details. It is reachable either by an manager or receptionist. Only they can add data into the database. The data can be recover easily. The data are well covered for personal use and makes the data processing very fast.

### I. INTRODUCTION

The project Hospital Management system includes booking of patients, keeping their details into the system, and also computerized billing in the pharmacy, and labs. The software has the provision to give a incomparable id for every patient and stores the details of every patient and the staff automatically. It includes a exploration facility to know the present status of each room. User can search attainability of a doctor and the details of a patient using the id. Hospital Management System is designed for multispecialty hospitals, to balance a wide range of hospital a administration and management processes. It is a integrated end-to-end Hospital Management System that provides applicable information across the hospital to carry effective decision making for patient care, hospital administration and censorious financial accounting, in a seamless flow. Hospital Management System is a software product suite plan to improve the standard and management of hospital management in the region of clinical process inspection and activity-based costing. Hospital Management System authorize you to develop your organization and improve its success and quality of work. Managing the key processes efficiently is critical to the success of the hospital helps you manage your processes.

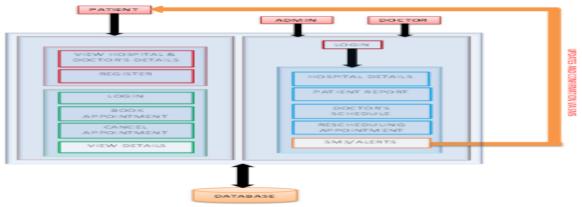


Fig 1. System Architecture

### II. EXISTING SYSTEM

Hospitals directly use a manual system for the management and maintenance of critical information. The current system requires many paper forms, with data stores broadcast through out the hospital management base. Often detail is incomplete or does not follow management standards. Forms are often lost in movement between departments



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requiring a inclusive auditing process to ensure that no vital information is lost. Many copies of the same information exist in the hospital and may lead to inconsistencies in data in various data stores.

### III. OBJECTIVE

Hospital are the important part of our lives, providing best medical facilities to people suffering from various illness, which may be due to change in weather conditions, increased work-load, emotional damage stress etc. It also is very ineffective and a time-consuming process. It is necessary for the hospitals to keep track of its day-to-day pursuit & records of its patients, doctors, nurses, ward boys and other staff personals that keep the hospital running easily and successfully. But keeping track of all the pursuit and their records on paper is very unwieldy and error prone. Examine the repeatedly increase in population and number of people visiting the hospital. Recording and maintaining all these records is highly undependable, ineffective and error-prone. It is also not economically & practically feasible to maintain these records on paper. We have evolved an automated sort of the manual system named as "Administration carries system for medical institutions".

The main point of our project is to provide a paper-less hospital up to 90%. The system also provides tremendous security of data at each level of user system interaction. System also provides very good security of data at every level of user-system interaction and also provides robust & reliable storage and aid facilities.

### IV. SCOPE OF THE PROJECT

The suggested software product is the Hospital Management system (HMS). The system will be used in any hospital, health center, dispensary or pathology labs. Clinic, dispensary or pathology to induce the knowledge about the patients and then storing that data for future. The current system is use in a paper-based system. It is too slow and cannot provide modernize lists of patients within reasonable timeframe. The aim of the system is to reduce over-time pay and increase the number of patients which will be treated accurately. Requirement declaration in these documents are both functional and non-functional

### V. NEED

This paper drawn the given system in JSP to automatic the process of day to day activities of Hospital like Room activities, Appointment of New Patient, Discharge of Patient, Allot a Doctor, and finally computerized the invoice etc. a) The full set of rules, regulations & procedures related to Hospital day to day venture and generate report is called "HOSPITAL MANAGEMENT SYSTEM". This project gives a idea related to automated Hospital activities. b) The following steps that give the detailed statistics of the need of proposed system are:

<u>Performance</u>: During last few decades, the hospital management system is has to maintain manual handling of all the hospital regular activities. The manual handling of the data is time consuming and highly prone to mistake. To increase the performance of the hospital management system, the computerized hospital management system is to be geared. The hospital management project is fully computerized and customer friendly even that any of the hospital staff can check the patient's and the doctor's details.

<u>Efficiency</u>: The basic need of the project is firm. The project should be capable for performing so that whenever a new patient is acknowledged, and they assigned a bed automatically and also doctor is assigned to the patient according to the patient's disease. And if patient is getting realised, the bed allot to him/her should automatically in the computer data.

