HOSPITAL INFORMATION MANAGEMENT SYSTEM

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ABSTRACT

This project is a web based shopping system for an existing shop.The project objective is to deliver the online shopping application in pyhon platform. This project is an attempt to provide the advantages of online shopping to customers of a real shop. It helps buying the products in the shop any where through internet by using an android device. Thus the customer will get the service of online shopping and home delivery from his favorite shop. This system can be implemented to any shop in the locality or to multinational branded shops having retail outlet chains. If shops are providing an online portal where their customers can enjoy easy shopping from anywhere, the shops won't be losing any more customers to the trending online shops such as flip cart or eBay. Since the application is available in the Smartphone it is easily accessible and always available.

1 INTRODUCTION

Our project Hospital information Management system includes registration of patients, storing their details into the system, and also booking their appointments with doctors. Our software has the facility to give a unique id for every patient and stores the details of every patient and the staff automatically. User can search availability of a doctor and the details of a patient using the id. 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 interface is very user-friendly. The data are well protected for personal use and makes the data processing very fast. It is having mainly two modules. One is at Administration Level and other one is of serine. of patients and doctors. The Application maintains authentication in order to access the application. Administrator task includes managing doctors' information, patient's information. To achieve this, aim a database was designed one for the patient and other for the doctors which the admin can access. The complaints which are given by user will be referred by authorities. The Patient modules include checking appointments, prescription. User can also pay doctors fee online.

.2. LITERATURE SURVEY AND RELATED WORK

A literature survey for a Hospital Information Management System (HIMS) would involve researching and summarizing existing academic papers, articles, books, and other scholarly sources related to HIMS. Here are some key points to consider when conducting a literature survey for HIMS:

1. Introduction to HIMS:
a. Start with an overview of what a Hospital Information Management System is and its importance in healthcare.
2. Historical Perspective:
a. Investigate the historical development and evolution of HIMS.
3. Key Components and Features:
a. Identify and describe the core components and features commonly found in HIMS, such as patient records, appointment scheduling, billing, and inventory management.
4. Benefits and Challenges:
a. Explore the advantages and challenges associated with implementing HIMS in healthcare organizations.
5. Integration and Interoperability:
a. Discuss how HIMS systems integrate with other healthcare systems and ensure interoperability for data exchange.
6. Security and Privacy:

a. Analyze the security measures and privacy considerations in HIMS, including compliance with regulations like HIPAA.
7. User Experience and Acceptance:
a. Examine user experiences and acceptance of HIMS among healthcare professionals and patients.
8. Case Studies and Implementation Success Stories:
a. Highlight real-world case studies and success stories of HIMS implementation in different healthcare settings.
9. Future Trends and Innovations:
a. Discuss emerging trends and innovations in HIMS, such as the adoption of artificial intelligence, telehealth integration, or mobile applications.

10. Challenges and Future Research Directions:
a.Identify the current challenges in HIMS and suggest areas for future research and improvement.a. Identify the current challenges in HIMS and suggest areas for future research and improvement.

3 EXISTING SYSTEM

This refers to how hospital management is currently handled before implementing any changes or improvements. It could involve manual record-keeping, paper-based processes, or outdated software systems.

4 PROPOSED WORK AND ALGORITHM

This outlines the changes or improvements that are planned for the hospital management system. It could involve implementing new software, streamlining processes, or introducing advanced technologies like Electronic Health Records (EHR) systems

5 METHODOLOGIES

MODULES

Python.

Python is currently the most widely used multi-purpose, high-level programming language.

Python allows programming in Object-Oriented and Procedural paradigms. Python programs generally are smaller than other programming languages like Java.

Programmers have to type relatively less and indentation requirement of the language, makes them readable all the time.

Python language is being used by almost all tech-giant companies like – Google, Amazon, Facebook, Instagram, Dropbox, Uber… etc.

