**Healthcare Management System**

**1. INTRODUCTION**

**1.1About the project**

This project mainly designed for Indian hospital and Health care industries. Private and government based hospitals both equally get benefited through this application. In India history the transcriber has not able to download the Doctors voice videos. And are not being centrally managed. When you compare well developed countries like USA, UK all the Doctors videos are being monitored and maintained with unique identification. So action plan of this project would be a proposal to our Indian government for storing the Doctors voice video.

The purpose of the project entitled as “HEALTHCARE 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 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, diagnosis details, while system output is to get these details on to the screen. 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 into the database. The data can be retrieved easily. The data are well protected for personal use and makes the data processing very fast.

**2. PROBLEM DEFINITION**

**2.1 Introduction**

Hospital Management System is designed for multispecialty 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 helps you manage your processes

**2.2 Problem Definition**

The information is very difficult to retrieve and to find particular information like- E.g. - To find out about the patient’s history, the user has to go through various registers. This results in inconvenience and wastage of time. The information generated by various transactions takes time and efforts to be stored at right place. Various changes to information like patient details or immunization details of child are difficult to make as paper work is involved. Manual calculations are error prone and take a lot of time this may result in incorrect information. For example calculation of patient’s bill based on various treatments. This becomes a difficult task as information is difficult to collect from various register.

**1. Existing system**

Hospitals currently use a manual system for the management and maintenance of critical information. The current system requires numerous paper forms, with data stores spread throughout the hospital management infrastructure. Often information is incomplete or does not follow management standards. Forms are often lost in transit between departments requiring a comprehensive auditing process to ensure that no vital information is lost. Multiple copies of the same information exist in the hospital and may lead to inconsistencies in data in various data stores.

**Drawbacks of the existing system**

* No centralized management for patient’s record
* In proper management in all treatment
* No proper data available
* Difficult to understand the patient’s history.

**2. Proposed System**

The Hospital Management System is designed for any hospital to replace their existing manual paper based system. The new system is to control the information of patients. Room availability, staff and operating room schedules and patient invoices. These services are to be provided in an efficient, cost effective manner, with the goal of reducing the time and resources currently required for such tasks.

Rapid changes are happening in the health sector for the patient treatment process. Most of the hospitals now uses automated management systems for managing patient data including their personal and medical data. But sharing of patient data video of patients moving across hospitals for better treatment is still a hurdle especially between Hospitals. This research work addresses the problem of the information flow across hospitals or across individual Hospital Management Systems. This is done by designing a Storage Patient History in voice note. So the main purpose of this design is to fix the information flow problem in hospital shifting of critical patients and hospital shifting of patients with other critical reasons. The proposed system also addresses the convenience of availing the service of expert doctors from nearby hospitals if there is difficulty in shifting patients due to his/ her bad physical conditions.

**Advantages in the proposed system are**

* Lightweight application for Storage Patient History in voice note
* Storage management of patient’s Records
* In future Doctors to understand the history of the patient’s
* Based on history patient’s will get right medicine on right time

**3. SOFTWARE ANALYSIS**

**3.1 Hardware Requirements**

* Speed : 2 GHz core CPU.
* RAM :  4 GB RAM or above.
* Hard Disk     : 250 GB HDD.
* Processor  : Intel i3 and above processor.

**3.2 Software Specification**

* Microsoft account : Visual Studio 2019
* Operating System : Windows
* Front End **:** Asp.net, C#
* Back End  :MSSQL

**4. MODULES DESIGN**

This project ““HEALTHCARE MANAGEMENT SYSTEM” deals with Data Storage for application. This contains the following modules.

* Admin
* Doctor
* Transcriber

The entire project is divided into 3 modules.

4.1 Admin

* Login: Login with valid details like username and password.
* Register: Managing the Hospital and their Credentials Add for new doctor and new transcriber.
* Logout: Logout from admin panel.

4.2 Doctor

* Login: Login with valid details like username and password
* Register Id and username: Id and username can be filled
* Uploading: Managing Uploading the doctor record for patient history.
* Logout: Logout from Hospital panel

4.3 Transcriber

* Login: Login with valid details like username and password.
* Download: Downloading the record which has be saved by doctor.
* Logout: Logout from Hospital panel

**Overall Diagram**

