



**LOKNETE HON.HANMANTRAO PATIL CHARITABLE TRUST'S  
ADARSH INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE,VITA**

**(NAAC Accredited Institute)**

**A/P:**Khambale(Bha) Near Karve MIDC, Vita **Tal:** Khanapur **Dist:** Sangli.415311

**Phone & Fax:** (02347) 229021 **Email:** [aitrc@aqiv.edu.in](mailto:aitrc@aqiv.edu.in) **Web :** [www.aitrcvita.edu.in](http://www.aitrcvita.edu.in)

**Hon.Adv.Sadashivrao H Patil**

Ex.MLA. Founder

**Hon.Adv.Vaibhav S Patil**

President

**Dr. P.S. Patil**

Principal



Academic Year:	ProjectSynopsis		Sem-V
2022-23	Department : Computer Science and Engineering		Date of Preparation:
RollNo	3057,3058,3059,3060	Class	TY B.Tech
ProjectTitle	Health Care Management System		
StudentName	1. Nikita Sanjay Bhosale. 2. Payal Randhirsing Jamdar 3. Manisha Arjun Gaikwad. 4. Shreya Popat Karade		

### **Introduction:**

Health care management system is a web application developed for hospitals to manage staff data and patients data effectively. the main aim of developing “HEALTH CARE MANAGEMENT SYSTEM” is to computerize the Front Office Management of Hospital. Hospital Management System is designed for multi-specialty hospitals, to cover a wide range of hospital administration and management processes. The project Hospital Management system includes registration of patients, storing their details into the system, and also computerized billing in the pharmacy, and labs. Healthcare is a field in which accurate record keeping and communication are critical. The software has the facility to give a unique id for every patient and stores the details of every patient and the staff automatically. With the increase of demand in hospitals, we need effective data management system for handling patient’s data, staff data and treatment details in an effective way. It deals with the collection of patient’s information, diagnosis details, etc. It includes a search facility to know the current status of each room. User can search availability of a doctor and the details of a patient using the id.

The main intention of introducing this system is to reduce the manual work at Health center counters. Quicker processing of receipt would mean better service to the patients . It would also help in the complexity of maintaining the records manually and thus less time is wasted on rework. The system is used to enter the patient details and to enter the details about the health center and the details about the in-patient and out-patient in detail and about the reports of the patients . User can login into the The Hospital Management System using a username and password. To develop a Health Center Management system, we take care of patient registration, drug information and concerns such as drug inquiries and complaints. It is accessible either by an administrator or receptionist. Only they can add data into the database. Proper maintenance of the drug information timely dispatching of the drugs from the main stores to the pharmacy and also maintenance of daily dispatching of the drugs to the out patients from the pharmacy to the out patients .



**LOKNETE HON.HANMANTRAO PATIL CHARITABLE TRUST'S  
ADARSH INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE,VITA**

**(NAAC Accredited Institute)**

**A/P:**Khambale(Bha) Near Karve MIDC, Vita **Tal:** Khanapur **Dist:** Sangli.415311

**Phone & Fax:** (02347) 229021 **Email:** [aitrc@aqiv.edu.in](mailto:aitrc@aqiv.edu.in) **Web :** [www.aitrcvita.edu.in](http://www.aitrcvita.edu.in)

**Hon.Adv.Sadashivrao H Patil**

**Hon.Adv.Vaibhav S Patil**

**Dr. P.S. Patil**

Ex.MLA. Founder

President

Principal



**Literature Review :**

Sr.NO	Authors	Year	Paper Gist
1	John Smith	2020	John Smith's literature review in 2020 focuses on the implementation of Electronic Health Records (EHRs) in healthcare management systems. Additionally, EHRs provide real-time access to patient information, leading to quicker decision-making and better healthcare outcomes.
2	Emily Davis	2018	Maria Rodriguez's literature review in 2019 explores the benefits of healthcare management systems that incorporate Artificial Intelligence (AI) and Machine Learning (ML). These technologies ultimately lead to more efficient healthcare delivery and improved patient outcomes.
3	Maria Rodriguez	2018	Maria Rodriguez's literature review in 2019 explores the benefits of healthcare management systems that incorporate Artificial Intelligence (AI) and Machine Learning (ML).predict disease outbreaks, optimize resource allocation, and personalize treatment plans. These technologies ultimately lead to more efficient healthcare delivery and improved patient outcomes.



