

Hospital Management System

Project Report

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD
OF THE DEGREE OF

Bachelor Of Technology
Computer Science Engineering

Submitted By

Raj Vardhan Singh
(2103490100026)

September 2022



Dr. APJ Abdul Kalam Technical University, Uttar Pradesh
Lucknow, INDIA

CONTENT OF REPORT :

- Objective
- Introduction
- 1. MODULE 1
- 2. MODULE 2
- 3. MODULE 3
- 4. MODULE 4
- 5. MODULE 5
- Software Required
- Hardware Required
- Technologies Required
- Proposed Work
- Flowcharts
- Output Analysis
- Conclusion

OBJECTIVE:

The hospital management system project is a basic C Programming language program. This project can be used to improve coding skills and logic building abilities. It is meant to store all the data and information of a hospital Including patients data and data related to the availability of the doctors. This project will help in making the older way of storing data more efficient and easy.

This discussion gives you the whole report on the Hospital Management System Project along with its abstract and modules. It enables you to be knowledgeable of the project's core functions and processes by knowing the purposes of the Hospital Management System. The Hospital Management System Project also comes with PDF Documentation reports and the abstract of every source code available.

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. It deals with the collection of patient's 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

The main objectives of this hospital management system project are :-

- To simplify the cumbersome work of storing the data related to the hospital.
- To provide an organized way of storing and managing the information of the hospitals.
- This new system will make the time of admission of patients very less as compared to the older system.
- Managing the work of doctors and will help in getting a full record of the patient.

INTRODUCTION:

The project Hospital Management system Is designed to make the cumbersome process of storing the information and data related to a hospital more easier and effective. This will help in reducing the efforts and human power to store and manage the data. It will also make the data available urgently whenever it is required. This project contains the basic words of C programming language like structures, switch statements, calling of functions, functions, conditional statements, while loops and a much detailed use of file handling.

The Hospital Management System is powerful, flexible, and easy to use and is designed and developed to deliver real conceivable benefits to hospitals.

Hospital Management System is designed for multispeciality hospitals, to cover a wide range of hospital administration and management processes. It is an integrated end-to-end Hospital Management System that provides relevant information across the hospital to support effective decision making for patient care, hospital administration and critical financial accounting, in a seamless flow. Hospital Management System is a software product suite designed to improve the quality and management of hospital management in the areas of clinical process analysis and activity-based costing. Hospital Management System enables you to develop your organization and improve its effectiveness and quality of work. Managing the key processes efficiently is critical to the success of the hospital and helps you manage your processes.

Human Resources Personnel managing the timekeeping will not be the same again as they will experience relief. It would be fast and easy for them to handle transactions such as report making and monitoring time entries. Further determining or computing the salary-related manually will be eliminated that will lead to faster transactions.

Thus, this mini project on Hospital management system will help a lot in the functioning of the hospital and will help a lot in reducing manwork.

STRUCTURE OF PROGRAM :

The program is mainly Divided into a few modules containing **Functions** of different operations which are ultimately called under a **SWITCH** statement. Each MODULE is so made that it makes the code understandable and easy to Manipulate. The MODULES of the program are:-

❖ MODULE 1:

This module consists of the function to admit the patient and is called under a **SWITCH** statement. Which uses the **structure** of the patient's information Denoted by **struct patient**.

❖ MODULE 2:

This module contains a function that is used to check the list of the patients admitted in the hospital along with the progress report in their disease or health condition. It also stores the data in a file named as **patient**.

❖ MODULE 3:

Calling of this module provides the user the facility to discharge the patient that has been admitted to the program or the file via MODULE 1.

❖ MODULE 4:

The function available in this module is of insertion type that is used to insert a new doctor to the list of the doctors of the hospital. It uses a **structure** named as **struct doctor**.

❖ MODULE 5:

It is used to see the list of the doctors available in the hospital at the current time. It will help in checking the availability of the doctor at a condition of emergency. It also works on the **file handling** facility of the C programming language.

