A

Project report on

"HOSPITAL MANAGEMENT SYSTEM"

Report submitted to

Institute of Engineers (India)

8 Gokhale Road, Kolkata 700 020

In partial fulfillment for the

AMIE in

"COMPUTER SCIENCE"

Submitted by

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Under the guidance of

Miss. Govekar Jyoti Suresh



2022

AMIE Project work on

"HOSPITAL MANAGEMENT SYSTEM"

Submitted by

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"COMPUTER SCIENCE"

Institute of Engineers (India)

8 Gokhale Road, Kolkata 700 020



The Institution of Engineers (India) 8 Gokhale Road, Kolkata 700 020

Academic Year: 2022

CERTIFICATE

This is to certify that MISS. PATIL SNEHAL SANJAYKUMAR, Membership No: ST683799-4 of Computer Science Engineering has completed the project work titled "Hospital Management System" is a bonafide record of the work carried out independently under my guidance.

This project work has been carried out in partial fulfillment of the requirement of passing Section B Examination of the Institution of the Engineers (India) and has been implemented successfully as per the guidelines laid down by the Institution of the Engineers (India). The project work is an original one and has not been submitted earlier to any other University/Institution for fulfillment of the requirement of any other course of study.

Miss. Govekar Jyoti Suresh

DECLRATION

I, PATIL SNEHAL SANJAYKUMAR, Membershi	p No: ST683799-4 , studying
Computer Science Engineering branch in The Institu do hereby declare that the project work done on "Hos is an original work and has not been submitted earlier fulfillment of the requirement of a course of study.	spital Management System
Place:	
Date:	Patil Snehal Sanjaykumar

ACKNOWLEDGEMENT

I would like to take chance to make grateful acknowledgement all those people who have positively involved and supported during project work and made this project successful.

Apart from the efforts, the success of any project depends largely on the encouragement and guidelines of many others. We take this opportunity to express our gratitude to the people who have been instrumental in the successful completion of this project.

Foremost, I would like to express my sincere gratitude to my project guide **DR**. **Jyoti Suresh Govekar,IEI** for his continuous support to make this project more fruitful and successful.

The completion of any inter-disciplinary project depends upon cooperation, coordination and combined efforts of several sources of knowledge.

I am eternally grateful to our teacher DR. Jyoti Suresh Govekar, IEI for her even willingness to give us valuable advice and direction under which we executed this project. Her constant guidance and willingness to share her vast knowledge made us understand this project and its manifestations in great depths and helped us to complete the assigned tasks.

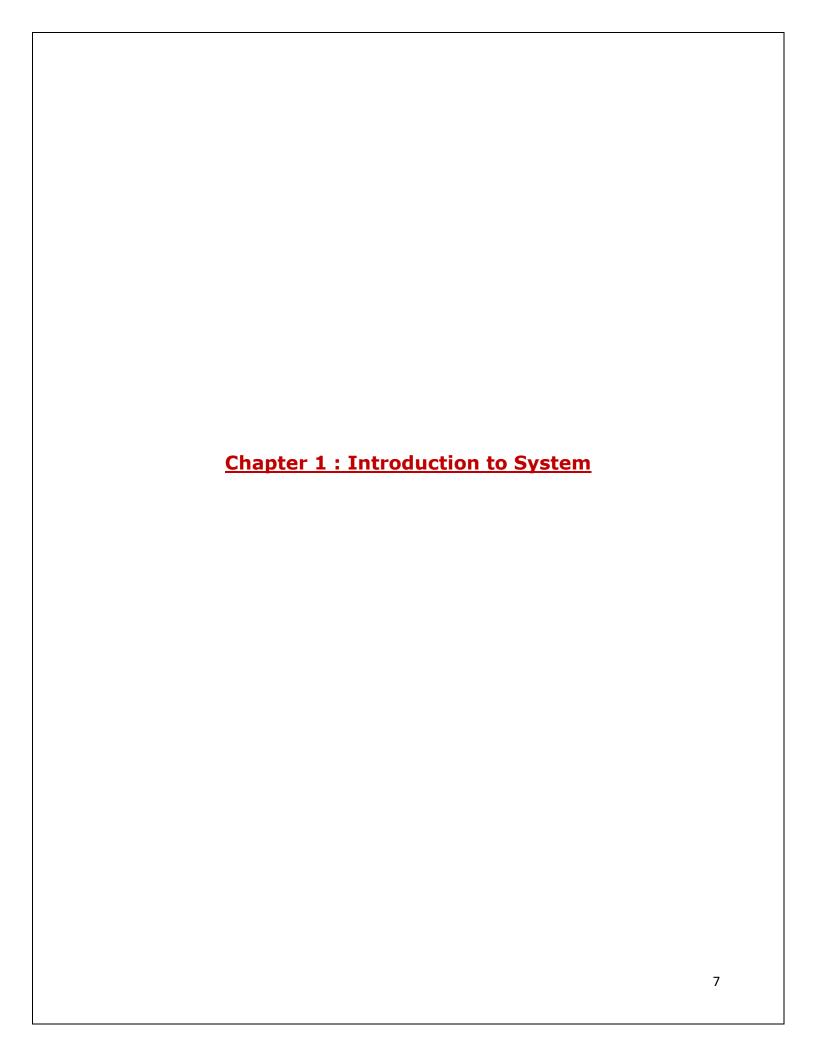
I am overwhelmingly thankful for their moral support that motivated me at every step to successfully complete the project.

PATIL SNEHAL SANJAYKUMAR

ST-683799-4

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Introduction:

The project Hospital Management system includes registration of patients, storing their details into the system, book doctor appointment, consult with doctor and also computerized billing in the pharmacy.

The 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 administrator. 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.

Hospital Management System is powerful, flexible, and easy to use and is designed and developed to deliver real conceivable benefits to hospitals. The Hospital Management System is designed for multi-speciality hospitals, to cover a wide range of hospital administration and management processes.

Hospital Management System is a software product suite designed to improve the quality and management of hospital management in the areas of clinical process analysis and activity-based costing. Hospital Management System enables you to develop your organization and improve its effectiveness and quality of work. Managing the key processes efficiently is critical to the success of the hospital helps you manage your processes.

1.1 Problem Defination:

• Lack of immediate retrievals: -

The information is very difficult to retrieve and to find particular information like- E.g. - To find out about the patient's history, the user has to go through various registers. This results in in convenience and wastage of time.

• Lack of immediate information storage: -

The information generated by various transactions takes time and efforts to be stored at right place.

• Lack of prompt updating: -

Various changes to information like patient details or immunization details of child are difficult to make as paper work is involved.

• Error prone manual calculation: -

Manual calculations are error prone and take a lot of time this may result in incorrect information. For example - calculation of patient's bill based on various treatments.

