

## HOSPITAL INFORMATION MANAGEMENT SYSTEM

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### ABSTRACT

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 user

I.e., 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. Keyword:- Deep-Convolutional Neural Networks, Caffe model

### 1 INTRODUCTION

A literature survey, also known as a literature review or review of literature, is a critical examination of the existing body of literature related to a specific research topic or area of interest. It involves reviewing and analyzing academic and scholarly sources, such as books, research papers, articles, and other written materials, to gain a comprehensive understanding of the current state of knowledge on the chosen topic. Literature surveys are commonly conducted as part of research projects, theses, dissertations, or even as standalone academic papers.

Here are the key steps involved in conducting a literature survey:

1. Define Your Research Topic: Clearly define the research question or topic you want to explore in your literature survey. Ensure that your topic is specific and focused.
2. Search for Relevant Literature: Conduct a comprehensive search of academic databases, libraries, and online resources to identify relevant sources. Use keywords, Boolean operators, and search filters to refine your search.
3. Select Relevant Sources: Evaluate the search results to determine which sources are pertinent to your research topic. Consider the source's relevance, credibility, and publication date.
4. Organize and Categorize Sources: Organize the selected sources into categories or themes based on the topics, concepts, or issues they address. This helps in structuring your literature survey.
5. Review and Summarize: Read and critically analyze each selected source. Summarize the key findings, methodologies, and arguments presented in the literature. Note any gaps, inconsistencies, or trends in the existing research.

### 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:\*

- Start with an overview of what a Hospital Information Management System is and its importance in healthcare.

**2.\*Historical Perspective:\***

- Investigate the historical development and evolution of HIMS.

**3.\*Key Components and Features:\***

- 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:\***

- Explore the advantages and challenges associated with implementing HIMS in healthcare organizations.

**5.\*Integration and Interoperability:\***

- Discuss how HIMS systems integrate with other healthcare systems and ensure interoperability for data exchange.

**6.\*Security and Privacy:\***

- Analyze the security measures and privacy considerations in HIMS, including compliance with regulations like HIPAA.

**7.\*User Experience and Acceptance:\***

- Examine user experiences and acceptance of HIMS among healthcare professionals and patients.

**8.\*Case Studies and Implementation Success Stories:\***

- Highlight real-world case studies and success stories of HIMS implementation in different healthcare settings.

**9.\*Future Trends and Innovations:\***

- 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:\***

- Identify the current challenges in HIMS and suggest areas for future research and improvement.

**11. \*Conclusion:\***

- Summarize the key findings from the literature survey and provide insights into the current state of HIMS research and practice.

Remember to use academic databases, library resources, and search engines like Google Scholar to find relevant literature on this topic. Be sure to properly cite all the sources you reference in your survey.

**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

S.No.	MODULE	APPLICABLE ROLES	DESCRIPTION
1	LOGIN	PATIENT  DOCTOR  ADMIN	PATIENT: Can login using unique Id and Password after this system shall show his/her profile.  DOCTOR: Can login using unique Id and Password after this system shall show his/her profile.  ADMIN: Can login using unique Id and Password after this system shall show a profile with links to maintain the website.
2	REGISTRATION	PATIENT	PATIENT: Can Register by filling all the required details, after this the system will verify the details and check if already registered or not.
3	MAKE APPT.	PATIENT	PATIENT: Can Select doctor, date time and make an appointment request after this system shall show a confirmation for appointment request.
4	CANCL APPT.	PATIENT	PATIENT: Can Cancel appointment if want to by just one click after this system shall ask for re- schedule or refund of payment.  DOCTOR: Can Cancel appointment if want to by just one click after this system shall send a message to the patient.
5	PAYMENT	PATIENT	PATIENT: Enter payment details and make payment after this system shall show the generated bill by the hospital.
6	DOCTOR MODULE	ADMIN	ADMIN: Can add a new doctor by filling all the details after this system shall show a confirmation message.