SOFTWARE REQUIRED :

<u>Software</u>	<u>Minimum Recommended Requirement</u>	<u>Maximum Recommended Requirement</u>
System type	Microsoft Windows 7 (32 bits), Windows 8 (32 bits), ubuntu, linux.	Microsoft Windows 10, Windows 11.
Storage	FAT File System	NTFS File System
Programming Language Compiler	Turbo C for windows 7.	Turbo C for windows 10,11, Dev c/c++, and other compilers.

HARDWARE REQUIRED :

<u>Hardware</u>	<u>Minimum recommended requirement</u>	<u>Maximum recommended Requirement</u>
RAM	2 GB	3 GB OR More
Hard Disk Storage	20 GB	30 GB or More
Processor	Intel i3 10th gen, AMD Ryzen 3.....	Intel i5 10th gen, i5 11th gen, i7, AMD Ryzen 5, Ryzen 7.....

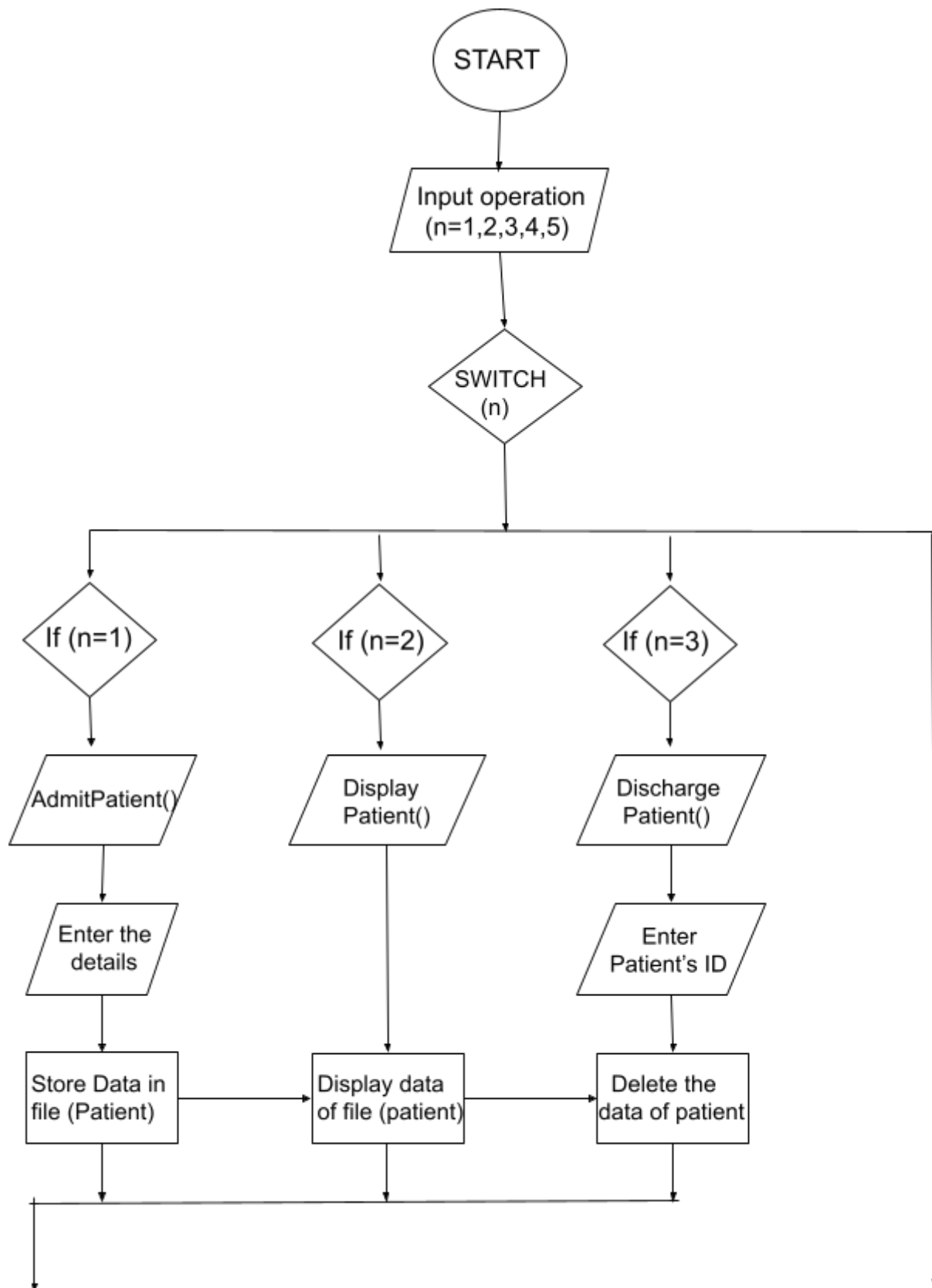
TECHNOLOGIES USED :