**LOKNETE HON.HANMANTRAO PATIL CHARITABLE TRUST'S  
ADARSH INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE,VITA**

**(NAAC Accredited Institute)**

**A/P:**Khambale(Bha) Near Karve MIDC, Vita **Tal:** Khanapur**Dist:** Sangli.415311

**Phone & Fax:** (02347) 229021 **Email:** [aitrc@aqiv.edu.in](mailto:aitrc@aqiv.edu.in) **Web :** [www.aitrcvita.edu.in](http://www.aitrcvita.edu.in)

**Hon.Adv.Sadashivrao H Patil**

Ex.MLA. Founder

**Hon.Adv.Vaibhav S Patil**

President

**Dr. P.S. Patil**

Principal



## **Relevance of the Work:**

Healthcare management systems automate various administrative tasks, reducing the burden of manual paperwork and streamlining processes. This efficiency allows healthcare professionals to focus more on patient care, leading to improved outcomes and increased productivity.

With easy access to electronic health records, healthcare providers can quickly retrieve patient information, including medical history, test results, and treatment plans. This access enables more accurate diagnoses, better coordination of care, and personalized treatment options.

Healthcare management systems facilitate seamless communication and collaboration among healthcare professionals. They can securely share patient information, exchange messages, and collaborate on care plans, leading to improved care coordination and patient safety.

Healthcare management systems provide real-time data and analytics, enabling healthcare organizations to make informed decisions. They can identify trends, track performance metrics, and optimize resource allocation, ultimately improving the quality and efficiency of care.

Healthcare management systems are designed to meet industry standards and regulations, ensuring the security and privacy of patient information. They help healthcare organizations comply with requirements such as HIPAA and maintain data integrity, protecting patient confidentiality.

## **Proposed Work:**

Clearly outline the goals and objectives of the healthcare management system, such as improving patient care, streamlining operations, and enhancing efficiency.

Determine the essential functionalities the system should have, including patient management, appointment scheduling, electronic health records (EHR), billing and claims management, inventory and pharmacy management, and reporting and analytics.

Bring together a team of software developers, designers, and healthcare professionals to collaborate on the project.



**LOKNETE HON.HANMANTRAO PATIL CHARITABLE TRUST'S  
ADARSH INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE,VITA**

**(NAAC Accredited Institute)**

**A/P:**Khambale(Bha) Near Karve MIDC, Vita **Tal:** Khanapur**Dist:** Sangli.415311

**Phone & Fax:** (02347) 229021 **Email:** [aitrc@agiv.edu.in](mailto:aitrc@agiv.edu.in) **Web :** [www.aitrcvita.edu.in](http://www.aitrcvita.edu.in)

**Hon.Adv.Sadashivrao H Patil**

Ex.MLA. Founder

**Hon.Adv.Vaibhav S Patil**

President

**Dr. P.S. Patil**

Principal



### **Proposed Methodology:**

Start by collecting detailed requirements from stakeholders, including healthcare professionals, administrators, and end-users. This will help you understand their needs and expectations for the system. Based on the requirements, create a system design that outlines the architecture, modules, and interfaces of the healthcare management system. This design should align with industry best practices and consider scalability and future enhancements.

Begin the development phase by coding the various modules and functionalities of the system. It's essential to follow coding standards, conduct regular code reviews, and ensure proper documentation for future maintenance. Perform rigorous testing to validate the system's functionality, usability, and security. This includes unit testing, integration testing, performance testing, and user acceptance testing. Address any issues or bugs identified during this phase.

Once the system has passed all testing phases, it can be deployed and implemented in the healthcare organization. This involves installing the system, migrating data, and training users on how to effectively utilize the system.

### **HW/SW Requirement:**

#### **Hardware:**

- 256MB Ram
- 512 KB Cache Memory
- Hard Disk 10 GB

#### **Software:**

- Windows xp
- Operating system
- Programing Language C,HTML,PHP



**LOKNETE HON.HANMANTRAO PATIL CHARITABLE TRUST'S  
ADARSH INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE,VITA**

**(NAAC Accredited Institute)**

**A/P:Khambale(Bha) Near Karve MIDC, Vita Tal: KhanapurDist: Sangli.415311**

**Phone & Fax: (02347) 229021 Email: [aitrc@aqiv.edu.in](mailto:aitrc@aqiv.edu.in) Web : [www.aitrcvita.edu.in](http://www.aitrcvita.edu.in)**

