**Report for Capstone Project**

**Project Title:** Hospital Management System

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**Introduction:** The Capstone project "Hospital Management System" programmed using C++ language is simple program that allows the user to store and retrieve information about Hospital and Patient. The program is designed to maintain a record of hospital & patient records that includes patient name, patient contact number, disease then hospital doctor contact number, doctor name, specialization of doctor. The program is written in C++ language, which is a popular programming language used for developing system software and applications. C++ is a fast and efficient language that offers low-level control over hardware, making it suitable for programming systems with high performance requirements. The program mainly consider Object Orianted Programing concept, then Class and Object etc. The Hospital Management System is the Computer based Application designed to manage and streamline the operation of hospital. This system aims to improve the efficiency and effectiveness of the hospital services, ensure better patient care and satisfaction. Hospital management system is a software designed for the to store the medical records, files, reports, tests, x-rays etc. all the medical information of the patient will be store in this Hospital management system project its depend on the user. This help for the patient as well as doctor for managing the data of the patient. Now there is important of storing the data in online way, reducing the paper work, improving the patient care and satisfaction, better decision making, improving the staff productivity.

**Objectives:** 1.Reduce the error and cost

2.Improve the Data Management and security

3.Enhance Patient care and services

4.Automate hospital and administrative task

5.Financial management

6. Ensure accurate and timely information exchange

7. Staff productivity and efficiency

8.Coonnection between all department in hospital

**Methodology:** A hospital management system (HMS) is designed to streamline and automate various administrative and clinical processes within a healthcare facility. The methodology for developing an HMS mainly follow healthcare providers, administrative staff, and patients. Implementation involves coding, integrating various modules such as patient registration, appointment scheduling, billing, and electronic health records (EHR), followed by rigorous testing to identify and rectify any issues. A hospital management system is software that allows medical staff to collect, store, share patient information securely across the hospital. It helps with better patient care and processing medical records such as radiology images, lab tests, blood reports, and pharmacy records efficiently.

**Benefits:** 1. Streamlined operations

2. Improved patient registration and admission processes

3. Enhanced billing and insurance management

4. Automated reporting and analytics

5. Reduced administrative costs

6.Personalized care and treatment plans

7.Secure access to medical records

8. Reduced waiting times

**Applications:** 1.Reports Management : Report Management module, records and stores all the reports generated by the hospital.

2.Insurance Management: HMS insurance management component records and stores patients insurance details. On requirement, it presents the policy number, insurance company, other information.

3.Facility Management: HMS collect all such information and make it readily available to your receptionist. doctors can access patient data from any hospital using an online hospital management system.

4.Patient Management: It captures and stores the medical history, treatment required, details of their previous visits, upcoming appointments, reports.

**Output:** The output if user input in class patient is patient name, patient contact number, disease of patient and in other class hospital the doctor name, doctor contact number, specialization of doctors it’s all information will display in the output that means HMS will provided the information for both doctor and patient.

**Conclusion:** In conclusion, the "Hospital Management System" Capstone project is a simple tool for storing and displaying hospital and patient data. The program allows the user to specify the information about the hospital. Hospital management system it’s provides easy and effective storage information of the hospital and the patient care services. In this way, we made a simple and easy hospital management records program with the help of class, object, OOP and other such elements.