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Hospital Management & Heart Disease Prediction System

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Abstract: Nowadays peoples major needs are healthcare. Medicines are placed vital role in current generation. Every city, town or municipal corporation having at least of one hospital are a primary health center. We have created an application for maintaining the hospital and its management and disease prediction for heart to an patient.

Keywords: Hospital, Management System, Administrator, Heart, Prediction System

1. Introduction

In recent time huge amount of people suffering with health issues and also in the pandemic situation people are worried about health because of COVID. In the meanwhile most of the people fear about the health checkups to be done for their body. It causes the bad ratio of CARDIAC death even the heart attack also comes under the COVID death. People has to think lot about their health conscious.

We are having a technique to predict heart disease along with their checkups through the symptoms question related to heart.

2. Scope of the project

The concept so far used to having the application for patient record which is related to general checkup as well as of appointment details. We are here to enhance the application with particular disease prediction. As of now we are having only for Heart disease in future we will add multiple disease prediction and checkup. The advantage of the project is predict with symptom question and it will be recorded.

3. Overall System Architecture

Initially, the user (admin, doctor, nurse) should login the windows application to register their patient details, appointment timing, doctor prescription. And the datas are saved in the MS SQL SERVER database. The application will have the data in different formats like content will be in text, images like scan reports, patient image in .jpeg format. Finally the patient will get the prescription / checkup reports on their hand.

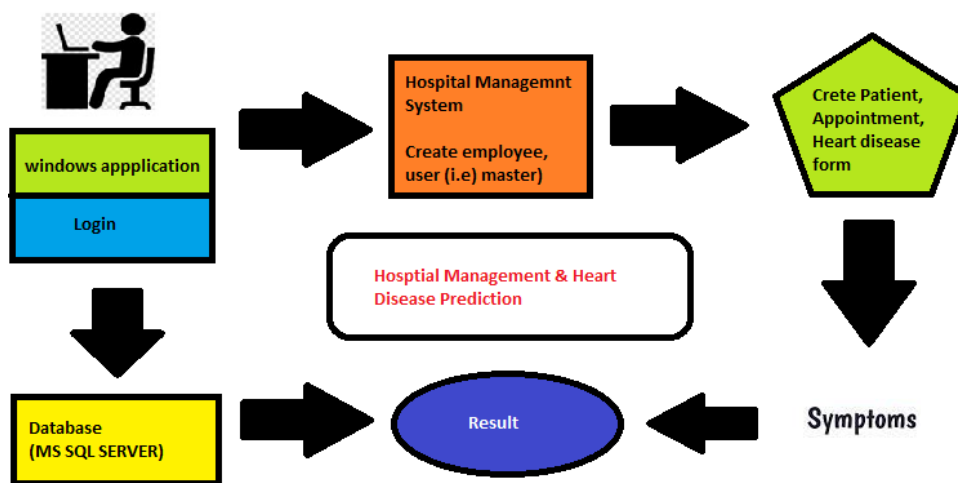


Fig.1.Architecture Diagram

4. Proposed Methodology

The proposed methodology in this system is that it allows patient to register their data with hospital management and have their general details. It also helps to book their appointment with concern doctor to get their proper prescription and health report. It properly predict the disease with the symptoms.

Major Module

Administrator Module:

This module is considered as a master module for creating the new data, update data, modifying data for the entire management activity like creating employee, users, department. The new appointment can able to create from here. It also having view access for all the modules.

Nurse Yard Module:

This is the module which is for creating the appointments, creating new patient. From this module patients general checkup details like weight, height, BMI temperature and pressure will be updated. We can also view the details of patients.

Doctor Yard Module:

In this module we have consultation where we can view the patient history and doctor appointments. From this module patients general checkup details like weight, height, BMI temperature and pressure will be updated. We can also view the details of patients.

Heart Disease Prediction Module:

In this module we can able to analysis the heart prediction and also in this model it can only predicted 86% correct. The remaining 14% are high risk heart patients who were told that everything is fine.

Help Module:

In this module we given a support information to contact with us.

5. Implementation details:

5.1 ADMIN:

The Web Application will have a detailed information about the users as well as the patients.

5.2 USER:

The user has to login with their details and manage the details of the management and they can't able to manage all the modules. Each users have a different types of privileges to access.

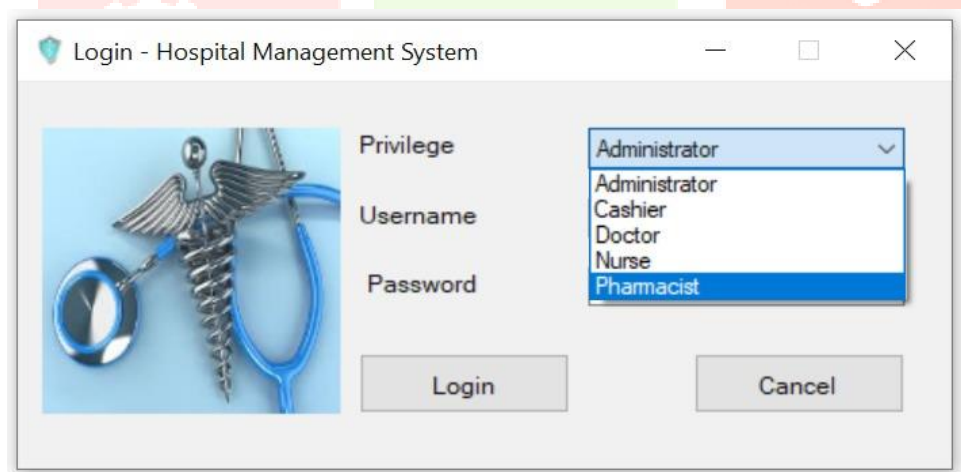
5.3 PROCESS:

- Firstly, the admin registering the details for the users who manage the Web Application.
- The users can manage the details of the patients.