Preparation of accurate and prompt reports: -

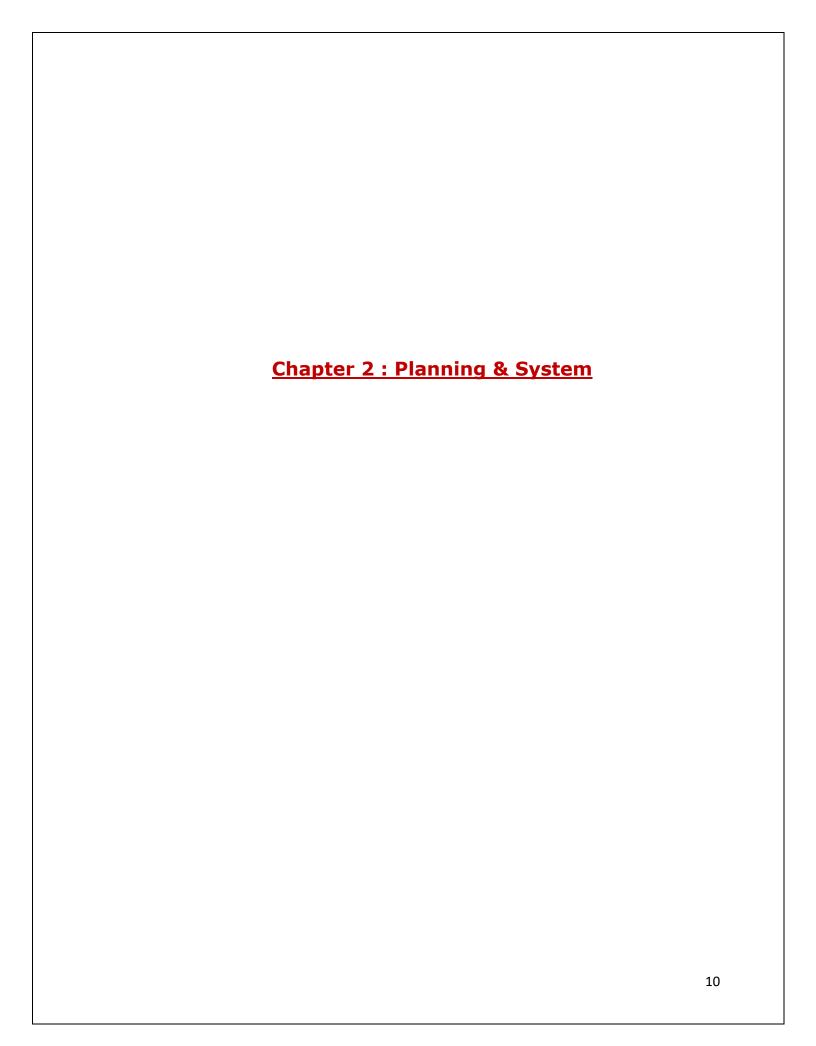
This becomes a difficult task as information is difficult to collect from various register.

1.2 Objectives:

The main objective of the Project on "Hospital Management System" is to manage the details of Hospital, Doctors, Patient, Pharmacy. It manages all the information. The project is totally built at administrative end and thus only the administrator is guaranteed the access.

The purpose of the project is to build an application program to reduce the manual work for managing the Hospital, Doctors, Medicine, Patient. It tracks all the details about the Patient, Doctor, Medicines.

Define hospital, Recording information about the Patients that come, Generating bills, Recording information related to diagnosis given to Patients, Keeping record of the Immunization provided to children/patients, Keeping information about various diseases and medicines available to cure them. These are the various jobs that need to be done in a Hospital by the operational staff and Doctors. All these works are done on papers.



2.1 Study of existing system:

Hospitals currently use a manual system for the management and maintainance of critical information. The current system requires numerous paper forms, with data stores spread through out the hospital management infrastructure.

Often information is incomplete or does not follow management standards. Forms are often lost in transit between departments requiring a comprehensive auditing process to ensure that no vital information is lost. Multiple copies of the same information exist in the hospital and may lead to inconsistencies in data in various data stores.

2.2: Proposed System:

The online hospital management system is available in the market that can serve patients to search doctors nearby and take appointment and view our appointment status online.

The Hospital Management System is designed for any hospital to replace their existing manual paper based system. The new system is to control the information of patients. Doctors, Book Appointment, Consult Doctor, Pharmacy, Medicine details are involved. These services are to be provided in an efficient, cost effective manner, with the goal of reducing the time and resources currently required for such tasks.

2.2.1: Information about modules:

Mainly consists 4 modules, which are

- Admin module
- User (Patient) module
- Doctor module
- Medical module

ADMIN

Admin has the full access to the system which means he is able to manage any activity with regard to the system. He is the highest privileged user who can access to the system.

Key functions:

- •Access patient record, doctor Record.
- •Add new doctor entry in system database.
- Confirm Payment and Generate Bill.
- View Records. (Total no of patients treated, doctor added/remove, consultant fee).

PATIENT

Patients can choose the best preferred appointments from the options provided and can also change the appointment schedule or cancel it. After appt. is confirmed by the respective doctor they can pay their consultant fee online. Patients have access to only their records.

Key functions:

- Make appointment.
- Cancel appointment.
- Update Details.
- Payment.
- View Payment History.

DOCTOR

Doctors can view the patient appointment list and provide the confirmation or make changes in the appointment list if required. Doctors have access to only records of those patients whom they are treating.

Key functions:

- Confirmation of appointment.
- Cancellation of appointment.
- Modification of appointment list.
- Add Prescription.

2.3: Information Gathering –

We preferred web application to find more information about Hospital Management_System. Also use the application for take guidance. We also preferred websites.

2.3.1 : Discussion –

For understanding the system we had a discussion with our project guide. They also suggest use PHP language for this project.

2.3.2 : Brainstorming -

We have properly studied the existing problems related to Hospital Management and we have essentially built proper detailed application for give a lot of facility and also give proper guide.

2.2.2 : Features of software :

• Appointment Management –

For hospitals having their own site, appointment widgets on to the site. Patients visiting the hospital's website can book online appointments with ease.

• Billing Management –

Integrated automatic billing due capture, options to bill before and after consultations.

Pay bill option is available

Pharmacy Management –

Pharmacy management handles stock of medicines, Prescription, Stock management.

Manage Multiple Locations –

Any number of branches can be added and managed by single account. Admin can manage all.

• Benefits of Hospital Management System –

We have so clarified on the importance of HMS for your needs and purposes. It is time saving, online booking appointment, consult with specialists top doctors, Medicine products available at pharmacy, add to cart medicines also pay bill online way which all saves the time.

• Increased Data Security –

The patient data can be kept a hundred percent safe by using HMS in your hospital. It can be made accessible by only a limited account of authorized personnel. With HMS, all the data is stored on a server or client and kept safe by just securing the login information safe.

• Improve Visibility and Transparency –

Hospital Management System (HMS) improves the visibility and transparency in the complete management process and in all records.

• Improved Quality Control -

Hospital Management System improves the quality control on the products and services of the hospital.

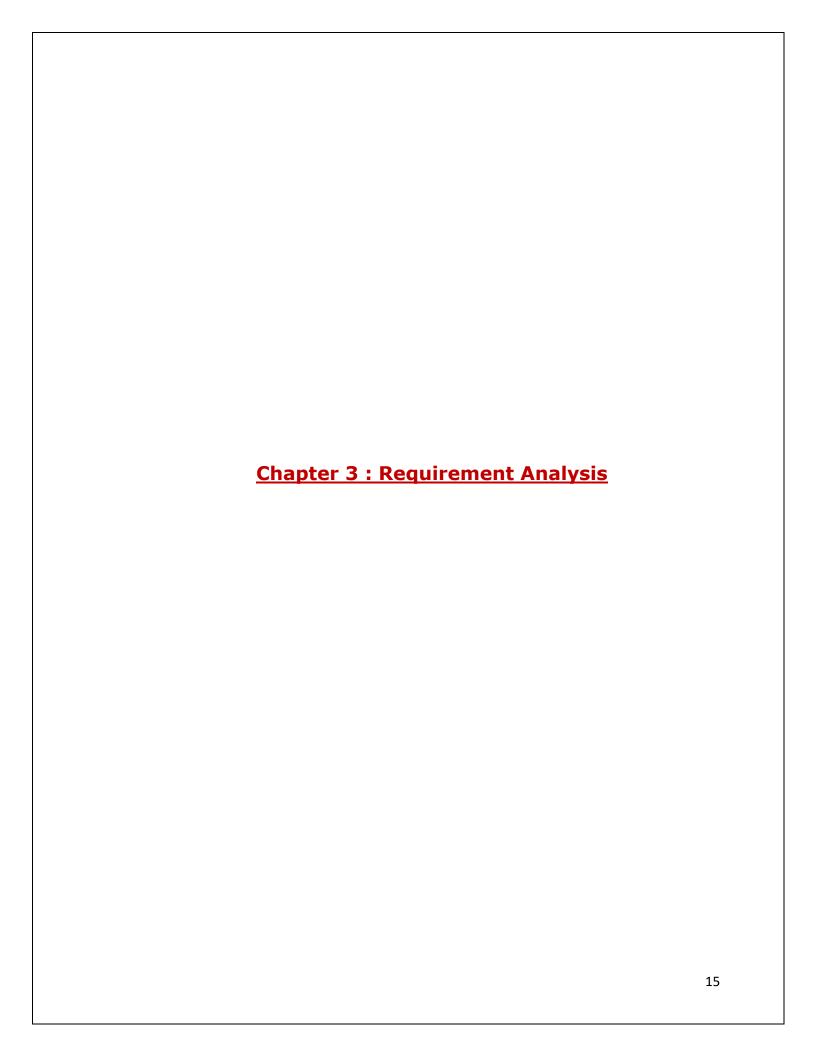
• Ease to Access System Facilities –

Hospital Management System makes it easy to get access to the management system facilities for the authorized users and keep it safe from unauthorized users.

