A
RESEARCH
REPORT

ON

HOSPITAL MANAGEMENT SYSTEM

SUBMITTED TO:

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SUBMITTED BY

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<u>CERTIFICATE</u>

This is to certify that the below mentioned first year engineering students have carried out the necessary research report work on "**HOSPITAL MANAGEMENT SYSTEM**" in the department of Computer Engineering, Chitkara University, Rajpura, Punjab. They have completed this project work under my guidance in satisfactory manner on December 2022 of first year engineering. The performance of each of these students during the course was very good.

DATE:

Dr. Sunil Gupta

Guide

ACKNOWLEDGEMENT

Apart from the effects if all the team members, the section of this project report topic depends largely on the encouragement and guidance of our mentor. We take this opportunity to express our gratitude to the mentor who have been instrumental in the approval of this project topic.

We would like to show our greatest appreciation to **Dr. SUNIL GUPTA.** We cannot thank them enough for their tremendous support and help. They motivated and encourage us very time while selecting the proper project topic. Without their encouragement and guidance, we would not have able to select the proper topic.

The contribution and support from all the team members including **Shiven Narang, Shivansh Sharma, Sneha Pal** is vital. The team spirit shown by all has made a research report work successful.

ABSTRACT

The purpose of the project entitled as "Hospital Management System" is to computerize the front office management of hospital to develop software which is user friendly simple, fast, and cost effective. The main function of the system is register and store patient details and doctor details and retrieve these details as and when required and also to manipulate these details meaningfully. Traditionally, it was done manually. The Hospital Management System can be entered using a username and password. It is accessible by an Admin, Doctor, & Receptionist. Only they can add data to the database. The data can be retrieved easily. The data are well protected for the personal use and makes the data processing very fast.

Government of India has still aimed at providing medical facilities by establishing hospital. The basic working of various hospitals in India is still on paper as compared to hospital in European countries where computer have put in to assist the hospital personals their work. The concept of automation of the administration and management of hospital is now being implemented in India also, with large hospital like APPOLO and AIIMS in Delhi, ESCROTS in Chennai, having automated their existing system.

Computers are not only used to increase the efficiency in all fields ranging from fixing the appointment with the Doctor to keeping the records of the patient.

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1.INTRODUCTION

Health of citizen is the wealth of nation. India has contributed the most ancient medical science "ayurveda" to the world besides other medical sciences. this field has witnessed a rapid metamorphosis in all of its sections. hospital management system is designed to improve the quality and management of hospital in the areas of clinical process analysis and activity-based costing. Hospital management system enables you to develop your organisation and improve its effectiveness and quality of work. Managing the key processes efficiently is critical to the success of the hospital helps you manage your process.

The hospital management system can be entered using username and password.it is accessible by an admin, doctor & receptionist. Only they add data to the database. The data can be retrieved easily. The data are well protected for personal use and makes the data processing very fast. Hospital management system is powerful, flexible, and easy to use and is designed and developed to deliver real conceivable benefits to hospital.

The project hospital management system includes registration of patients, storing their details into the system using database. The software has the facility to give a unique id for every patient and stores the details of a patient using the name id.

Hospital management system is designed for multi specialist hospital, to cover a wide range of hospital administration and management processes. The system also provides excellent security of data at every level of user system interaction and also provides robust and reliable storage facilities.

1. MODULES

The entire project mainly consist of **5** modules, which are:-

- **ADMINS**
    1. Admin activity
    2. Receptionist management
    3. Doctor management

- **DOCTORS**
    1. Appointment
    2. Add doctor
    3. Delete doctor
    4. Doctor activity
    5. Patient details
    6. Search doctor
    7. Update doctor
    8. View doctor

- **MAIN**
    1. Admin
    2. Connector
    3. Doctor
    4. Hospital
    5. Receptionist

- **PATIENT**
    1. Delete patient
    2. Add patient
    3. Patient activity
    4. Search patient
    5. Update patient

