HOSPITAL MANAGEMENT SYSTEM

MINOR PROJECT SYNOPSIS

BACHELOR OF TECHNOLOGY.

Information Technology

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1. Introduction

The project Hospital Management system includes registration of patients, storing their details in the system, and also computerized billing in the pharmacy, and labs. The software has the facility to give a unique id for every patient and stores the details of every patient and the staff automatically. It includes a search facility to know the current status of each room. Users can search for the availability of a doctor and the details of a patient using the id.

The Hospital Management System can be entered using a username and password. It is accessible either by an administrator or receptionist. Only they can add data to the database. The data can be retrieved easily. The interface is very user-friendly. The data are well protected for personal use and make the data processing very fast. The purpose of the project entitled "HOSPITAL MANAGEMENT SYSTEM" is to computerize the Front Office Management of Hospital to develop software that is user friendly, simple, fast, and cost-effective. It deals with the collection of patient information, diagnosis details, etc.

Traditionally, it was done manually. The main function of the system is to register and store patient details and doctor details and retrieve these details as and when required, and also to manipulate these details meaningfully System input contains patient details, and diagnosis details; while system output is to get these details on to the CRT screen.

A form is a major part of the Visual Basic application, which allows the user to enter the data as well as view the result. Control is an object that we draw on a form to enable or enhance user interaction with an application. Hence a Visual Basic application is a combination of objects like forms and controls, procedures that can respond to Events and other general-purpose procedures. Event procedures are where we do the actual computer programming and are saved with the form in the file with the firm extension. These procedures are where we write BASIC language statements. You will learn a lot of programming and BASIC language in this course. The BASIC you will learn is very similar to the original BASIC used by Bill Gates and Paul Allen when starting Microsoft.

ADVANTAGES

- It is fast, efficient and reliable

- Avoids data redundancy and inconsistency

- Very user-friendly

- Easy accessibility of data

- The number of personnel required is considerably less

- Provides more security and integrity to data

2. Objectives

The main objectives of a Hospital Management System are:

- Design a system for better patient care.

- Reduce hospital operating costs.

- Provide MIS (Management Information System) report on demand to management for better decision making.

- Better co-ordination among the different departments.

- Provide top management a single point of control

3. Feasibility study

For healthcare practices, in particular, the feasibility study by the healthcare consultants comprises of a short description of the new service or healthcare center, local marketing analytics, legal requirement, taxation obligations, healthcare policies and the financial data. The ideal feasible study elevates the potential of the project and its success level on a realtime scale. The feasibility professionals from the experienced consulting firms could help you in providing the feasible study with accuracy. In addition, these results are also perceived as the driving factors for the investors to invest in the project.

The Benefits Of Conducting A Hospital Feasibility Study

- Broadening the scope in order to identify the new opportunities

- Enhances the resources skills while anticipating the challenges

- Helps in narrowing down the potential risks and in finding solutions

- Most importantly, identifies the outcome of the project with utmost accuracy

Here are the areas that a healthcare consultant could help you in deriving the accurate data with effective feasible study.

Financial Feasibility – The assessment typically analyzes the economical scope of the project including the investments and the return on investments and the time it would take to reach the set target. The healthcare analysts will help the management in allocating the resources and selectively invest on the different aspects of the project where the outcome has greater scope.

Operational Feasibility – The study involves recognizing and streamlining the operations in order to make them function seamlessly. The experienced healthcare consultants study the operational feasibility as on how effectively the operations could be structured. This plan includes identifying and finding solutions for the bottlenecks, loopholes, functional gaps and, internal and external communication challenges.
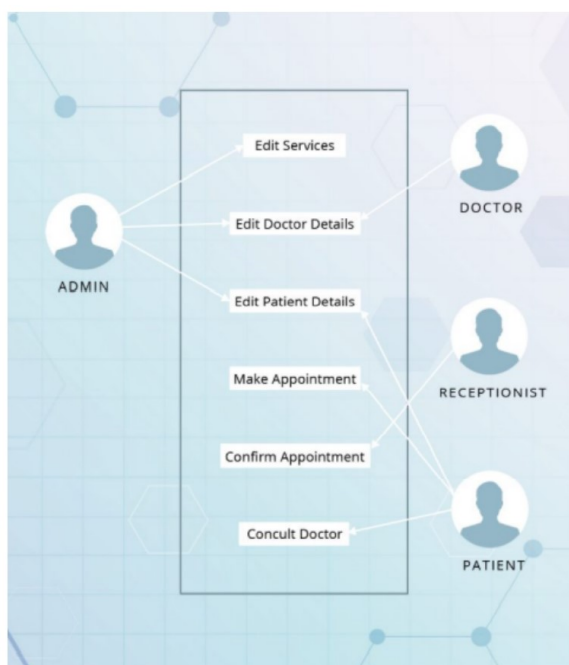
Technical Feasibility – Focusing on the development of the technical aspects is imperative for healthcare success. The professionals will help the management in determining whether the technical resources are on par with the industry and the skill-set of employees is capable enough to make full use of the technical support. This also involves evaluating the healthcare equipment that includes medical equipment, hardware, software and all other electronic communication mechanism and listing the requirements from the perspective