• Cost Effective –

HMS not only saves time in the hospital but also is cost effective in decreasing the number of people working on the system of working on the system of manual entry of data and paperwork. The implementation will decrease the human intervention into the system thereby avoiding human caused errors.

Every hospital has different needs, analyze what is best for your requirement and install the apt HMS system.

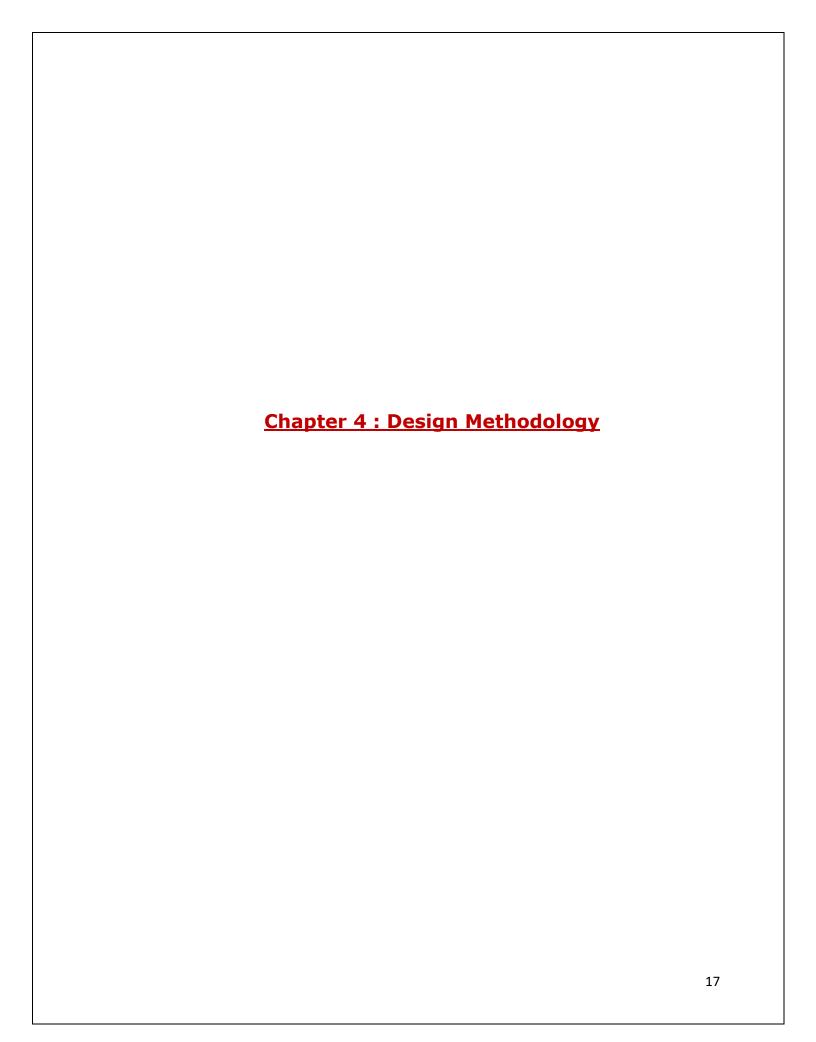


3.1 : Software Requirement :-

- HTML5
- CSS3
- BOOTSTRAP
- JAVASCRIPT
- PHP
- MYSQL
- OS Windows 7
- Notepad ++ /Visual Studio Code

3.2: Hardware Requirement:-

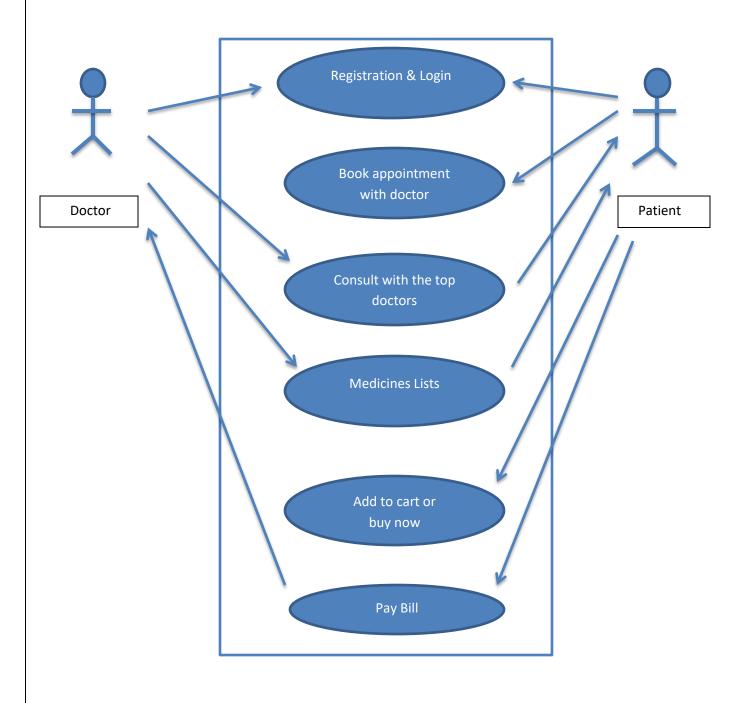
- Laptop/Desktop with 4 GB RAM
- Hard Disk Space
- Processor
- Necessary input output devices like printer



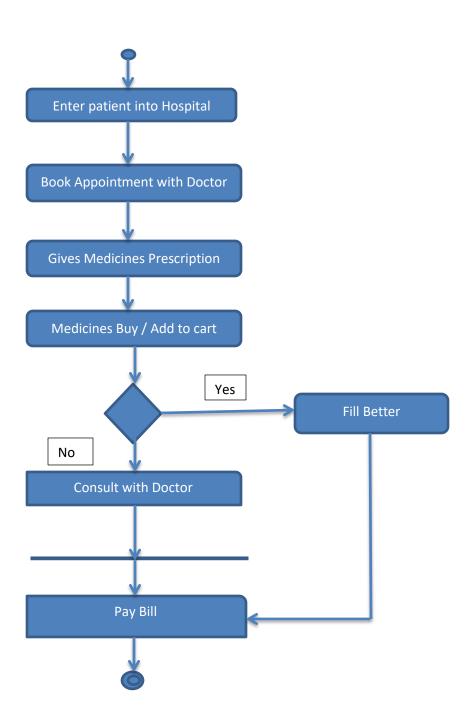
System Architecture:



