

Abstract

Hospitals currently use a manual system for the management and maintenance of critical information. The current system requires numerous paper forms, with data stores spread throughout the hospital management infrastructure. Often information (on forms) is incomplete, or does not follow management standards. Forms are often lost in transit between departments requiring a comprehensive auditing process to ensure that no vital information is lost. Multiple copies of the same information exist in the hospital and may lead to inconsistencies in data in various data stores.

A significant part of the operation of any hospital involves the acquisition, management and timely retrieval of great volumes of information. This information typically involves; patient personal information and medical history, staff information, room and ward scheduling, staff scheduling, operating theater scheduling and various facilities waiting lists. All of this information must be managed in an efficient and cost wise fashion so that an institution's resources may be effectively utilized HMS will automate the management of the hospital making it more efficient and error free. It aims at standardizing data, consolidating data ensuring data integrity and reducing inconsistencies.

Project Overview

The Hospital Management System (HMS) is designed for Any Hospital to replace their existing manual, paper based system. The new system is to control the following information;

Outdoor patient details (OPD)

Internal patient details (IPD)

Pharmacy

Pathology management

OT management

Word management

Expenses

Administrator management

Settings

Fixed asset

Accounting

Human resources

Account

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Existing System

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Proposed System

The Hospital Management System (HMS) is designed for Any Hospital to replace their existing manual, paper based system. The new system is to control the following information;

Outdoor patient details (OPD), Internal patient details (IPD), Pharmacy, Pathology management, OT management, Word management, Expenses, Administrator management, Settings, Fixed asset, Accounting, Human resources, Account.

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Features:

1. Outdoor Patient Details

- i. Patient Appointment:
Here, You can entry patient details like their name, address, phone number, age. When a patient call for booking their serial number to visit a doctor then you can input this information here.
- ii. View and Print Appointment:
Here you can watch all entry of appointment with details and you can print it.
- iii. Pathology Test:
When Doctor gives some test then you can input the test details here.
- iv. Test Report Delivery:
After completing pathology test you can deliver the report with the account clearance.

2. Internal Patient Details

- i. Patient Admission:
When patients want to admit in your hospital then you have to save their details. Here you can store all information about your patient
- ii. Pathology Test Requisition:
Here you can save all pathology test and report with patient details.
- iii. Medicine Requisition:
You can input all medicine that doctor prescribed and given the patient here.
- iv. Health Equipment Requisition:
You can entry Health equipment like oxygen, vaccine, etc here.
- v. Patient Discharge:

When a patient discharge from your hospital then you can store their current condition and preferred to next doctor or hospital. All data has been saved here for future safety.

vi. Discharge Prescription:

Normally when a patient get release form a hospital then they get a last prescription for their future needs. It also you can store here.

vii. Admitted Patient List:

Here you can see all admitted current patient list with their category like heart, accident, medicine, pregnant, orthopedic etc at a glance and if you want then you can watch with the details of all patient.

viii. Discharge Patient List:

This is a list of discharge patient. You can search here for last 7 days patient and 1 month and total number of patient list.

3. Pharmacy

i. Sale Medicine:

You can input all selling information like price, name, company, and you can print it for the customer.

ii. Buy Medicine:

When you buy medicine from dealer or company then you can save them here.

iii. Save Medicine:

All medicine details with their history company everything you can save here.

iv. Update Medicine:

If you need any update for medicine then you can change your medicine information like price, name and any other things.

v. Purchased Medicine:

When you purchase medicine then you can add them here for future purpose.

vi. Sold Medicine:

Which medicine you sold already you can see them here with details.

vii. Medicine Storage:

You can see how much medicine you have now in your store.

viii. Require Medicine:

If you need any medicine for next day and which medicine customer wants but you can't give them you can store them here.

ix. Save Medicine Type:

Every medicine has its type; you can save them with their type here.

x. Save Medicine Company:

You must be connected with some company. Here you can input all company information with their dealings.

xi. Save Medicine Supplier:

You have some medicine supplier. All supplier details are saved here.

xii. Required Medicine Print:

Which medicine you need for future you can print them to buy them from this option.

4. Pathology Management

i. Save Pathology Test:

All pathology tests are saved here with patient details.

ii. Pathology Test List:

You can see here all pathological lists at a glance.

iii. Set Test Schedule:

You can fix time schedule for test. Morning shift or evening shift.

iv. Payment Receive:

You can receive payment for test in this option.

- v. Report Delivery:
You can find all patients report and deliver to them with printing facility.
- vi. Purchase Ingredient:
if you need to buy some ingredients for your lab then you can input them here.

5. OT Management

- i. Book OT:
When you want to book OT for the operation you can book OT from here which verified with date and time.
- ii. Clean OT:
We know OT is very sensitive place. So for OT cleaning is the matter for a hospital that's why we keep this option for ensure of OT cleaning.
- iii. Update OT:
If you need to update any information of OT then you can change or update anything from this option.
- iv. Open New OT:
When you want extension or move OT or Open a new OT to another floor then you can input all details about your new OT.

6. Word Management:

it's all about word information like duty doctor, nurse, worker, patient, store keeper.

7. Expenses:

This is an option for all expenses of your hospital. Like flat rent, electricity bill, employee expense etc.

8. Administrator Management

- i. Add Doctor:
Admin can appoint a new doctor with their all details.
- ii. View Business Condition:
This is only accessible for the admin. You can check your business condition any time.
- iii. Call Meeting:
When admin needs to call a meeting then he can call a meeting via this option. Admin can send mail or notification to all or specific person.
- iv. Meeting Calendar:
Admin can see the whole schedule calendar at a glance.

9. Settings:

It is the option for all setting of your software.