<u>Control</u>: The complete authority of the project is under the hands of admin who has the password to access this project. All the authority is under the administrator/admin and the other members have the rights to see the whole records doesn't change any transaction or entrance.

**Security**: Security is the main criteria for the system. Since illcit accessing may corrupt the database of project and it will affects not only the hospital but also it affects the patient's life.



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# VI. RESULT

# a) Home Page

Performer: Any users

Flow:1. Any user can browsers this page.



Fig. 2 Home Page

# b) Admin login page

Performer: Admin users

### Flow:

- 1. Only admin user can browsers this page
- 2. Admin user can search all patient appointment.

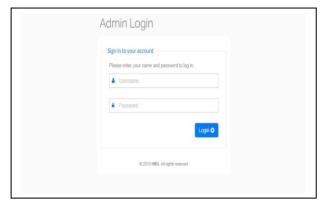


Fig. 3 Admin Login

### c) Admin user details page

Performer: Admin users

Flow:

- 1. Admin user can browsers this page.
- 2. Admin user can view all module here.

# d) Appointment History page

Performer: Admin users
Output: Appointment History.

Flow:

- 1. Admin user can browsers this page.
- 2. Admin user can view all appointment history

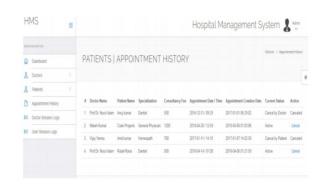


Fig. 4 Appointment History Page



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## e) User (Patient) login page

Performer: User.

Input: User email and PasswordOutput: User profile page.

Flow:

1. User Logs in with user email and password.

Alternate Flow:

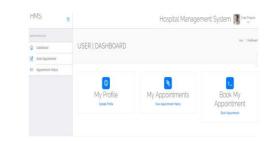


Fig. 5 User Patient login

1. If the user email is wrong then it is asked to login again.2. If the password is wrong then the user is asked to enter again.

# f) User account create page

Performer: User.

Input: User name, email, password and confirm password. Output: Create a new user and show user profile page.

Flow:

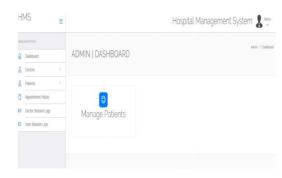


Fig. 6 User Account Page

- 1. Password must be more than 8 cheater.
- 2. Password and confirm password must be same Alternate Flow:

### g) User Details page

Performer: User.

Flow:

1. User must be fill up all input field.

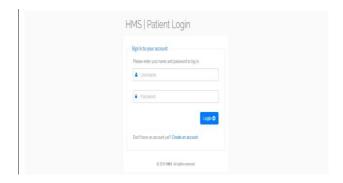


Fig. 7 User Details Page



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Alternate Flow:

### h) Doctor Login page

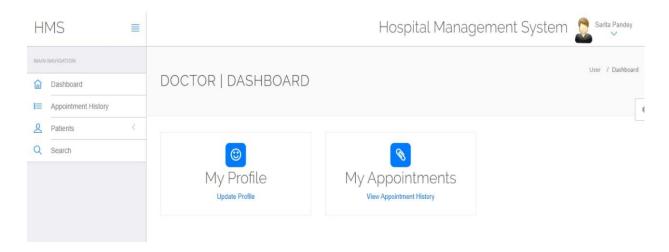


Fig. 8 Doctors Login Page

### I) Doctors detail page

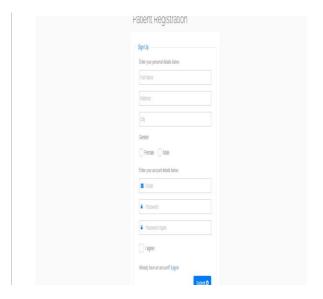


Fig. 9 Doctors Detail Page

### VII. CONCLUSION

Since the Hospital Management System is essential for maintaining detail about the Doctors, Patient, Hospital staff etc. We understand that by using of Hospital administrators would be able to significantly improve the operational control and thus streamline operational. Using this application we can retrieve patient's history with a one click. Thus processing information will be quick. It guarantees correct maintenance of Patient details. It easily reduces the book keeping task and thus reduces the human attempt and increases precision speed.



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