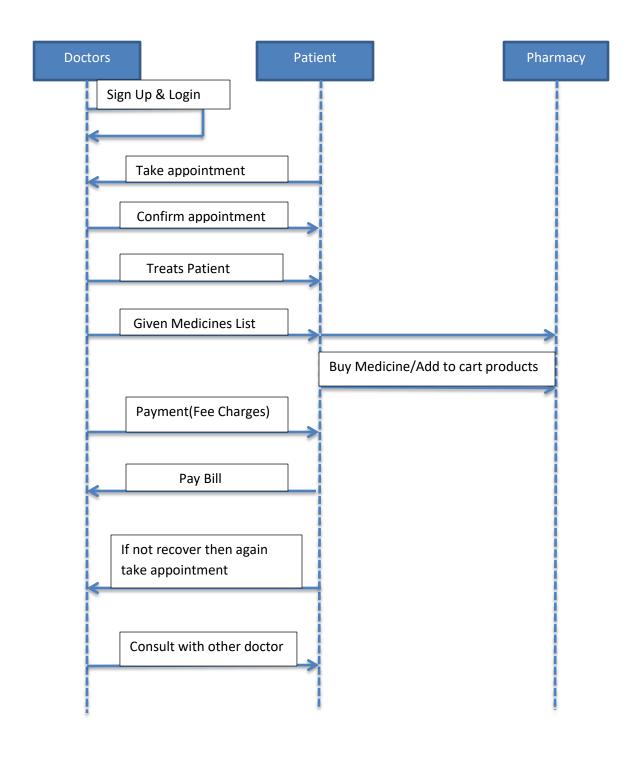
Use Case Diagram:



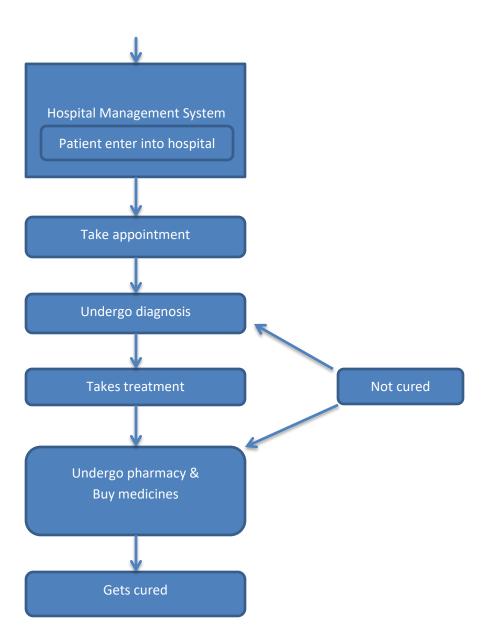
Activity Diagram:



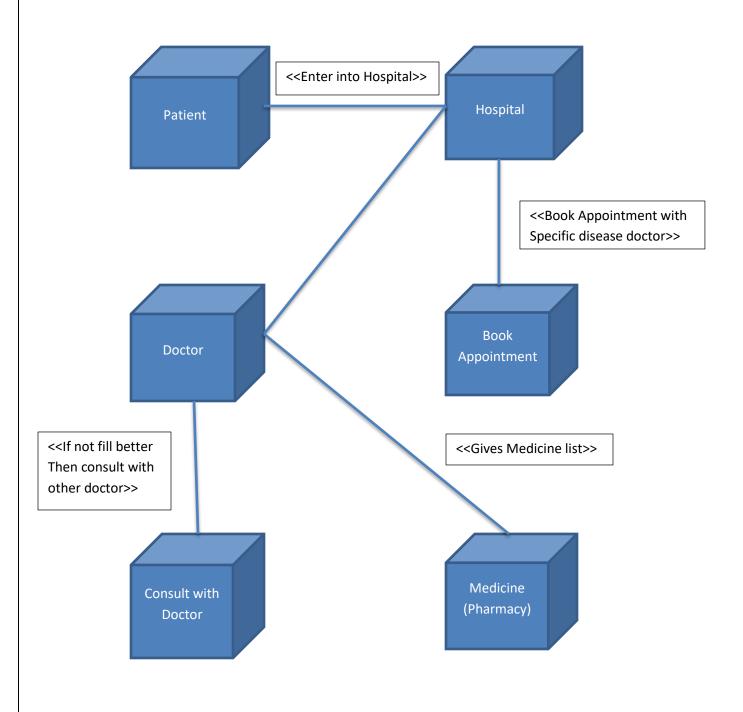
Sequence Diagram:

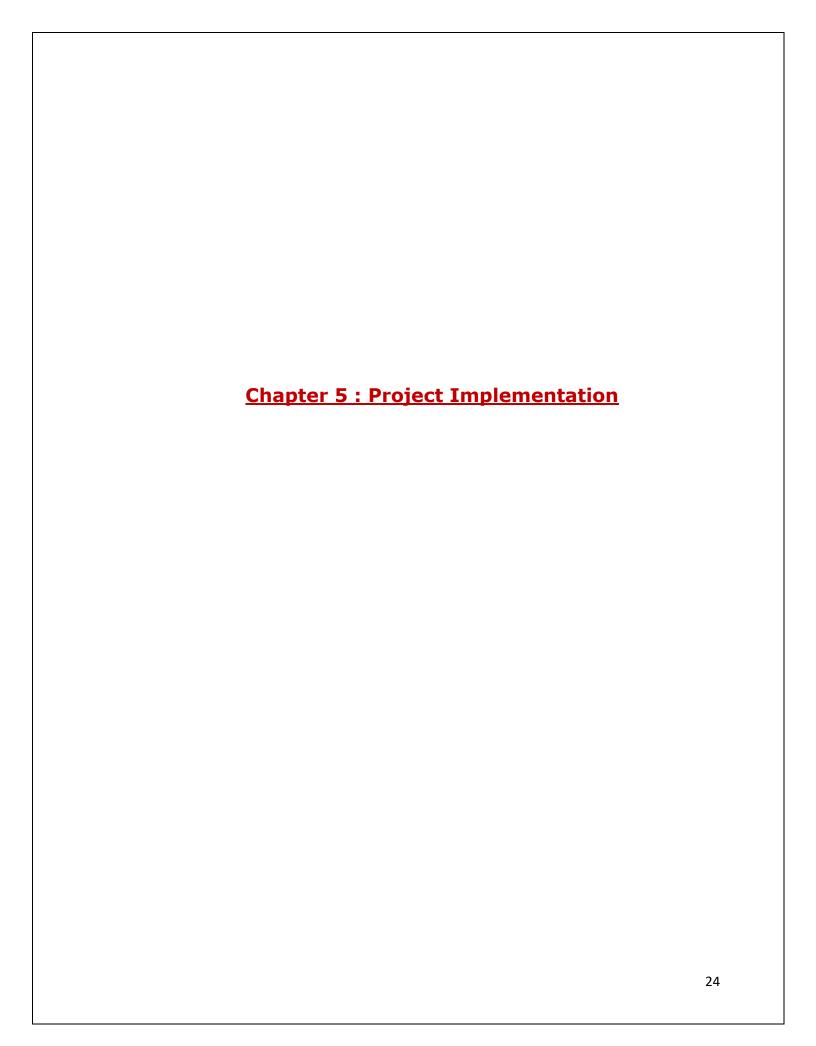


State Diagram:



