# Update 4

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### February 2022

# 1 Abstract

The goal of this article was to build and implement an automated system that would solve the challenge of dealing with patient data at a hospital. The inherent flaws of the manual system of hospital file administration inspired the researchers to embark on this study.

This manual system has a slew of issues, including file security, a sluggish file retrieval system, and a slow file update system, to name a few. This study looks at a hospital's present information system and proposes an automated solution that will assist Medical Doctors and those who work with hospital data in performing their jobs more successfully and efficiently. WAMP (Windows, Apache, MySQL, and PHP) would be used to create the system.

A online application that operates on a computer network would be the HDBMS. It would provide different users easy and quick access to stored data as needed, while also providing security against illegal access. Based on their user-assigned-role, each authorised user can add, delete, and update data in the database. It would also have the capability of assigning a unique identity to each individual and automatically storing the information of each patient and staff member. It has a search feature that allows you to find out the current status of each room in the hospital. The system allows a user to look for doctor availability and patient information. The user interface is quite intuitive.

Index Terms—Hospitals, database, management, medical doctors, patients, system

## 2 Introduction

Hospitals are important institutions, and they require efficient service delivery because good health is essential for a happy society. As a result, a system that will allow hospital management to make effective and efficient decisions is required. Recently, attempts have been made to design and build a user-friendly and dependable database system to meet the needs of hospital or medical administration systems.

On the other hand, many hospitals and medical facilities continue to use a manual hospital administration system. Medical practitioners, nurses, patients, and other personnel in both government and commercial hospitals have continued to face several setbacks and challenges as a result of these medical management systems.

# 2.1 The Need for Hospital Database Management Systems

Database systems are required by all large businesses in order to manage information. The hospital is one of these businesses. Data processing becomes more important in hospitals due to the enormous number of patients, doctors, and other employees. In a hospital, data management can be used to obtain patient information, schedule doctors, and keep track of finances. Doctors should have access to the patient's medical records in order to provide the best diagnosis possible in order to cure the patient. Patients, on the other hand, have access to their lab results as well as any other information that their doctors indicate. The hospital's data base makes it simple to manage the accounting department.

# 2.2 The Hospital Database Management System has a number of features

All patient information, including prescriptions, surveys, and diagnoses, can be entered into the database management system.

1) All data includes a prescription survey and patient diagnoses. 2) Both the patient and the physician are capable of handling all information. 3) If the organisation is online, patients can make an appointment for a visit and access their information via interest. 4) The hospital's statistics, such as patient capacity and employee numbers, are available to the administration.

### 3 Sources of Data

### 3.1 Observation Method

The researcher went to the hospitals on multiple occasions to study and analyse the management manner of operation.

### 3.2 Interview

Doctors and other employees were interviewed in order to gather information that would aid in the development of the new system.

#### 3.3 Information from Published Sources

Information was obtained from a variety of existing publications on the subject. Several books and periodicals on hospital database management were read in order to gather information for the new system's designs.