- i. Invoice
- ii. Profile

10. Fixed Asset

- i. Purchase Asset:
If you need to buy some ingredients like bed, cloth, electric device. Most of all which product is stable and permanent asset for your hospital. You can save them with purchase history.
- ii. Sale Asset:
When you realize that your product is getting old and you have to sell them then you can select your product and sell them.
- iii. Present Asset:
All present asset list is here. You can see all existing asset at a glance.

11. Accounting

- i. Create Group
- ii. Create Ledger
- iii. Journal Voucher
- iv. Payment Voucher
- v. Receive Voucher
- vi. View and Report
 - a. Trial Balance
 - b. Balance Sheet
 - c. Ledger Book
 - d. Income Statement
 - e. Payment Receive Statement

12. Human Resource

- i. Add Employee:
If you need to appoint new employee for your hospital then you can save all data of that new employee.
- ii. Remove Employee:
When you want to remove any employee then you can delete all data from database.
- iii. Pay Salary:
You can save all salary payment details.
- iv. Pay Bonus:
All bonuses are calculated and save here.
- v. Apply Leave:
If any employee needs a vacation or leave then they can apply here.

vi. Leave Summary:
Here you can see the reason of employees leave.

vii. Leave Summary All:
You can see all leaving person with their details here.

13. Account

i. Log Out:
After doing all job you have to log out form here.

ii. Change Password:
If you feel insecure then you can change your password.

iii. Recover Password:
If you forgot your password then you can recover it with your valid mail and phone number.

iv. Create Password:
If you need you can create password in every field.

v. View User:
You can see all user of this app at a glance.

vi. Assign Roles:
You can assign all employees post and role that helps to give promotion to your employee.

vii. Create Role:
If you need a new post or role for developing your business, you can assign here.

viii. View Roles:
What you create and what you appoint every role you can see here.

ix. Assign Permission To Role:

Stakeholders of this software:

1. Hospital Owner/Chairman
2. Admin Panel
3. Doctor
4. Receptionist
5. Pharmacist
6. Nurse
7. Store keeper
8. Pathologist
9. Accountant
10. Employee
11. Computer Operator

System Specification

Hardware Requirements

Processor: Core i3 to above (4th gen to above)

RAM: 4gb

Hard Drive: 10gb

Software Requirements

Operating System: Windows 7 to above

Programming Language: .NET

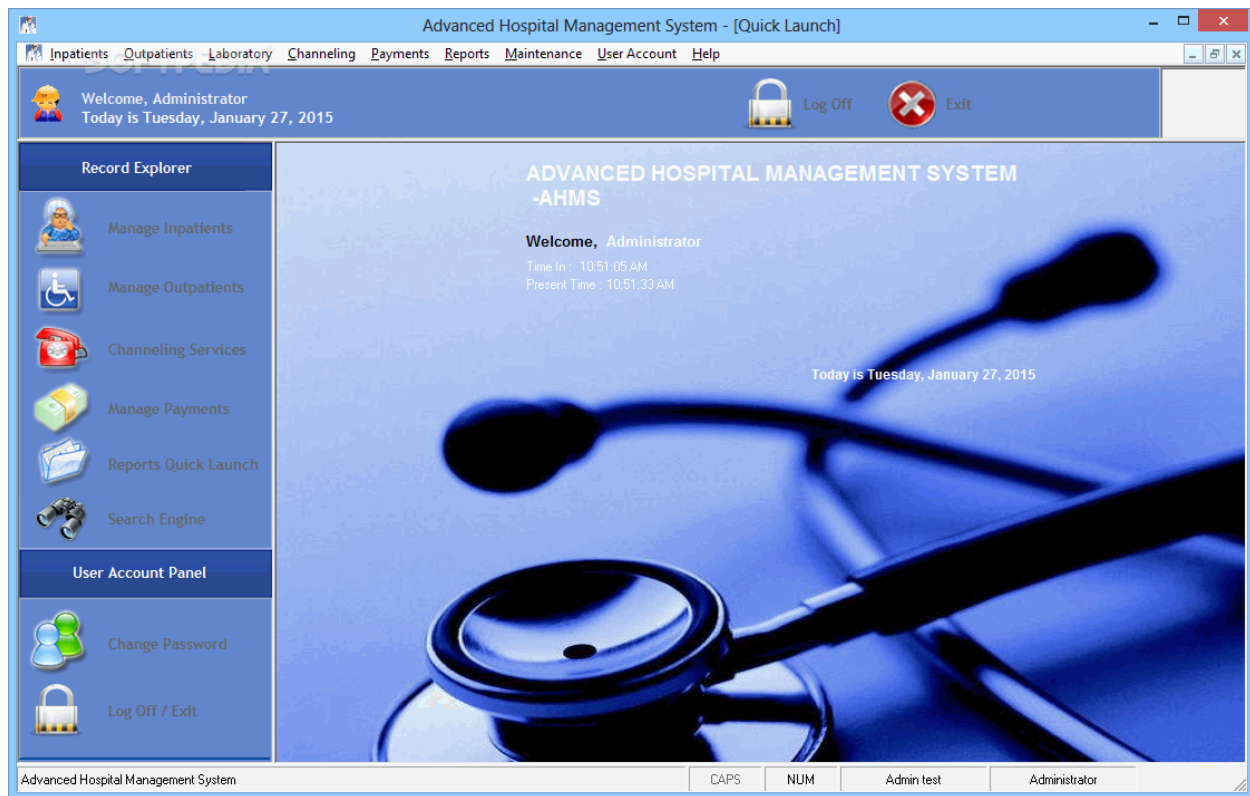
Web Technology: ASP.NET

Front-end: C#.NET

Back-end: SQL server

Web server:

Your Software as like as:



Use case