

Medi Tracker

Abstract

Every hospital needs an online system whereby it can accommodate the patients comfortably and avoid any confusion to the doctors regarding their work. There should be a system where the patients are categorized under insurance policy and non policy holders and the system helps the hospital management to claim the bills from concerned insurance companies. All these needs and much more are fulfilled in MediTracker.

MediTracker is useful to record patient's details along with the compliant. It also records the inpatient details and outpatient details and arranges the appointment of doctors. MediTracker also provides the management reports like schedules, appointments of doctors, inpatients, insurances and discharges. And also used to generate bills dynamically for the discharged patients etc. □ The administrative user can create new users and change their passwords. He can add the doctor's information as well as new doctor's details. He can add information related

to inpatients, outpatients, rooms availability, billing and insurance information. The administrator can view the management reports. The doctors can change their own passwords. He can view his own appointments and information of inpatients and outpatients for any day.

Existing System

The following are the disadvantages of current system

1. It is difficult to maintain important information in books
 2. More manual hours need to generate required reports
 3. It is tedious to manage historical data which needs much space to keep all the previous years ledgers, books etc
 4. Daily admissions of patients are to be entering into different books immediately to avoid conflicts which are very difficult
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Proposed System

Proposed system is a software application which avoids more manual hours that need to spend in record keeping and generating reports. This application keeps the data in a centralized way which is available to all the users simultaneously. It is very easy to manage historical data in database. No specific training is required for the employees to use this application. They can easily use the tool that decreases manual hours spending for normal things and hence increases the performance. As the data is centralized it is very easy to fix an appointment of doctor with a patient immediately.

Advantages:

The following are the advantages of proposed system

1. Easy to manage all the daily admissions of patients and appointments of doctors.
2. Can generate required reports easily
3. Easy to manage historical data in a secure manner
4. Centralized database helps in avoiding conflicts
5. Easy to use GUI that does not requires specific training.

Scope of the System

The proposed system scope is limited to Intranet only. In future it can be enhanced to be a global communication medium for different Hospitals. We can also implement internationalization (i18n) to support user interface in various/local languages.

Module Description

The system “**Meditracker**” consists of 4 modules

1. Admin Module
2. Doctor Module
3. Rooms Module
4. Discharges & Insurance Module

Admin Module:

The Administrator can enter the all the details of the Doctors details and all the information related to the hospital management .he can enter rooms information ,patients information,appointment Information ,insurance information . he can view all the users and all the information related to The hospital

ROOMS MODULE:

This module deals with major and crucial part that includes the details of available rooms in the hospital for inpatients. This module provides interface to add the rooms and can be viewed as a report that displays all the empty rooms and reserved rooms and it can also shows the different

types of rooms available in the hospital. Basically some categories of rooms are available in the hospital. Whenever the patient admits in the hospital, the admin user or the manager will fill the admission form of the patient. If the patient wants to join as an inpatient then it will display availability of the rooms in some categories. According to the availability, the patient can chose the room. Rooms description, Visiting hours for the patient's relatives this type of information will be displayed in the rooms list. Only admin user and the manager can view details of all rooms, rooms availability information, and they can allot the new rooms for the patients.

Doctor Module

This module maintains all the information, which belongs to the employees who are working with the Hospital. This module maintains the details all the four types of users. This module separately maintains the information of different departments. This can be maintaining Admin, Manager, Doctors, and Accountants. All the employees' details are recorded to database and can be viewed as a report.

This module maintains all the information of doctors in the hospital. All the doctors' details are recorded to database and can be viewed as a report that displays the schedules of doctors. The admin user, manager, and doctor can view the details of all the doctors.

Discharges & Insurance Module

This module deals with major and crucial part that includes discharges of inpatients and updates the rooms' status as empty after discharge of the patient. And also it can give all the information related to the insurance of the inpatient.

Features to be implemented

- *Session management*
- *Connection pooling*
- *Normalized database*
- *Prevention of duplication login*
- *Design patterns*
- *Three-tier architecture*
- *Maintainability*
- *Easy deployment with Ant script.*
- *Exception handling*
- *Client-side validations*

Technologies to be used

- *Web Presentation: HTML, CSS*
- *Client – side Scripting: Javascript*
- *Programming Language: Java*
- *Web based Technologies: JNDI, Servlets, JSP*

