**HOSPITAL MANAGEMENT SYSTEM**

**A PROJECT REPORT**

***Submitted by***

**Himanshu Kumar Tiwari (201500295)**

**Subham Sinha (201500708)**

**Vaishnavi Singh (201500768)**

***in partial fulfilment for the award of the degree of***

# BACHELOR OF TECHNOLOGY

In

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**DECLARATION**

I, Himanshu Kr. Tiwari, Subham Sinha and Vaishnavi Singh hereby declare that the work which is being presented in the Mini Project on the topic **“HOSPITAL MANAGEMENT SYSTEM”** is the authentic record of our own work carried under the guidance of Mrs. Ruchi Talwar.

**Date: Signature: 26/04/2023**

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## “*Acknowledgement is the only way to keep love alive."*

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## Himanshu Kumar Tiwari

## (201500295)

Subham Sinha

(201500708)

Vaishnavi Singh

(201500768)

## CERTIFICATE

## This is to certify that this dissertation entitled “HOSPITAL MANAGEMENT SYSTEM ” who carried out the work under my supervision. This is to further certify to the best of my knowledge that this Project Report has not been carried out earlier in this institute and university.

## 

## Signature: Signature:

## Himanshu Kumar Tiwari

## (201500295)

## Mrs. Ruchi Talwar Subham Sinha (201500708)

## Vaishnavi Singh

## (201500768)

## Certify that the above mention Project Report has been duly carried out as per the norms of the college and the statutes of the university.

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## ABSTRACT

Hospital information system is the arrangement of necessary, precise and appropriate data, the hospitals should ensure the system work and can be accessed at any time. The online hospital management system and desktop (on-premise) solutions are possible options of the healthcare providers. This could be a unique system for the certain institution, chain of clinics, state hospitals or even the international medical organizations. It is usually started with the basic version that can be scaled up. Hospital Management System is a system enabling hospitals to manage information and data related to all aspects of healthcare – processes, providers, patients, and more, which in turn ensures that processes are completed swiftly and effectively. When one thinks of the various aspects and departments of a hospital, it becomes apparent that an HMS is critical.

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**INTRODUCTION**

The hospital management system (HMS) is an integrated software that handles different directions of clinic workflows. It manages the smooth healthcare performance along with administrative, medical, legal and financial control. That is a cornerstone for the successful operation of the healthcare facility.

**OBJECTIVE**

The main objective of the Hospital Management System is to manage the details of Hospital, Doctor Employee Test Medicine. It manages all the information about Hospital Patient Medicine Hospital The project is totally out at administrative end and thus only the administrator is guaranteed the ac cess. The purpose of the project is to build an application program to reduce the manual work for managing the Hospital Doctor, Patient, Employee tracks all the details about the Employee Test, Medicine.

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### **KEY FEATURES**

### **Operation Theatre Management**

Surgeries are long and tedious and a hospital must know the schedule of surgeries, to avoid overbooking and ensure availability of the required surgeons, other doctors and operation theatre staff.

### **Lab Management**

Maintain accurate accounts of tests, payments received, report generation dates, patient information, customized reports, timely notifications to patients and laboratory staff, and detailed MIS reports – all through one Hospital Management System.

### **Patient Management**

With faster, secure, and easy data retrieval, a hospital/healthcare facility would be able to provide better and efficient care to the patients.

### **Supply Management**

With efficient hospital management systems (HMS), hospital management can track and manage supplies more efficiently and set up better purchasing contracts with suppliers.

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### **Billing Management**

Given the large numbers (in all respects) that any hospital needs to manage, a great feature of Hospital Management System is to help keep track of billing aligned with treatments, tests, and doctor fee.

### **Facility Management**

A comprehensive Hospital Management System will enable the addition of several branches across locations of the hospital. This ensures that patients can visit any branch for treatment.

### **Appointment Management**

Appointment scheduling is one of the most tedious processes in a hospital. With the help of a Hospital Management System, an appointment widget is easily added to the hospital’s website.

### **Staff Management**

HMS helps in the management of employees across different locations of a particular hospital/healthcare facility. Every aspect related to an employee is captured here- date of joining, designation and department, insurance details, leave and absence status, salary and benefits details, authorization level, and other information.

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**Modules**

* Registration module: Provides a registration from to the user to fill his/her details. And provides the user-“user-id” and “password” on successful completion of the registration.
* Login module: validates the user id and password from the database.
* Appointment module: provides the appointment option to choose from.
* Profile module:Enable the user to view his/her information .
* Logout module: provide the logout facility to the user.
* Database module:Manage all the database related operations.

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**Working Methodology of the Project**

Working methodology of the Hospital management system is that it is capable of generating regular reports of the tracked data including healthcare, staff efficiency, finances, [inventory](https://smallbusiness.chron.com/advantages-inventory-control-healthcare-organization-3201.html), and facility utilization, etc. This greatly helps the clinic authorities in making reasonable policy decisions. Therefore, any of these functions are designed to make the clinic management system easy to use, comprehensive, powerful and reliable.

It allows to have the accurate schedule of each employee, manage your facility abilities and the supply chain in order to meet all the needs of the patients. It helps to arrange the appointments for both the staff and patients’ convenience.

Another function is connected with managing finances. The hospital accounting software estimates the patients’ payments. It might remind the bank account.

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**Tools to be used in development**

* Front-end development: REACT, HTML, CSS, BOOTSTRAP and JAVASCRIPT.
* Back-end development : NODE JS, EXPRESS JS
* Database : MYSQL (Workbench)

**System Specification**

**Minimum Hardware Requirements:**

* Processor: Pentium(R) dual-core CPU 20GB hard disk space.
* 512 MB RAM for windows Xp/windows7/windows8.

**Software Requirements:**

* Windows, MYSQL should be installed to run the website using/localhost.
* Web browser: Google chrome/Mozilla Firefox/Internet Explorer9 etc.

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**CONCLUSION**

Taking into account all the mentioned details, we can make the conclusion that the hospital management system is the inevitable part of the lifecycle of the modern medical institution. It automates numerous daily operations and enables smooth interactions of the users.

Developing the hospital system software is a great opportunity to create the distinct, efficient and fast delivering healthcare model. Implementation of hospital management system project helps to store all the kinds of records, provide coordination and user communication, implement policies, improve day-to-day operations, arrange the supply chain, manage financial and human resources, and market hospital services. This beneficial decision covers the needs of the patients, staff and hospital authorities and simplifies their interactions. It has become the usual approach to manage the hospital. Many clinics have already experienced its advantages and continue developing new hospital management system project modules.

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**REFERENCES**

* YouTube
* Stack OverFLow

**FACULTY GUIDELINES**

Ms. Ruchi Talwar

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