The biggest strength of Python is huge collection of standard libraries which can be used for the following –

- Machine Learning
- GUI Applications (like Kivy, Tkinter, PyQt etc.)
- Web frameworks like Django (used by YouTube, Instagram, Dropbox)
- Image processing (like OpenCV, Pillow)
- Web scraping (like Scrapy, Beautiful Soup, Selenium)
- Test frameworks
- Multimedia6

2 MACHINE LEARNING

Before we take a look at the details of various machine learning methods, let's start by looking at what machine learning is, and what it isn't. Machine learning is often categorized as a subfield of artificial intelligence, but I find that categorization can often be misleading at first brush. The study of machine learning certainly arose from research in this context, but in the data science application of machine learning methods, it's more helpful to think of machine learning as a means of building models of data.

Fundamentally, machine learning involves building mathematical models to help understand data. "Learning" enters the fray when we give these models tenable parameters that can be adapted to observed data; in this way the program can be considered to be "learning" from the data. Once these models have been fit to previously seen data, they can be used to predict and understand aspects of newly observed data. I'll leave to the reader the more philosophical digression regarding the extent to which this type of mathematical, model-based "learning" is similar to the "learning" exhibited by the human brain. Understanding the problem setting in machine learning is essential to using these tools effectively, and so we will start with some broad categorizations of the types of approaches we'll discuss here.