Legal Feasibility – The healthcare practices in India and allover the world are expected to follow their own guidelines that have been provided by their respective government bodies. The healthcare legal experts from the consultancies support the management in legal feasibility study that includes whether the hospital policies are compatible with the local law, the infrastructural and operational aspects are complimenting the guidelines and the medical qualification of the staff in order to provide medical care as per law. Besides, the healthcare consultants also help in getting all the required paperwork done. Every healthcare project involves time, investment and resources and feasibility study ensure that the management has a clear idea in order to invest right in the right time. The advanced analysis and exact scenario of the future market will always help in taking the right steps, avoiding any moments that are uncertain for the objective of the practice.

4. METHODOLOGY/PLANNING OF WORK/DATA FLOW

HMS was introduced to solve the complications coming from managing all the papers works of every patient associated with the various departments of hospitalization with confidentiality. HMS provides the ability to manage all the paperwork in one place, reducing the work of staff in arranging and analyzing the paperwork of the patients. HMS does many works like:

- Maintain the medical records of the patient

- Maintain the contact details of the patient

- Keep track of the appointment dates

- Save the insurance information for later reference

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Appointment Management
For hospitals having their own site, appointment widgets will be integrated onto the site. Patients visiting the hospital's website can book online appointments with ease.

Billing Management
Integrated Billing with treatments, Lab and Radiology. Alerts will be sent on Discount Authorisation. Automatic due capture, Option to bill before and after consultation.

Prescription Management
Manage commonly and recently used medicines. Option to show medicines available in the pharmacy. SMS prescriptions to Patients. Discharge Summary Template based Discharge Summary. ICD10 integration. Option to prevent discharge summary till IP bill is closed.

Operation Theatre Management
Automatic notification can be sent to customers on test results. Lab notifications like email, SMS
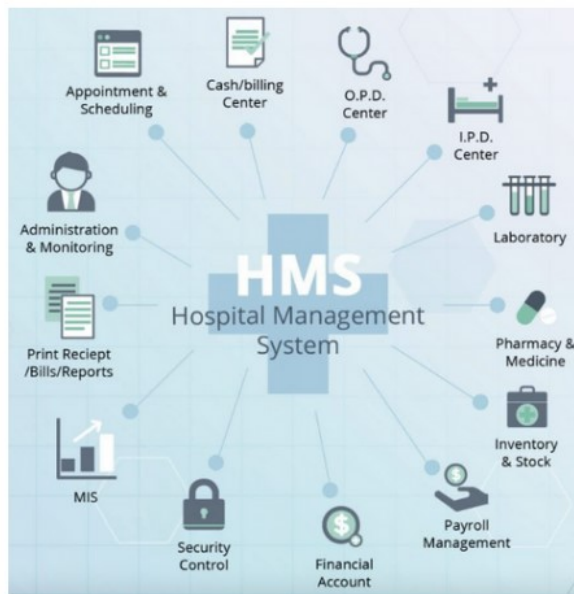
of the test reports sent from the Automated Lab notification module.

Pharmacy Management

Comprehensive Pharmacy Management handles stock, Prescription Integration, Ward Request, Stock Management, Stock Moment and intelligent reports.

Lab Management

Comprehensive Lab Management handles complete order management, Custom Reports, Smart Notifications, Credit Settlement, detailed MIS Reports, Analytics and App for Phlebotomist.

5. FACILITIES REQUIRED FOR PROJECT WORK

Hardware Requirement		
Processor	RAM	Disk space
GHz or faster 1.6 processor	1GB of RAM (1.5 GB if running on a virtual machine)	RPM hard drive and 5400 5 GB of available hard disk space

Table (1.1): Hardware Requirement

Software Requirements		
Operating System	Database	User Interface design
Windows XP, Windows 7 Windows 8, Windows10	Microsoft SQL Server Management studio ,SQL Client	Visual studio 2013, NET Framework 4.5

Table (1.2): Software Requirement

6. References

We take references for this project from- Herbert Scheldt, java

- Complete reference, fifth edition, Tata Mc Graw Hill.

- https://en.wikipedia.org/wiki/NetBeans

- "MySQL 8.0 release notes". MySQL.com retrieved- 29 July 2019