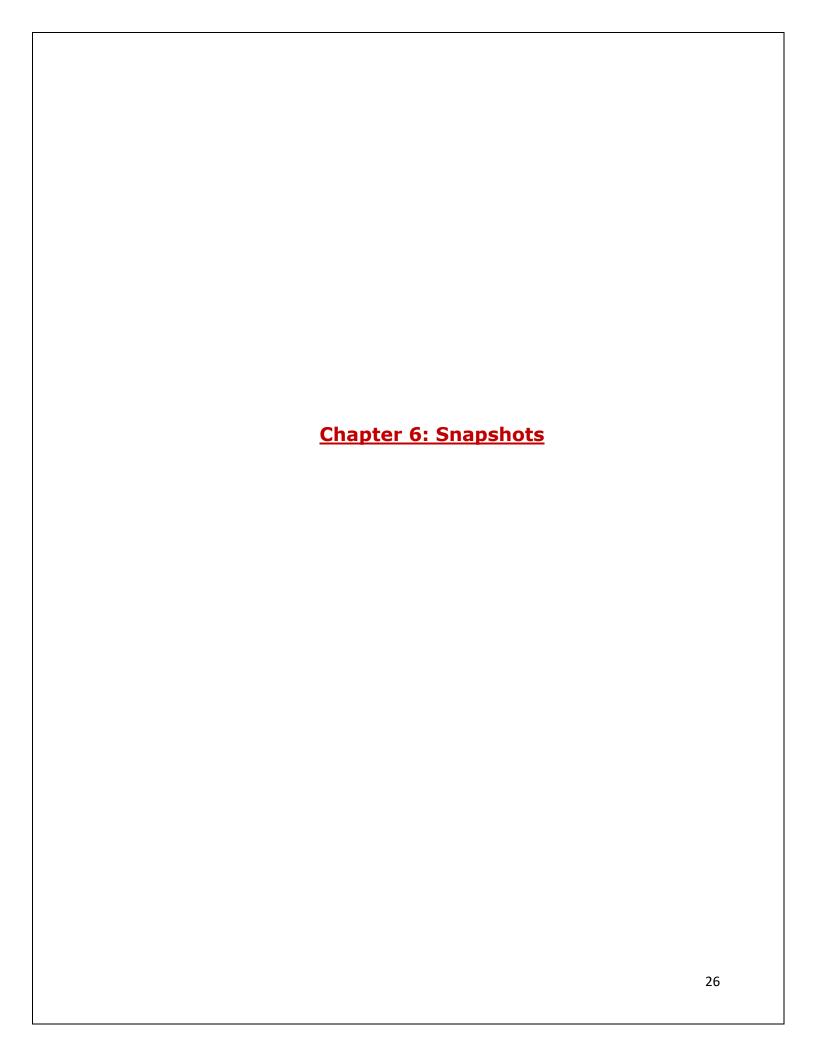
Component Diagram:



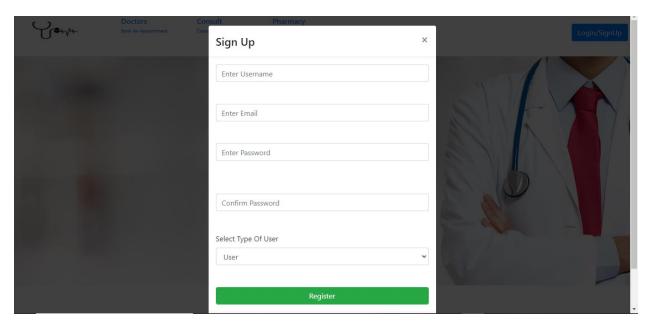


Project Implementation:

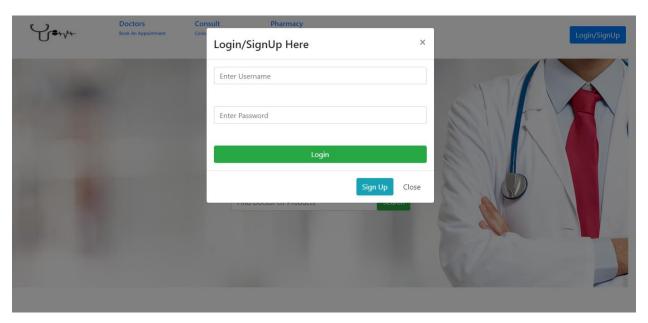
Date	Work Timing	Activity	
11/11/2022 to 17/11/2022	1 week	Topic Search & Select	
18/11/2022 to 24/11/2022	1 week	Synopsis & Planning	
25/11/2022 to 01/12/2022	1 week	Designing	
02/12/2022 to 15/12/2022	2 week Coding		
16/12/2022 to 22/12/2022	1 week	Testing	
23/12/2022 to 29/12/2022	1 week	Report	



Sign Up Page :-

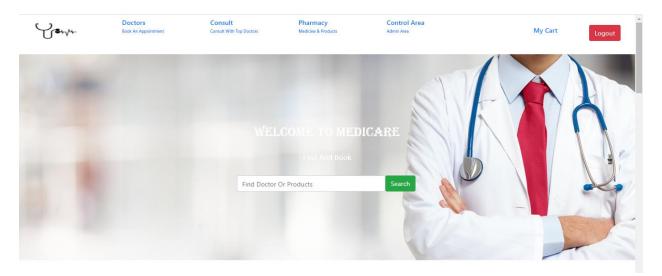


Login Page :-



Homepage:

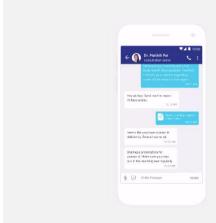
Doctor -



Instant appointment with doctors. Guaranteed.

- 100,000 Verified doctors
- 3M+ Patient recommendations
- 3M+ Patient recommendations





Skip the waiting room. Consult with a doctor

- Fees starting at ₹99
- Verified doctors respond in 5 minutes
- 100% Private and confidential







Consult top doctors online for any health concern

Find experienced doctors across all specialties



Pregnancy Problem



Acne,pimple & Skin Problem



Cold & Fever Problem



small baby Problem





Genral Doctors



Dental Problem



Gynecologist



Children Doctors



dermatology



cardiology



Neurologists



Otolaryngology

Our Doctors says it!



Dr.Sanket Patil

There is no reason to panic. With proper precautions you can protect yourself, your family, your communities and our patients. Here are some tips to stay safe.



Dr.Snehal Patil

Wear a mask. My mask protects you and your mask protects me. Keep your mask in place at all times, covering your nose and chin.Be Careful..

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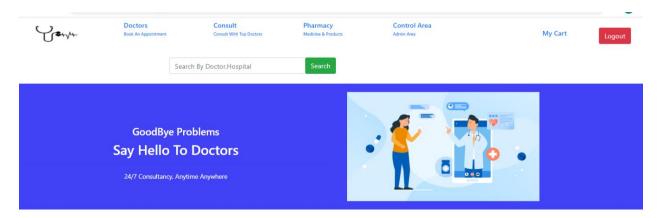




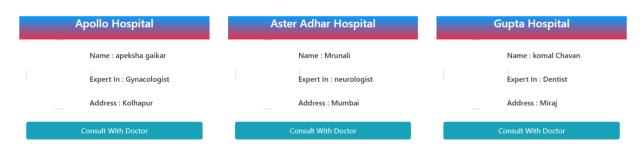




Consult -



Top Doctors

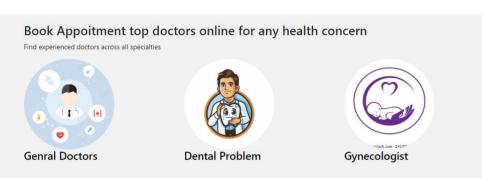


Consult our doctors online

Our eConsult service lets you:

- Request advice and treatment from our practice online
- · Get self-help advice for hundreds of common conditions

GET STARTED









Children Doctors



Neurologists



Otolaryngology

Why ask for one doctor reference when you have millions?



Our Doctors says it!





Dr.Snehal Patil

Wear a mask. My mask protects you and your mask protects me. Keep your mask in place at all times, covering your nose and chin.Be Careful..

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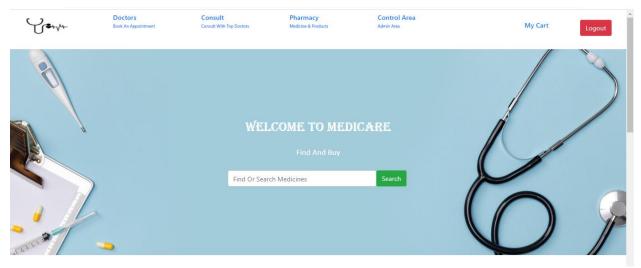