**Hon.Adv.Sadashivrao H Patil**

**Hon.Adv.Vaibhav S Patil**

**Dr. P.S. Patil**

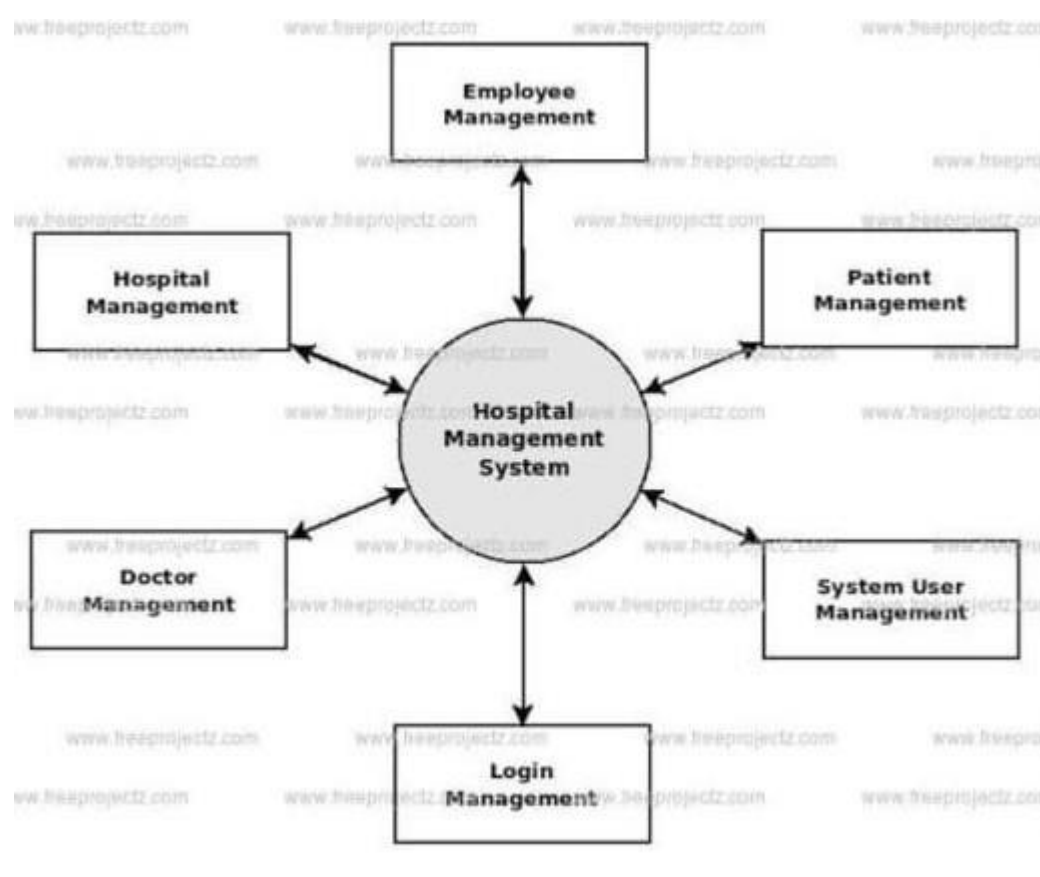
Ex.MLA. Founder

President

Principal



## Flowchart/Algorithm





**LOKNETE HON.HANMANTRAO PATIL CHARITABLE TRUST'S  
ADARSH INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE,VITA**

**(NAAC Accredited Institute)**

**A/P:**Khambale(Bha) Near Karve MIDC, Vita **Tal:** Khanapur **Dist:** Sangli.415311

**Phone & Fax:** (02347) 229021 **Email:** [aitrc@aqiv.edu.in](mailto:aitrc@aqiv.edu.in) **Web :** [www.aitrcvita.edu.in](http://www.aitrcvita.edu.in)

**Hon.Adv.Sadashivrao H Patil**

Ex.MLA. Founder

**Hon.Adv.Vaibhav S Patil**

President

**Dr. P.S. Patil**

Principal



**References:**

a)[Wikipedia\(n.d\).Mbarara Hospital.RetrievedSeptember27<sup>th</sup>,2010,from  
http://www.wikipedia.org:http://www.wikipedia.org/wiki/Mbarara\\_Hospital](http://www.wikipedia.org/http://www.wikipedia.org/wiki/Mbarara_Hospital)

b)[Support.microsoft.com](http://support.microsoft.com)

c) [Advance C Programming Oxford Publisher 2010](#)

**Signature of Student**

1. Nikita Sanjay Bhosale (CS3057) -
2. Payal Randhirsing Jamdar (CS3058) -
3. Manisha Arjun Gaikwad (CS3059) -
4. Shreya Popat Karade (CS3060) -

**Signature of Guide**

**Head of Department**