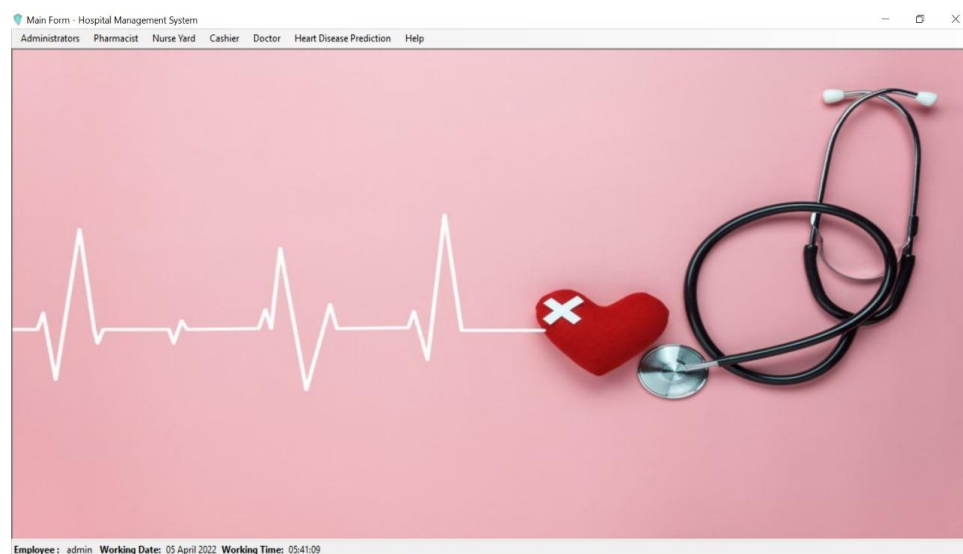
5. Result:

The system has reduced the queue completely, greatly reducing stress for staff and ensuring a good experience for patients.

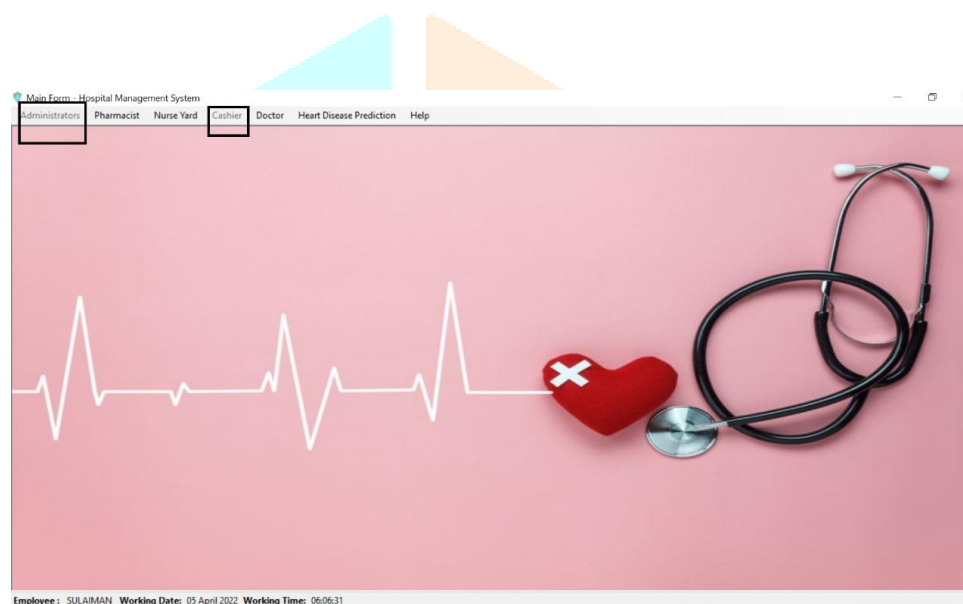
Data captured using the system will be used to improve appointment scheduling in the future as it provides a clear picture on patient flow from entry to exit. The system provides information on daily work flow, which has the benefit of enabling roster makers to improve staff rosters in the future and ensure high traffic areas are appropriately looked upon.



Login Page for Users



Admin Home page



Doctor Home Page

7. 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 the hospital system software is a great opportunity to create the distinct, efficient and fast delivering healthcare model. Implementation of hospital management system project helps to store all the kinds of records, provide coordination and user communication, arrange the supply chain, manage financial, 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.

8. References

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