RESULTS AND DISCUSSION

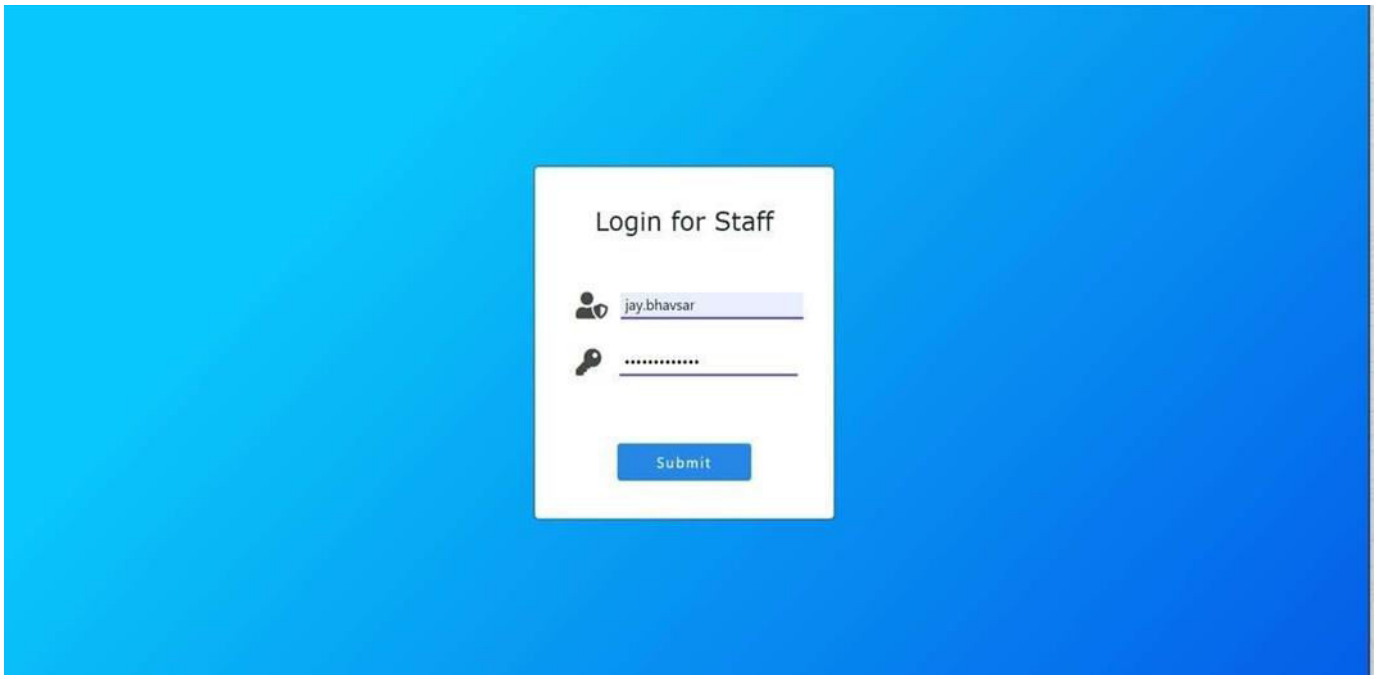


Figure 1: LOGIN PAGE

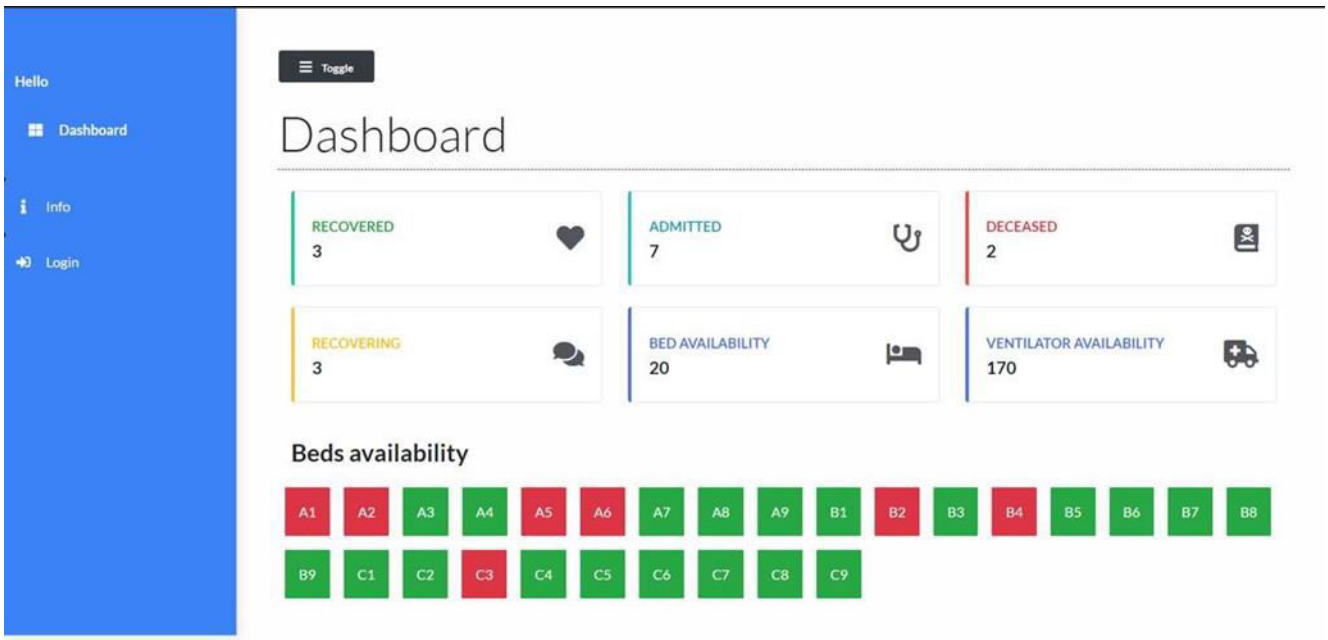
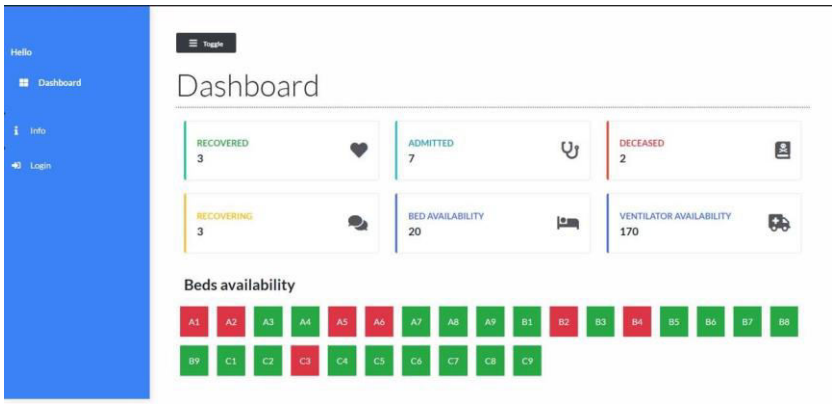