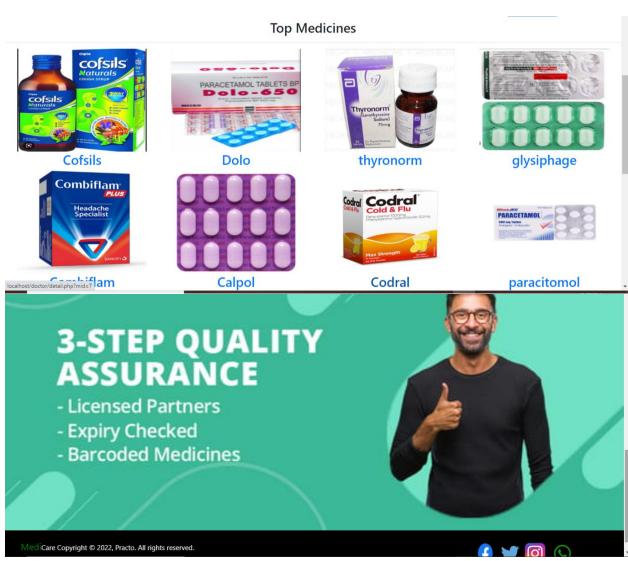






Pharmacy -





Medicine Details -





crocin max

Product Used In: headache

Product Information:

most used medicine for headache

Product Price: 90/- Rs

Product Lists -

Product_id	Product Name	Product Image	Product Used For	Buy Now	Delete
1	crocin max	Grain AAAA	headache	Buy Now	Delete
10	Dolo	Dela 650	Fever	Buy Now	Delete
12	Nasacort	Nacacott Macacott	Allergy	Buy Now	Delete

Buy Now -





<u>Pay Bill -</u>



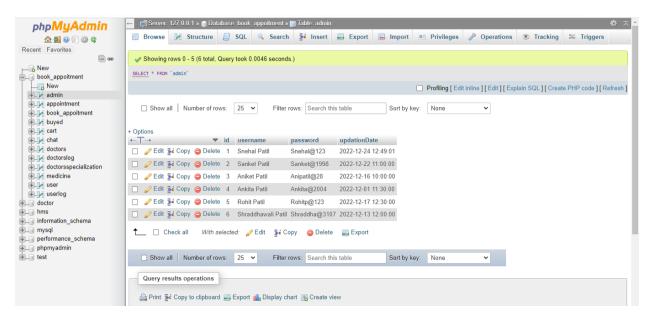
My Cart

Select your bank	•
Select your bank	
Username	
Username	Enter Mobile Number
Money	Mobile Number
900	
Password	

