

Hospital Management System

Features for the browser based Hospital Automation System.

- ▶ Registration.
- ▶ Patient Check In / Check Out.
- ▶ Laboratory / Pathology Automation.
- ▶ Inventory System.
- ▶ Food Department Automation.
- ▶ Medicine.
- ▶ Patient Record Maintenance.
- ▶ Staff Record Maintenance.
- ▶ Staff Payroll System.
- ▶ Doctor Consultant.
- ▶ Laundry Maintenance System.
- ▶ Emergency Services.
- ▶ Operation Room / ICU Maintenance.
- ▶ In-house Mailing System.
- ▶ Blood Bank Maintenance System.
- ▶ Database of Blood Donors / Blood Group.
- ▶ Billing System.
- ▶ Communication of different Group Hospitals (If Any) through Internet.
- ▶ News forum for flashing news, articles and important meetings.
- ▶ Infrastructure Maintenance.
- ▶ Medical Equipment Maintenance.
- ▶ Integration of various disciplines.
- ▶ Web Sites for the Hospitals & its Features.

Following are the details of the features the system provide:

- ▶ **Registration:** On the system the user are able to register according to its hierarchy, so that a username and password will be provided to the user in order to login to the system. The user database and records are maintained by the system and also you can add, update and delete the records from the system with proper privileges. (Depending of the user i.e. reception, stores, etc).
- ▶ **Patient Check In / Check Out:**

For In-Patient (IPD): If the new patient gets admitted to the system then a unique record is generated for each patient and patient details along with the room reservation and its case papers and other details will be stored in the system. And also room Allotment is taken care. Once patient gets a discharge then his check out from hospital along with the billing details will be taken care of by the system.

For Out-Patient (OPD): If the new patient visits the Doctor in OPD, the system then generate a unique record for each patient and patient details along with the its case papers and other details are stored in the system. Billing details are also taken care of by the system.

- ▶ **Laboratory / Pathology Automation:** The system keeps track of the laboratories in the hospital. The equipment purchasing, inventory and billing of the purchase will be maintained by the system. The system keeps track of the tests performed on different patients and its records will be maintained by the system.
- ▶ **Inventory System:** The system keeps track of all the inventory of the hospital, which may include various departments such as pharmaceuticals, food and laundry department to name the few. Stock & vendor details are maintained by the system. The invoice, purchase orders, purchase requisitions is generated by the system and detail reports of each transaction will be maintained.
- ▶ **Food Department Automation:** The system keeps track of all the activities related to food department. If some patients are kept on the prescribed diets then it will be informed to the department automatically. Also it keeps track of all the other activities related to this department.
- ▶ **Medicine:** The pharmaceutical department is a very important part of the hospital. The system keeps track of the inventory. The patient prescription details and the information about the category-wise medicines are stored. The system will inform the user in advance in case of the storage updating and inventory maintenance. The records for each patient and its bill will be maintained by the system and it will be added to the patient bill when he will be discharged.
- ▶ **Patient Record Maintenance:** The system maintains a detail record of each patient who will be admitted to the hospital. The patient case papers will be generated automatically and will be maintained in proper format. Whenever a regular patient will visit hospital his complete diagnosis chart along with case papers will be provided by the system. Also patient will be able to view his information and diagnosis details online by logging on to the system on the internet which will be of great help to patient as well as there family doctors.
- ▶ **Staff Record Maintenance:** The system keeps track of the entire staff of the hospital. The details of each and every staff (User) will be maintained online and a username and password will be provided to concern users so that they can log on to the system and perform activities related to there concern department. Also a user with proper access and rights is provided and can add, delete and modify records of the existing users to the system.
- ▶ **Staff Payroll System:** The system maintains the entire payroll system of the hospital. The staffs pay slips as well as addition and deduction to their salaries are maintained by the system. The system also keep track of the staff 's paid and unpaid leaves.
- ▶ **Doctor Consultant:** The system will provide a forum for the senior as well as junior doctors so that they can consult with each other online. It will be of great help for the doctors, surgeons and practice students to keep track of there activities and schedules as well as it will save a lot of time of users since they can consult, communicate and share information online.
- ▶ **Laundry Maintenance System:** Since the hospital has a large number of patients coming in and out everyday hence there is a large overhead on laundry department also. The system keeps track of different activities in this department and will notify to the user regarding information online and will also keep track of the inventory.
- ▶ **Emergency Services:** There are some emergency services related to the hospital such as ambulance and organ donation, blood donation, etc. The system keeps track of all these activities online and will prepare detail reports of these activities.
- ▶ **Operation Room / ICU Maintenance:** The system keeps track of the different critical patients and operation performed. Special reports will be maintained for the patients in ICU and the records of the operations performed on them will be maintained. The extra charges and special allowances charged to patients in this category will also be taken care of.
- ▶ **In- house Mailing System:** This is a special feature provided by the system. Since the system is browser based it makes it that much simpler to keep track of different entities online. A special mail server, which will be dedicated to the system, will be maintained on through which the total mailing system will work. The mailing system will help doctors and other users to communicate each other online as well as keep track of there busy schedule. They can also call online meetings and will be able to chat online with each other through there own identity.

- ▶ **Blood Bank Maintenance System:** The system keeps the track of blood bank. It will generate automated reports keeping track of inventory for stock of bloods for different blood group their Expiry. The system will make it much easier for the user to keep track of different activities in the blood bank.
- ▶ **Database of Blood Donors / Blood Group:** The system will maintain a detail database of different blood donors according to their blood group. When a need will arise for a certain group of blood donors then the system will produce name and other contact details of the blood donors related tot that particular blood group. It will make it easier to contact them in emergency situation.
- ▶ **Billing System:** The entire billing system for the patient will be automatically created. It will include the expenses of all kind and in the end when the patient gets a discharge the entire bill will be generated automatically. The bill will contain all the expenses, which should be charged to the patient for the period for which he was admitted to the hospital. Out Patient Billing is also taken care-of
- ▶ **Communication of different Hospitals through Internet:** The system will provide a platform through which all the hospital will be connected to each other through internet. It will make it easier to communicate for the management and other top officials to each other through this channel.
- ▶ **News forum for flashing news, articles and important meetings:** The system will also provide a sort of 'Discussion Forum' to the users of the system through which they can communicate to each other. They can post articles and other important news related to their organization and field. They can convey important news to all the others in the organization through this channel.
- ▶ **Infrastructure Maintenance:** The system keeps a detail record of the existing infrastructure and its record. All the assets and liabilities will be kept well maintained and any addition or removal will be kept updated.
- ▶ **Medical Equipment Maintenance:** The total medical equipment maintenance will be taken care of. The items included will be disposable, non disposable equipments and their proper maintenance.
- ▶ **Integration of various disciplines:** All the disciplines of hospital such as Gynecologist, Orthopedic etc. will be properly co?ordinate by the system through a common channel and a specialized interface so that there will be proper communication between these entities.
- ▶ **Proposed Web Sites for the Hospitals & its Features:** Along with the system we also propose a web site for the hospital, which will enable the organizations to project themselves on global scale and keep up?to?date with today's latest technology. Also it provides a good advertising platform for projecting the organization worldwide. The web site will contain following features:
 - ▶ Detail information of the hospital and its history.
 - ▶ Health tips for the visitors.
 - ▶ Online health related problem solving by the experts.
 - ▶ Online registration for the visitors to get notified for the various function and activities performed by the organization through out the year.
 - ▶ Health related news.
 - ▶ Online panel of experts and their comments.
 - ▶ Mailing system for the users who are seeking information.