- **RECEPTIONIST**
    1. Receptionist activity
    2. Add receptionist
    3. Choose doctor
    4. Choose patient
    5. Delete receptionist
    6. New patient
    7. Patient management
    8. Search receptionist
    9. View receptionist
    10. Update receptionist

2.SYSTEM ANALYSIS

2.1 EXISTING SYSTEM

The current manual system has lot of paper work. To maintain the record of sale and service manually, is a Time-consuming task. With the increase in database, it will become a massive task to maintain the database. Requires large quantities of file cabinets, which are huge and require a quite a bit of space in the office, which can be used for storing records of previous details. The retrieval of records of previously register patients will be a tedious task. Lack of security of the records of your system. If someone wants to check the details of the available doctors the previous system does not provide any necessary details of this type.

All this work done manually by the receptionist and other operational staff and lot of papers are needed to be handled and taken care of. Doctors have to remember various medicines available for diagnosis and sometimes miss better alternatives as they can't remember them at that time.

❖ **ADVANTAGES:-**
1. No extra training required
2. Easy to implement
3. Can be stored anywhere
4. Requires minimum efforts

❖ **DISADVANTAGES:-**
1. Needs a lot of paper work
2. Problem with maintenance
3. Volumes of data becomes problem
4. Once data is burned it cannot be reproduced easily
5. Data handling is problem

2.2 PROPOSED SYSYTEM

The hospital management system is designed for nay hospital to replace their existing manual paper-based system. The new system is to control the information of patients as well as doctors. These are to be provided in an efficient, cost-effective manner, with the goal of reducing the time and resources currently required for such task.

The complete set of rules and procedure related to the Hospital's day to day activities and generating report is called "HOSPITALA MNAGEMENT SYSYTEM'. It is a computerized management system. This system also keeps the records of hardware assets besides software of this organisation. The purpose system keeps the track of Doctors, Patients, & Receptionist. This project has GUI based software that will help on storing, updating, and retrieving the information through various user-friendly   menu-driven modules.

❖ **GOALS OF PURPOSED SYSTEM**
   i.   The system should be easy to operate
  ii.   The working in organisation will be well planned and organized
 iii.   The level of accuracy in the purposed system will be higher
  iv.   The reliability of the purposed system will be high due to proper storage of information
   v.   Provide quick and efficient retrieval of information

• **ADVANTAGES:-**
   1. Low maintenance cost
   2. Volume off data is not an issue
   3. Data can be converted easily to information
   4. Data cannot be corrupted easily with proper backup
   5. It can be expanded as well as data communication is possible

• **DISADVANTAGES:-**
   1. High starting cost required
   2. Additional man power is necessary
   3. Data communication system will have an additional cost

3. FUTURE SCOPE

All this work is manually done by the receptionist and other optional staff and lot of papers are needed to be handled and taken care of. Doctors have to remember various medicines for diagnosis and sometimes miss better alternatives as they can't remember them at time. The limited time and resources have restricted us to incorporate, in this project, only main activities that are performed in the hospital Management System, but utmost care has been taken to make the system efficient and user friendly.

Most of the analysis and interpretation, made for this report, are based on secondary data obtained. This data could have some inherit mistakes and errors. Finally, although due care has been taken those can be typing and compilation error in the report itself. The task specified were nit well defined because nothing was mentioned regarding validation in the project. Though we gave maximum efforts to check the software. But it is no way alter the ultimate aim of the project and because it's highly USER FRIENDLY, it would be the choice of all kind of personnel

5.CONCLUSION

Since we are entering the details of the patients electronically in the "Hospital Management System", data will be secured. using this application, we can retrieve patient's history with a single click. Thus, processing information will be faster. It guarantees accurate maintenance of patient details. It easily reduces the book keeping task and thus reduces the human efforts and increases accuracy speed.

Hospital management system is essential for maintaining details about the doctor, patient, etc we understand by using of hospital management system project the work become very easy and we save lot of time. Hospital administrator would be able to significantly improve the operational control and thus streamline operations. This would enable to improve the response time to the demand of patient care because it automates the process of collecting, collating and retrieving patient information. Accounting sometimes becomes awfully pathetic and complex. This product will eliminate any such complexity.