



Secure Health Care Website Portal

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ABSTRACT

Hospital Management System is an well managed software system designed and programmed to deal with daily operations and management of the hospital activities. The program can look after Patients records; manage treatment records and billing. The major problem for the patient nowadays is to get a report after consultation. Many hospitals manage reports in their system but it's not available to the patient when he / she is outside. In this project we are going to provide the extra facility, the data is stored in db using a strong encryption method and if doctor, nurse want to see the patient report it is required to enter the OTP received in the patient's registered device.

Keywords: Hospital management system, HMS, encryption, OTP

1. Introduction

Aim of HMS is to solve the complications coming from managing all the paper works of every patient with confidentiality.

The patient data can be kept a hundred per cent safe by using HMS in your hospital. It is can be only accessed by less members. With HMS, all the data is stored on a server and kept safe by just securing the login information safe.

To improve the visibility and transparency in the complete management process and in all records.

1.1. Objective

The Major Objective of HMS is to implement a paperless approach and design a secure system to safeguard the personal data of Patients.

Since all details are computerized, it is easily accessible by patients and Hospital personnel's. Scheduling Appointments and checking Doctor availability made easy.

1.2. Proposed System

Most hospital management does not give the security for patient reports. The project is focused on securing the patient reports; nobody cannot see the patient report without the patient permission, including doctor and nurse. If a doctor wants to see the patient report requires entering the OTP received in the patient's registered device. If a report is accessed via any other new device the alert message will be sent to the patient phone. Patient data is also saved in an encryption method in the database. This project has been designed into four modules .The patient, doctor, nurse, admin and modules. The patient module is used to see the appointment and the report details. The doctor modules is used to only the patient appointment and see the patient report

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with the patient OTP number and the nurse module is used to only see the patient appointment and add the appointment to the patient. Also there is an admin module work only do add the patient, doctor and nurse.

1.3. Module Description

Patient Management: This module covers the patient registration if register then login the patient management, the patient modules are book appointment, appointment history and medical history

Doctor Management: This module covers form the doctor appointment, patient history, add patient, manage patient.

Nurse Management: This module covers the only patient appointment and my profile

Admin Management: These module covers add the patient, doctor, and nurse

1.4. Significance

A properly implemented and managed HMS can maintain all records effectively, can help track all details easily and can help manage occurrence of any errors. Implementing a secure HMS indicates the all information stays safe and protected from unauthorized access.

1.5. Methodology:

Initially a basic HMS was designed with all major features. Once a proper web app was developed, security features such as OTP and encryption methods were implemented creating a secure HMS.

1.6. Originality of the Project

The Hospital Management system (HMS) is secured and protected by end to end encryption method. The user data cannot be accessed without users concern preventing unauthorized access. OTP feature is implemented and linked with the Patient's mobile number for accessing and viewing data. The user friendly interface helps in acquiring patient information easily and quickly saving time. Multi-factor authentication in login page is implemented to prevent brute force attacks and DOS attacks.

1.7. Conclusion

The main objective of the project is to develop system that Secure patients data from attacker. Taken a wide range of literature review in order to achieve all the tasks, where came to know about some of the products that are existing in the market. I made a detailed research in that path to cover the loop holes that existing systems are facing and to eradicate them in our application. In the process of research I came to know about the latest technologies and different algorithms.

REFERENCES

- [1] Kotapati Saimanoj, Grandhi Poojitha, Khushbu Devendra Dixit, Laxmi Jayannavar "Hospital Management System using Web Technology" Conference: ICAIT-2020 At: Bengaluru, year 2020
- [2] Digvijay H. Gadhari, Yadnyesh P. Kadam, Prof. Parineeta Suman .Department of Computer Engineering, Saraswati College of Engineering, Kharghar, Mumbai, Maharashtra, India "Hospital Management System" year 2018
- [3] Pranjali Anpan, Roshni Udasi, Susneha Jagtap, Shon Thakre, Chalika Kamble "Hospital Management System " Dept. of Computer Science & Engineering, Datta Meghe Institute of Engineering, Technology & Research, Wardha, Maharashtra, India. : 07 Issue: 04 | Apr 2020