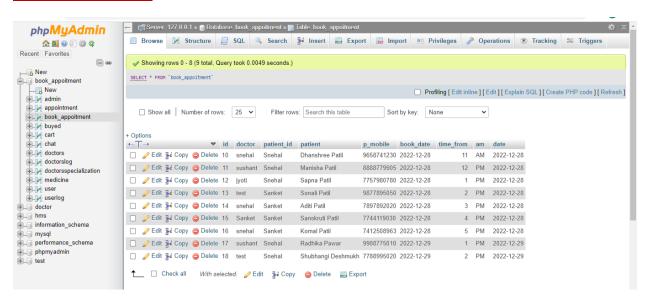
CVV	
CVV	
Pay Now	

Database -

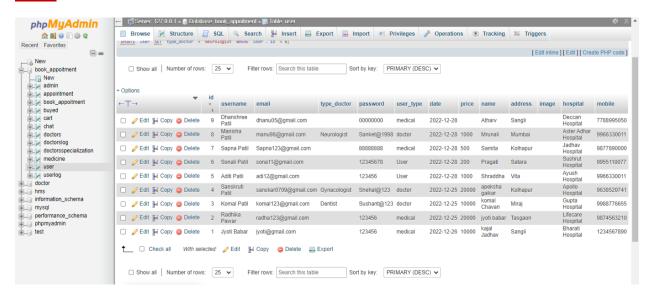
Admin -



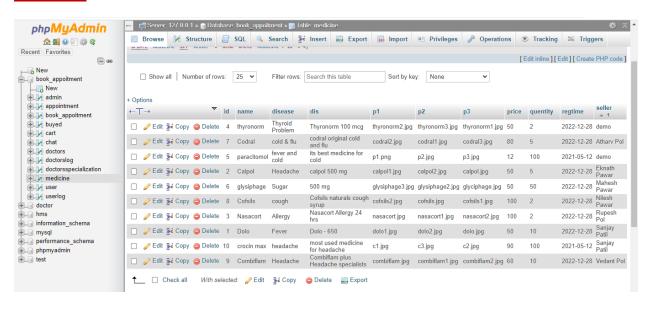
Book Appointment -



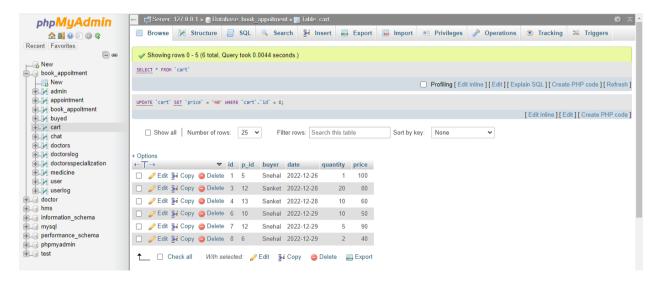
User -



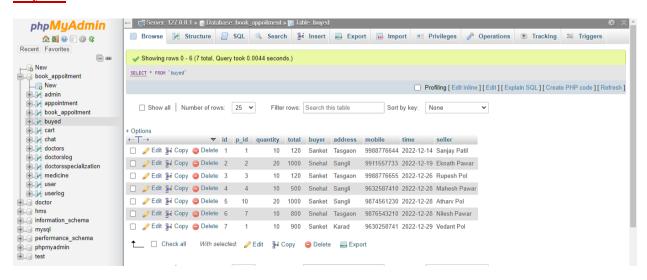
Medicine -



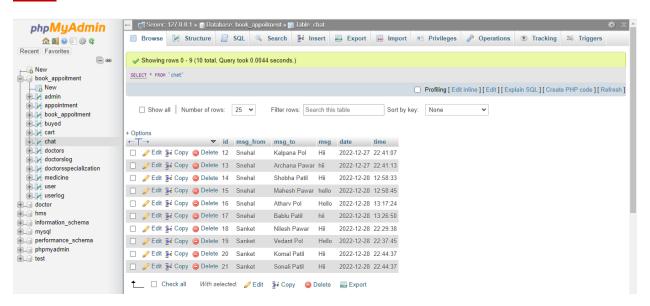
Cart -



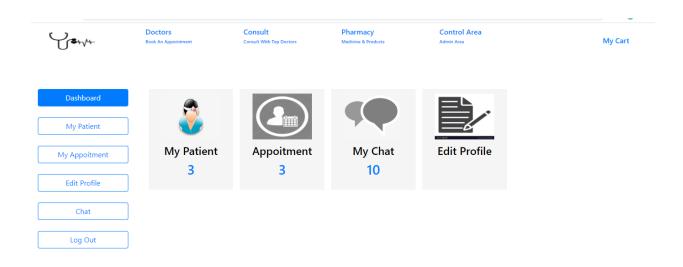
Buyed -



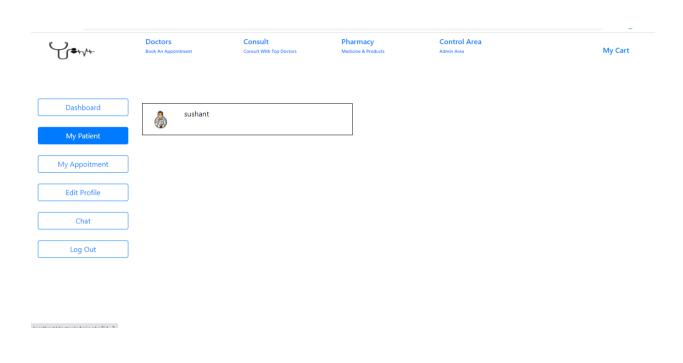
Chat -



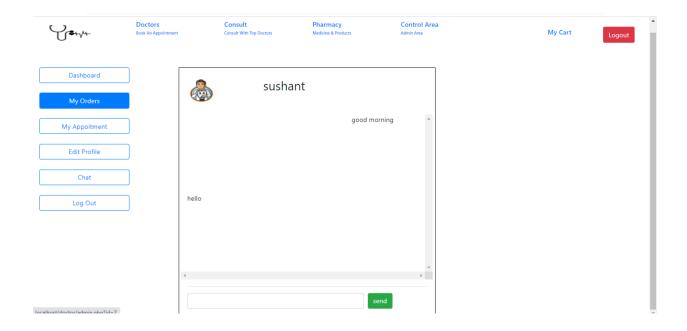
Dashboard -



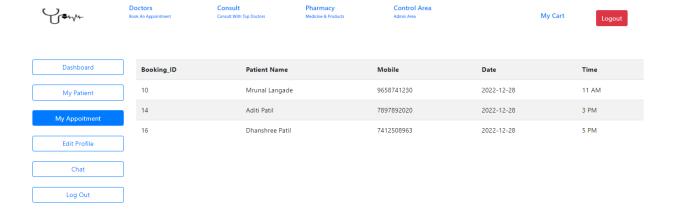
Patients -



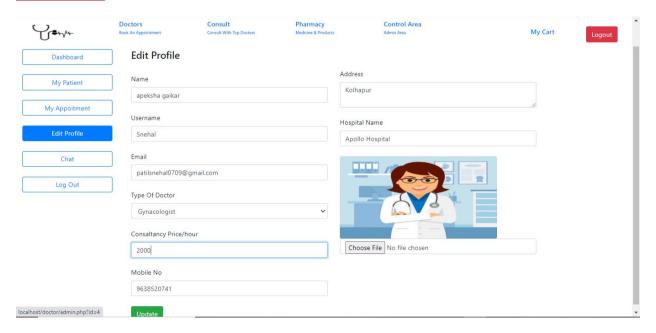
Chat -



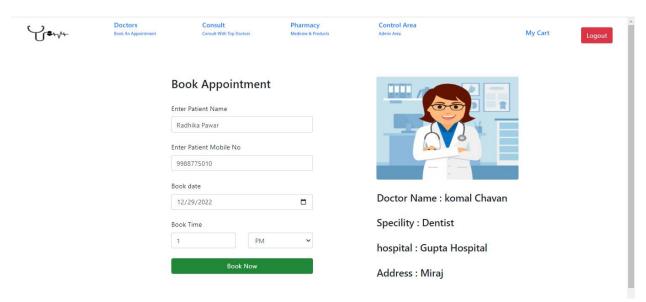
Appointment List-

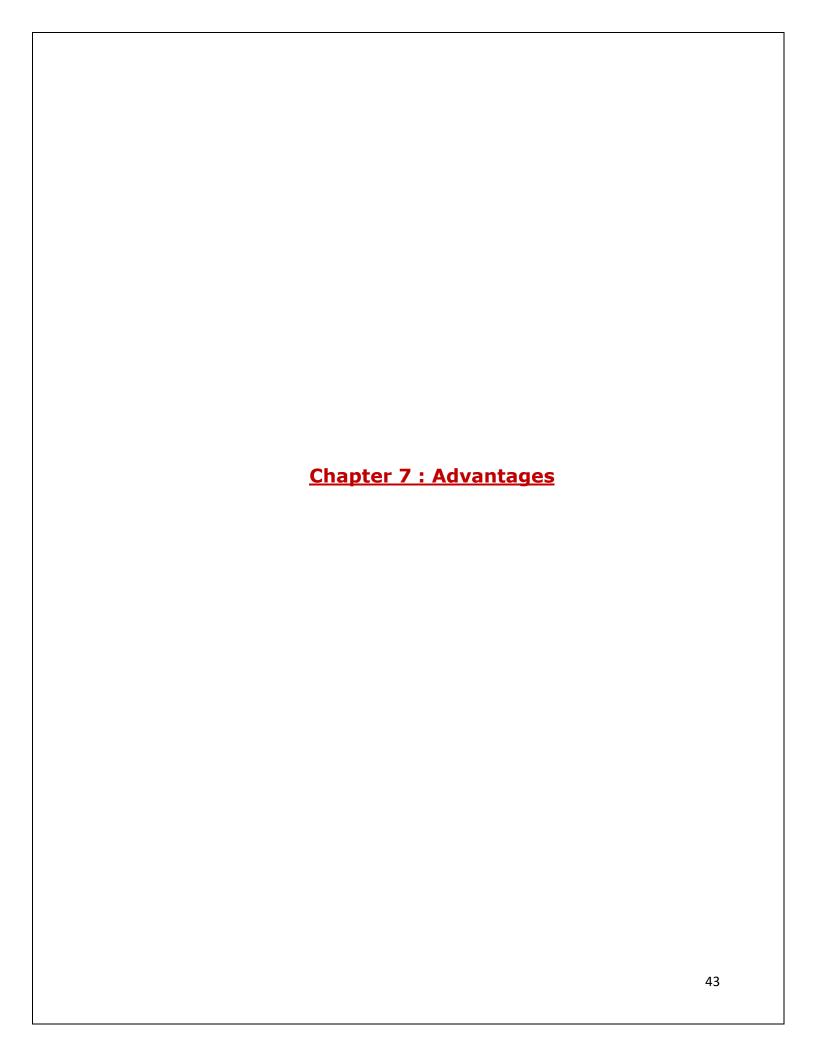


Edit Profile -



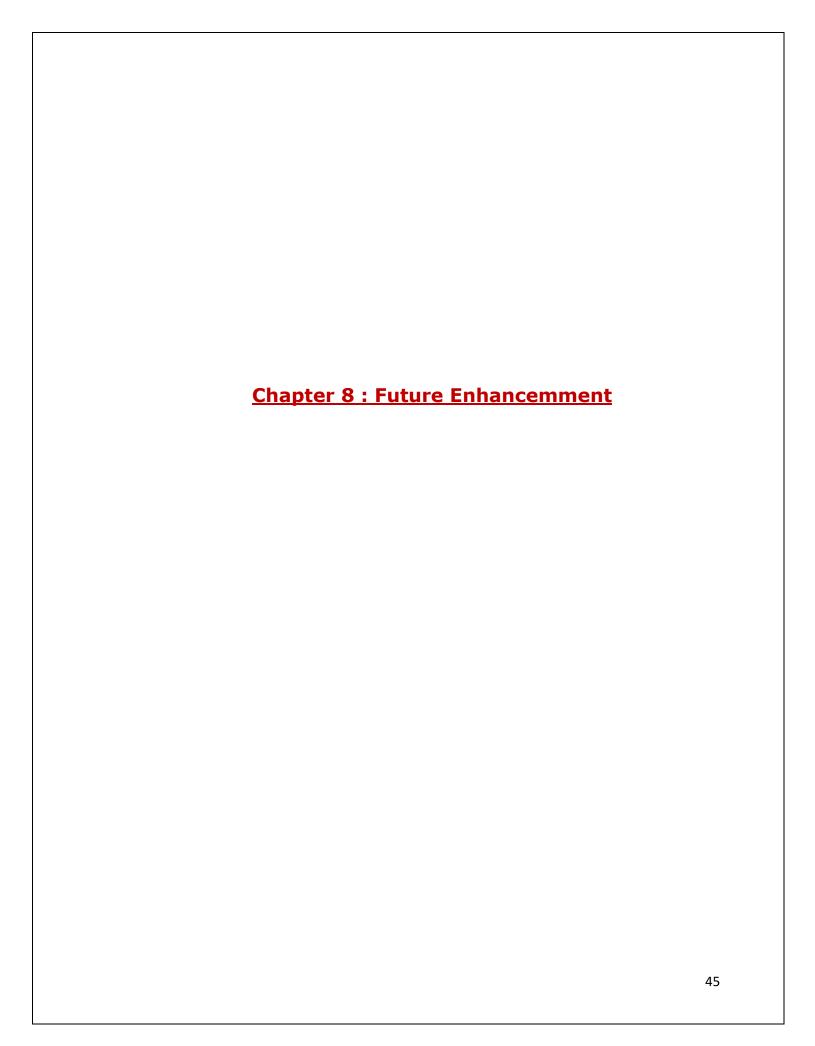
Book Appointment -





Advantages:-

- Only basic knowledge of computer is required and user friendly applications.
- Book appointment online. So, time management done and saves time at stand in queue.
- Consult with the top doctors. So, not need to go at other different hospitals.
- It improves the quality of patient care and refer the medicines.
- It is highly secure system.
- Less manual works and reduce in time spent.
- Saves the time of busy person compared to man power.
- All information controlled & maintained by admin, whole data can be accessed during less time.
- It is a computerized data. So, can be easily maintained and retrieved.
- Time saving technology.
- Improved efficiency by avoiding human errors.
- Data security and correct data retrieval made possible.
- Cost effective and easily manageable.
- Easy access to patient data with correct patient history.
- Reduces the work of documentation.
- Better audit controls and policy compliance.