## 6 Results and Screenshots

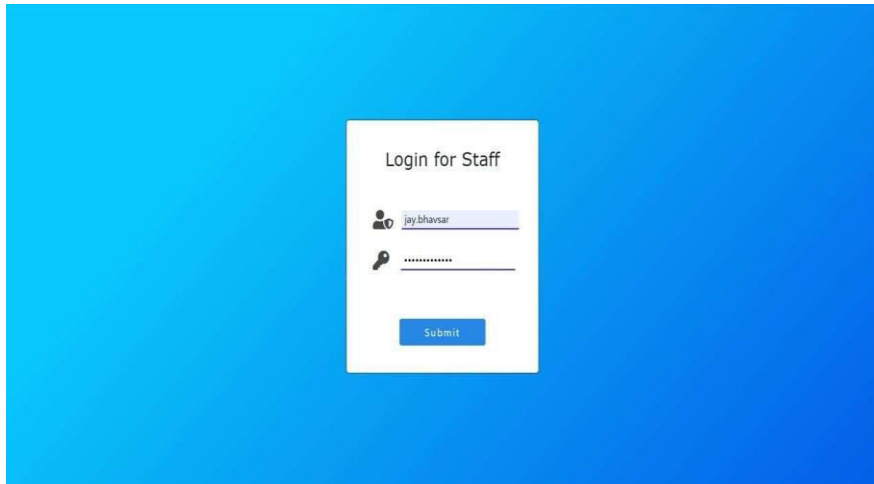


Fig 1:- LOGIN PAGE

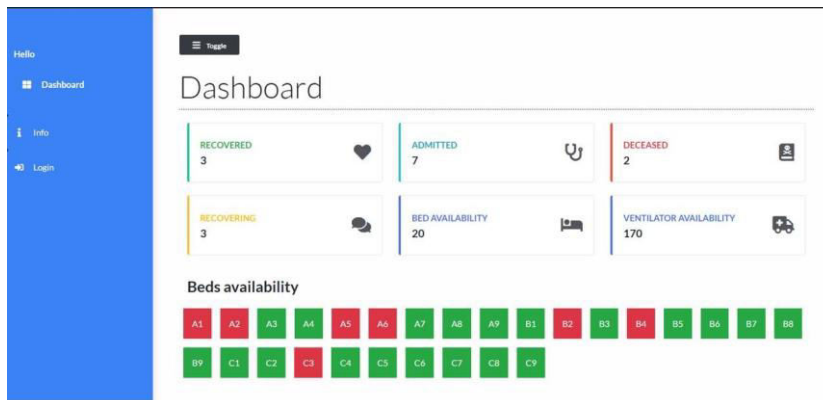


Fig 2:- DASHBOARD

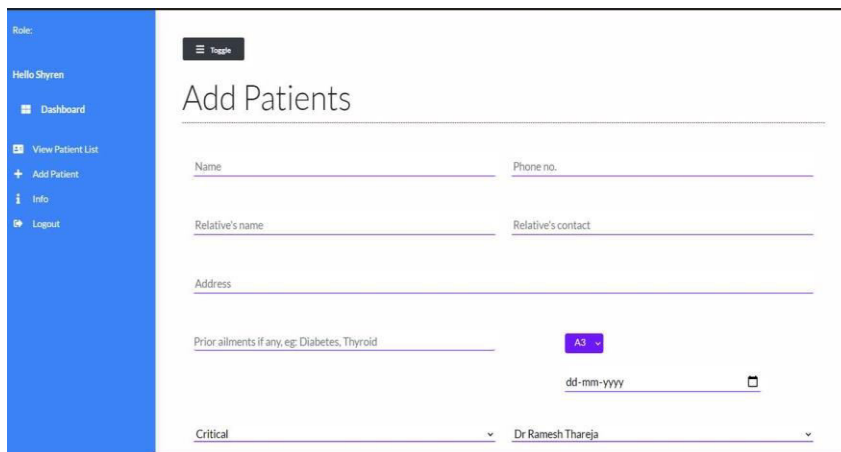


Fig 3:- ADD PATIENT 1

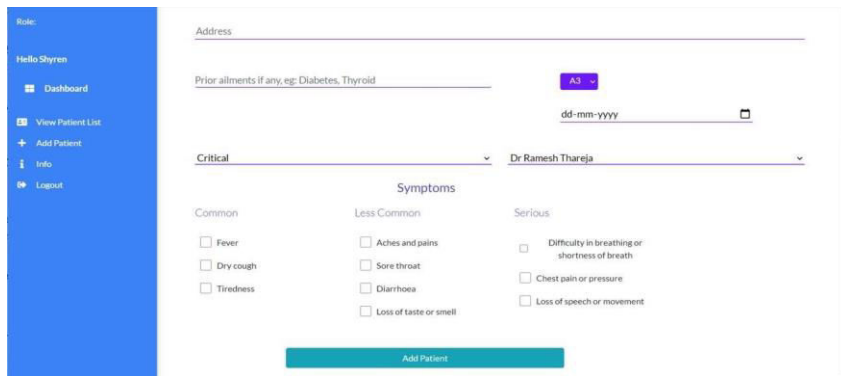


Fig 4:- ADD PATIENT 2

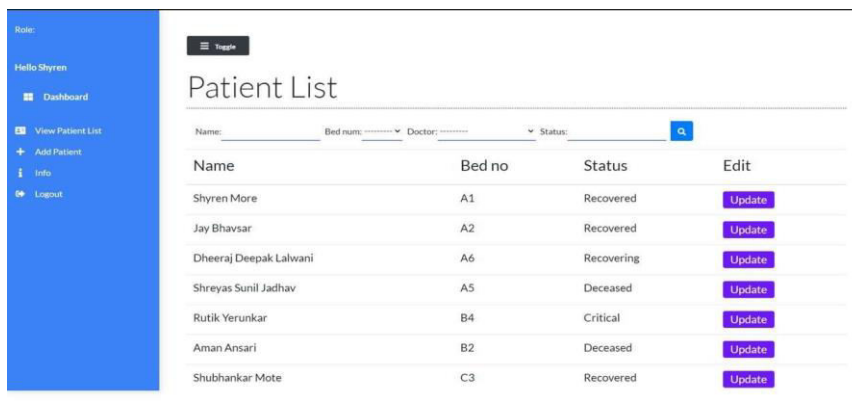


Fig 5:- Patient List

Role: Tags

Hello Shyren

- Dashboard
- View Patient List
- Add Patient
- Info
- Logout

### Shyren More, A1

Patient's contact 09870428889	Relative's contact 6749285201	Relative's Name Darshan Rander
Address Linkin road, Besides National College, Bandra east, Mumbai	Symptoms Fever, Dry cough, Aches and pains, Sore thro	
Prior ailments Thyroid	Bed number A1	
Status Recovered	Doctor Assigned: Dr Ramesh Thareja	
Doctor Visiting Time 3pm - 5pm	Doctor Notes: Take blood report	

**Save**

Fig 6:- ADDED PATIENT DETAILS



Fig 7:- ABOUT



Fig 8:-IPAD HOME PAGE VEIW

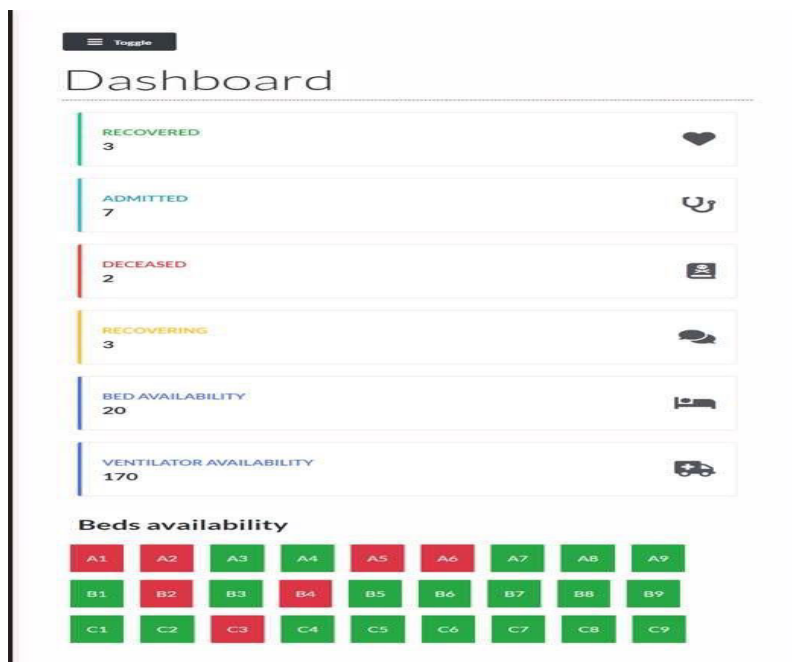


Fig 8:- IPAD View

## 7 .CONCLUSION AND FUTURE SCOPE

Working on the project was an excellent experience. It helped us to understand the importance of planning, designing and implementation so far we have learnt in our theory books. It helped us unleashing our creativity while working in a team. It also realized the importance of team working, communication as a part of this project. The project was successfully completed after a lot of efforts and work hours. This project underwent number of compiling, debugging, removing errors, making it bug free, adding more facilities in Hospital Management System and interactivity making it more reliable and useful.

This project focused that scheduling a project and adhering to that schedule creates a hard sense of time- management. It has also let us know that co-operative teamwork always produce effective results.

The entire project has been developed and deployed as per the requirements stated by the user. It is found to be bug free as per the testing standards that are implemented.

The estimated cost of the project is (efforts) 12 and the estimated size of the project is (FP) 209.72.

There are also few features which can be integrated with this system to make it more flexible. Below list shows the future points to be consider :

Getting the current status of patient.

Including a different module for pharmacy, LAB, Bed Allotment and many more.

Including a Frequently Asked Questions Section.

Finally, we like to conclude that we put all our efforts throughout the development of our project and tried to fulfill most of the requirements of the user.

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.

## 7 REFERENCES

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