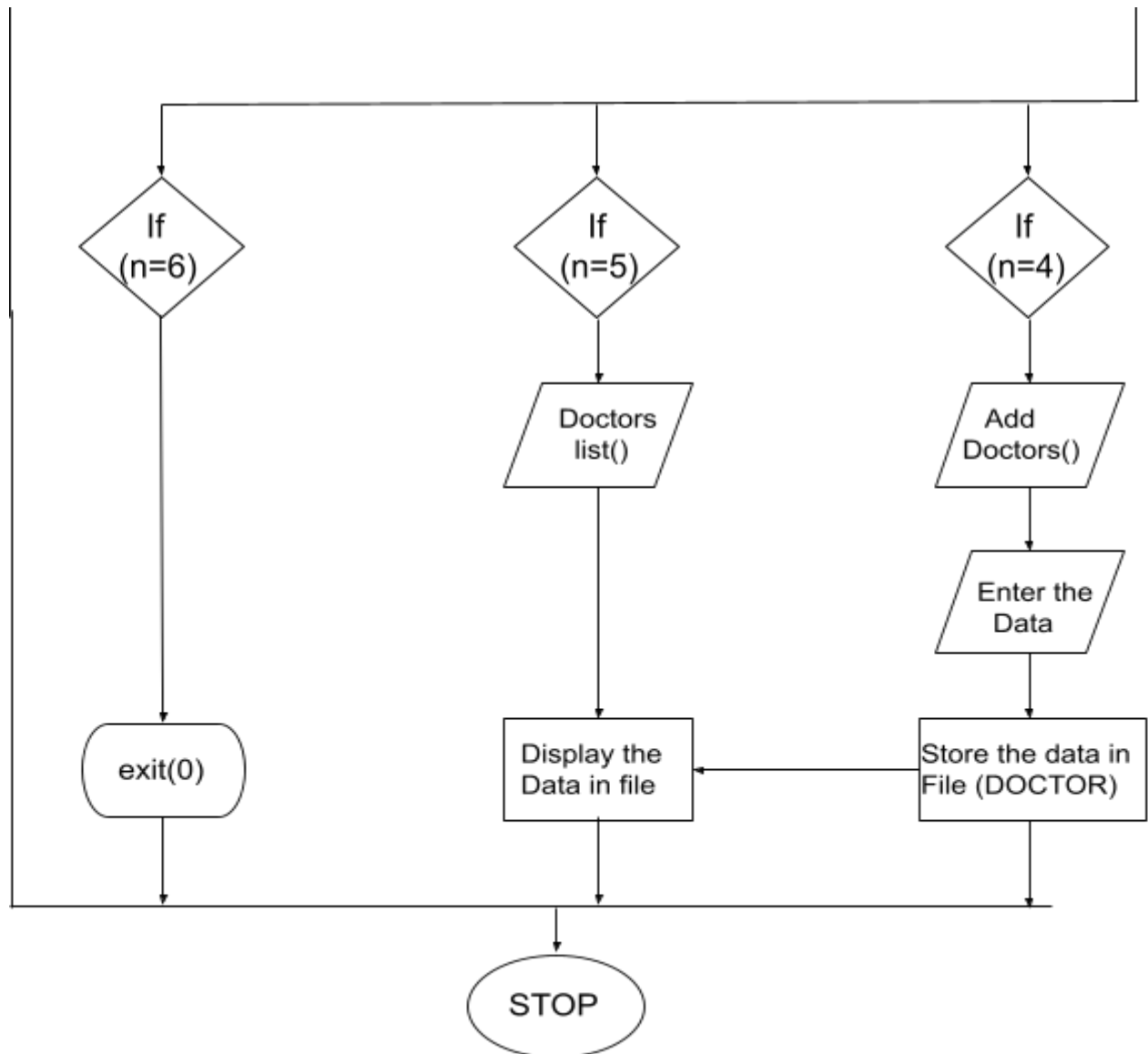
C Programming language, MS Word, Google DOCS, File handling....