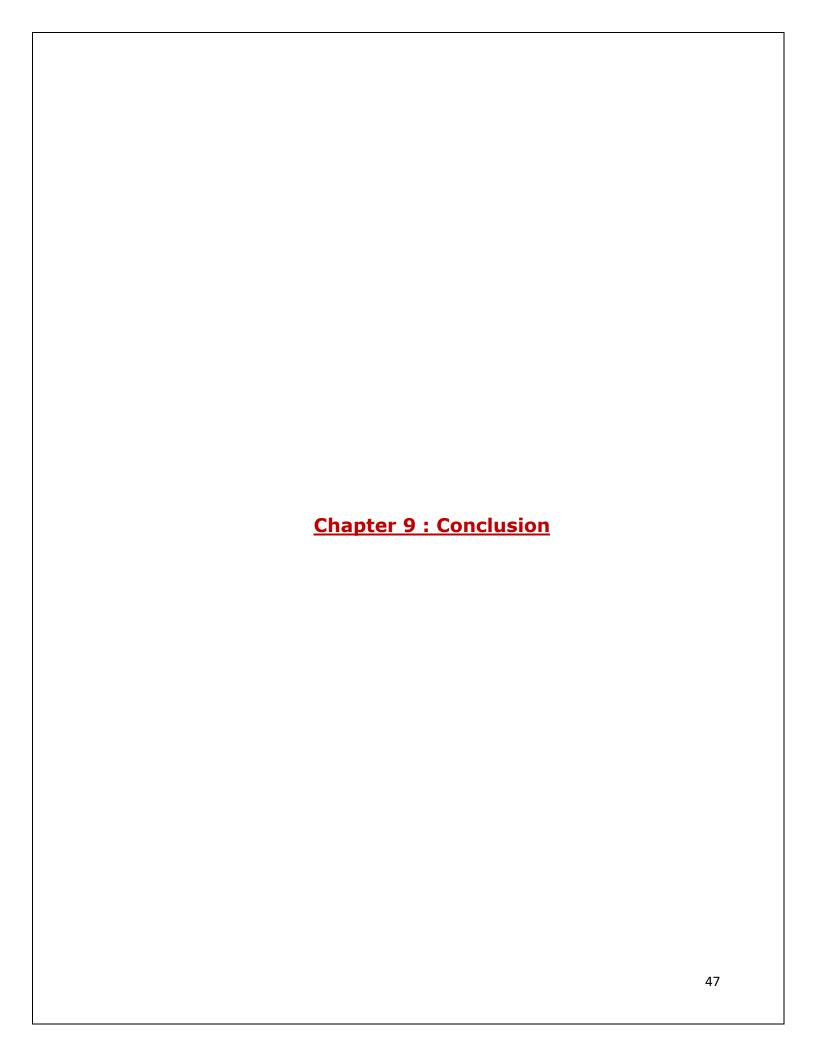


Future Enhancement:

The proposed system is Hospital Management System, we can enhance the system by including more facilities like book appointment online, consult with the specialists doctors as well as pharmacy system for the stock details of medicines providing such features enable the users to include more comments into the system.

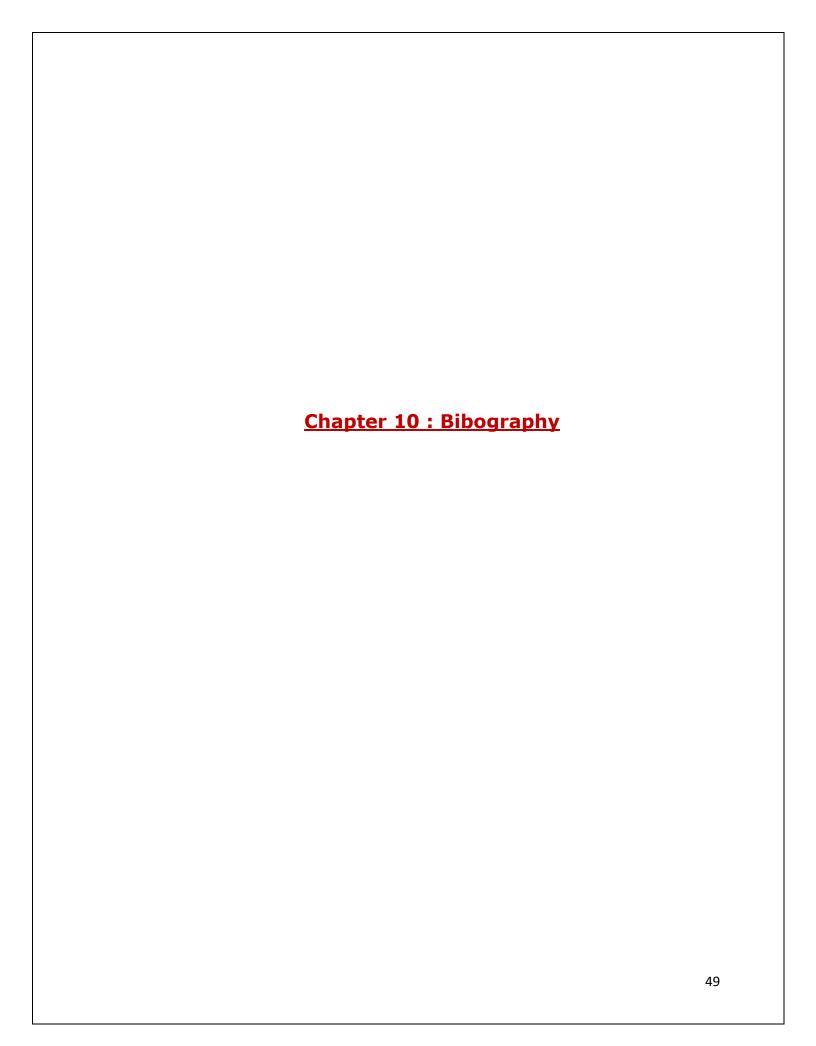
The main aim of our project is to provide a paper-less hospital up to 90%. It also aims at providing low- cost reliable automation of the existing systems. The system also provides excellent security of data at every level of user-system interaction and also provide robust & reliable storage and backup facilities.

This application avoids the manual work and the problem concern with it. It is an easy way to obtain the information regarding the various travel services that are present in our system. This is online service. That mean, patient and doctor directly connected through internet from anywhere.



Conclusion:-

- From this, we conclude that the hospital database is very useful to many hospitals.
- We can easily access any patient's information any time and can be kept safely for long period of time without any damage.
- We can efficiently identify the patient's health conditions by accessing these records.



Books:-

- Learning PHP, MySQL & JavaScript & CSS & HTML5. 5th edition by Robin Nixon. O'Reilly publication.
- PHP and MySQL Web Development. 5th edition by Luke Welling. Addison Wesley.
- Murach's PHP & MySQL. 3rd edition by Joel Murach & Ray Harris.
- Learn PHP & MySQL Zero to Hero Programming Crash Course by Paul Madoff.
- Mastering HTML, CSS & JavaScript Web Publishing by Laura Lemay 2016.
- Web design with HTML, CSS, JavaScript by Jon Duckett. 2014 Pck edition.

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- http://www.php.net/
- http://www.guru99.com/
- https://www.oracle.com/