FIG 2 : DASHBOARD



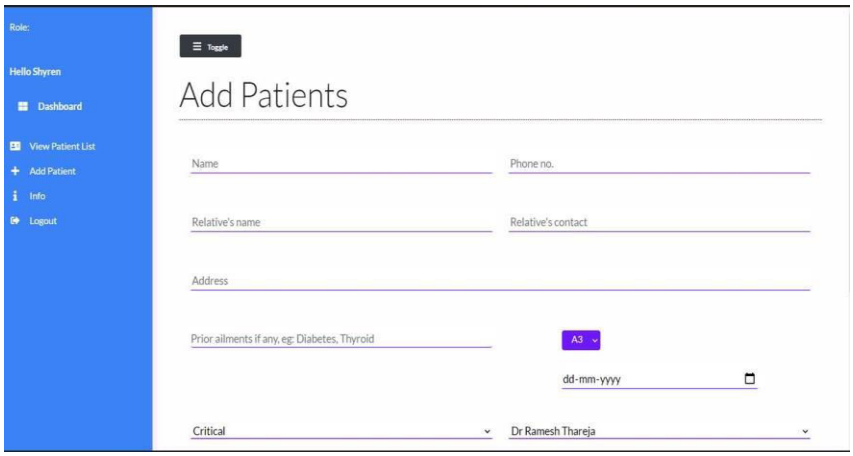


Fig 2:- DASHBOARD

Fig 3:- ADD PATIENT 1

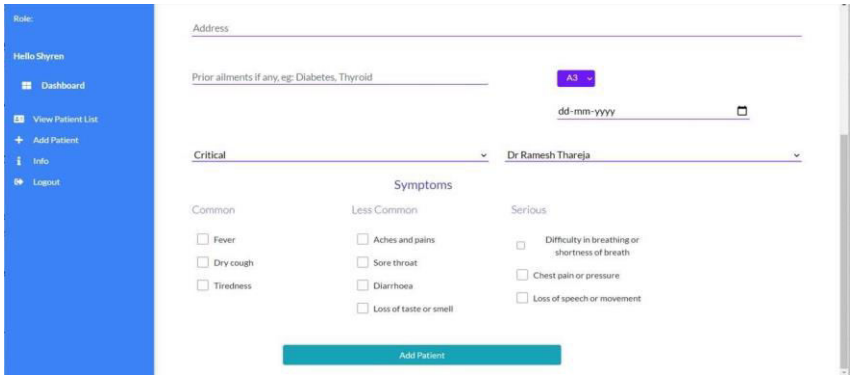


Fig 4:- ADD PATIENT 2

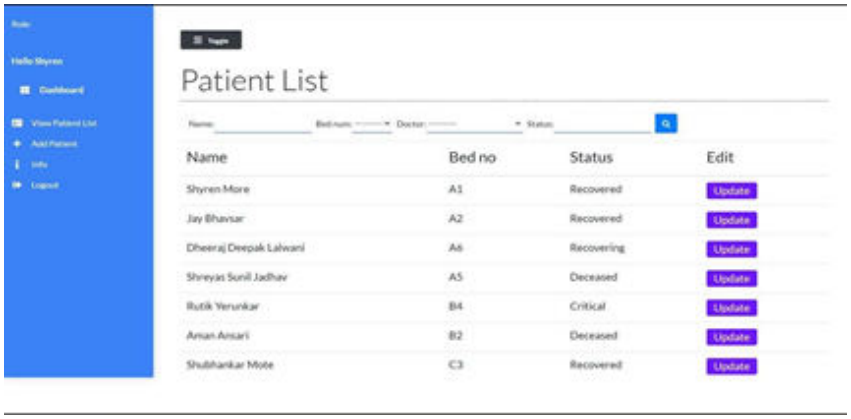


Fig 5:- Patient List

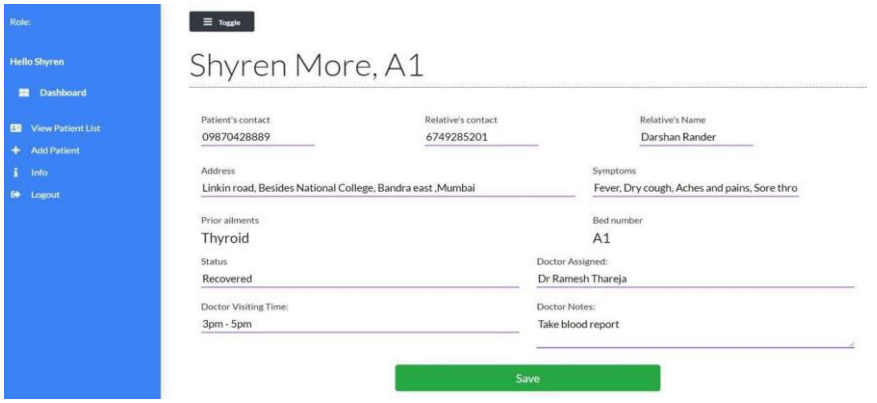


Fig 6:- ADDED PATIENT DETAILS

Fig 7:- ABOUT

Fig 8:-IPAD HOME PAGE VEIW

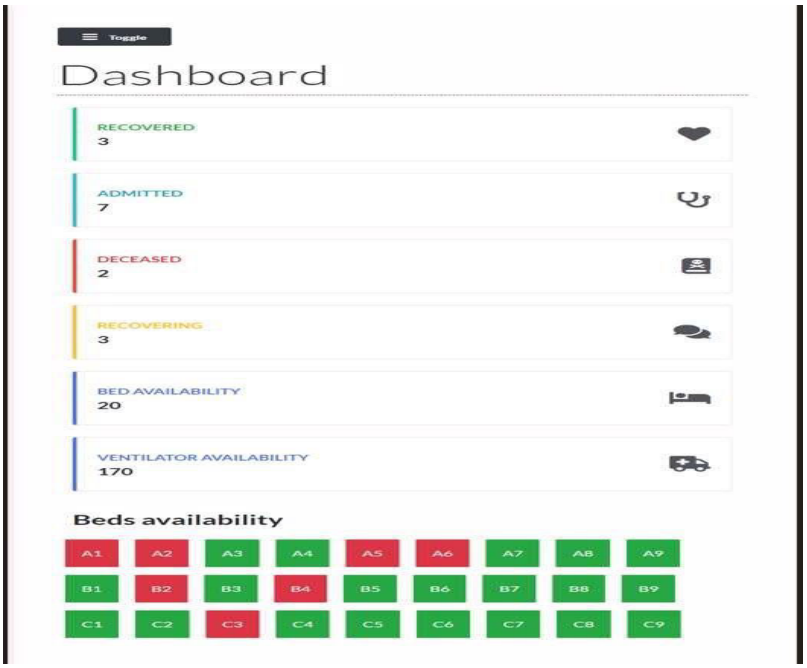


Fig 8:- IPAD View

7.CONCLUSION AND FUTURE SCOPE

Conclusion: This can be a powerful tool to help healthcare organizations improve their processes and streamline their operations. It can provide an integrated, comprehensive solution to managing patient records, billing and scheduling, as well as provide real-time insights into hospital performance.

FUTURE SCOPE

Data in a hospital information management system refers to the structured and unstructured information collected, stored, and managed within the system. It includes patient demographics, medical records, laboratory results, imaging reports, medication history, billing details, and administrative data.

8 REFERENCES

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