PROPOSED WORK:

This HOSPITAL MANAGEMENT SYSTEM PROJECT is oriented towards the electrification of the old school process of managing the data and information related to hospitals. It will make the process effective and Handy. So the system is proposed to store the data of patients and doctors along with all other important information. This project is designed in special modules to make the code easily re-editable and easy to transverse. Different modules perform different operations like admission and discharge of patients and the list of patients along with a list of doctors.

FLOWCHART :





OUTPUT ANALYSIS :

```
C:\Users\srajv\Documents\C Programs\hospital.exe
WELCOME...!

**** Hospital Management System ****

1.Admit Patient
2.Patient List
3.Discharge Patient
4.Add Doctor
5.Doctors List
0.Exit

Enter your choice:
```

```
C:\Users\srajv\Documents\C Programs\hospital.exe
**** Patient List ****

Id      Patient Name      Address      Disease      Date
-----
2       PQR                  MNO          CANCER       12/09/2022
1       XYZ                  ABC          FEVER        10/09/2022

Press Any Key To Continue...
```

```
C:\Users\srajv\Documents\C Programs\hospital.exe
WELCOME...!

**** Hospital Management System ****

1.Admit Patient
2.Patient List
3.Discharge Patient
4.Add Doctor
5.Doctors List
0.Exit

Enter your choice: 7
Invalid Choice...!!

Press Any Key To Continue...
```

```
Enter your choice: 1
Enter Patient id: 1
Enter Patient name: XYZ
Enter Patient Address: ABC
Enter Patient Disease: FEVER
Enter Date of Admission: 10/09/2022

Patient Added Successfully....!!

Press Any Key To Continue..._
```

```
C:\Users\srajv\Documents\C Programs\hospital.exe
**** Add Doctor ****

Enter Doctor's id: 12
Enter Doctor's Name: dr. xyz
Enter Doctor's Address: vbn
Doctor Specialize in: Physical surgeon
Date: 10/09/2022
Doctor Added Successfully

Press Any Key To Continue...
```

```
C:\Users\srajv\Documents\C Programs\hospital.exe
**** Doctor List ****

id      Name      Address      Specialize      Date
-----
12      dr. xyz      vbn          Physical surgeon 10/09/2022

Press Any Key To Continue...
```

```
C:\Users\srajv\Documents\C Programs\hospital.exe
**** Discharge Patient ****

Enter Patient id to discharge: 44

Record Not Found !

Press Any Key To Continue...
```

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 hospital system software is a great opportunity to create the distinct, efficient and fast delivering healthcare model. Implementation of hospital management system projects helps to store all 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.

Need to improve management in your hospital or plan to innovate healthcare with new software products? The hospital system software is a great solution for any medical institution. If you have some ideas and need assistance, you are welcome to contact Existek. We are an outsourcing company with great expertise in software development and always ready to find out the best approaches for your company. If you have any questions, feel free to contact us via the contact form or start the discussion in the website chat widget. Existek will be glad to provide professional consultation and find the solution for you.

RAJ VARDHAN SINGH

(2103490100026)