PROJECT REPORT ON

‘Online Hospital Management system’

SUBMITTED TO THE SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

SUBMITTED BY

Name :	Roll No :
ShilimkarAvadhut Mohan	C31148
Deshpande Apurv Sanjay	C31161
Yenugwar Chinmay Prakash	C31163

DEPARTMENT OF COMPUTER ENGINEERING

STES’S SMT. KASHIBAI NAVALE COLLEGE OF ENGINEERING

VADGAON BK, OFF SINHGAD ROAD, PUNE 411041

SAVITRIBAI PHULE PUNE UNIVERSITY

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Sinhgad Institutes

CERTIFICATE

This is to certify that the project report entitled

" Online Hospital Management system"

Submitted by

NAME:	EXAM NO:
Shilimkar Avadhut Mohan	C31148
Deshpande Apurv Sanjay	C31161
Yenugwar Chinmay Prakash	C31163

is a bonafide work carried out by her/ him under the supervision of **Prof. M. S. Agrawal** and it is approved for the partial fulfillment of the requirement of University of Pune as a part Database Management Lab work syllabus (Third year Computer Engineering).

(Prof. M. S. Agrawal)	(Prof. R. H. Borhade)
Guide Department of Computer Engineering	Head, Department of Computer Engineering

ACKNOWLDGEMENT

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I thank to my seminar guide **Prof. M. S. Agrawal** for her guidance, timely help and valuable suggestions without which this project would not have been possible. Her direction has always been encouraging as well as inspiring for me. Attempts have been made to minimize the errors in the report.

I would also like to express my appreciation and thanks to all my friends who knowingly or unknowingly have assisted and encourage me throughout my hard work.

Index

Abstract

"Design and implementation of online hospital management system" is Eco-friendly in use. The project's motive is to do paperless work in hospitals. The data of patient were collected in database for better results. The unique think is that only patients Id is required for his/her contact and treatment information. Previously when the information was written on paper, it was very typical to handle and care for long time for hospital. If data is lost, we haven't any corresponding options for that but when we save the data on database tables we easily fetch it. Sometimes the patient's previous information is also important for the new treatment, so were in project the enquiry of patients is also available to fulfill the consultant's requirement about the history of the patient. Not only of patients information is fetched but doctors and staffs information like their contact details, salary, joining date, duty time, qualification etc. are available through their Ids from database.

Problem Definition

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 inconvenience 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) Information about Patients is done by just writing the Patients name, age and gender. Whenever the Patient comes up his information is stored freshly.
2) Bills are generated by recording price for each facility provided to Patient on a separate sheet and at last they all are summed up.
3) Diagnosis information to patients is generally recorded on the document, which contains Patient information. It is destroyed after some time period to decrease the paper load in the office.
4) Immunization records of children are maintained in pre-formatted sheets, which are kept in a file.
5) Information about various diseases is not kept as any document. Doctors themselves do this job by remembering various medicines.

All this work is done manually by the receptionist and other operational staff and lot of papers are needed to be handled and taken care of. Doctors have to remember various medicines available for diagnosis and sometimes miss better alternatives as they can't remember them at that time.

Goals

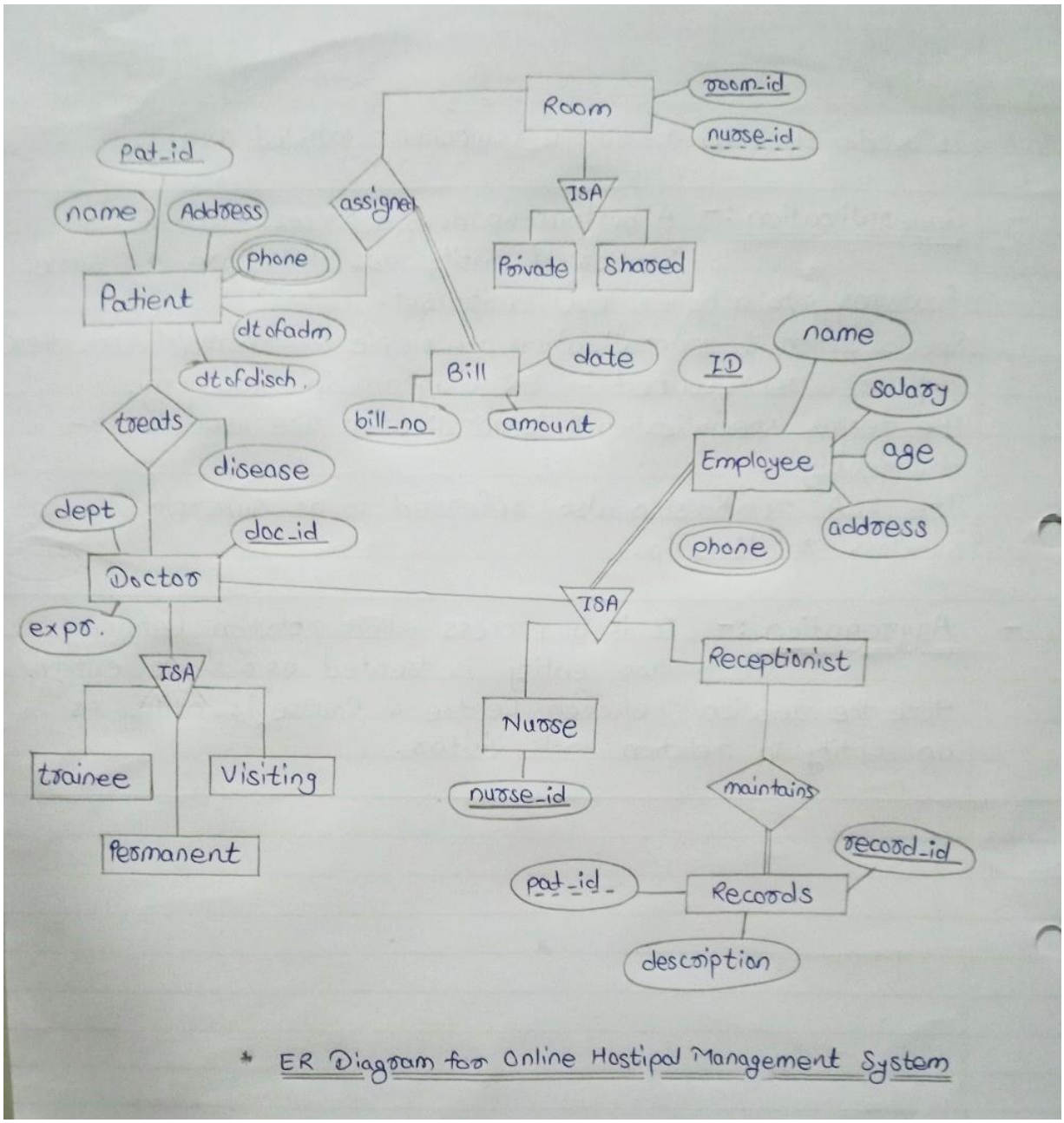
- Userfriendly.
- Simple Fast.
- Low cost and effective.
- It deals with the collection of patients information.
- Diagnosis.

Objectives

1) Define hospital
2) Recording information about the Patients that come.
3) Generating bills.
4) Recording information related to diagnosis given to Patients.
5) Keeping record of the Immunization provided to children/patients.
6) Keeping information about various diseases and medicines available to curethem.

Entity Relationship Diagram

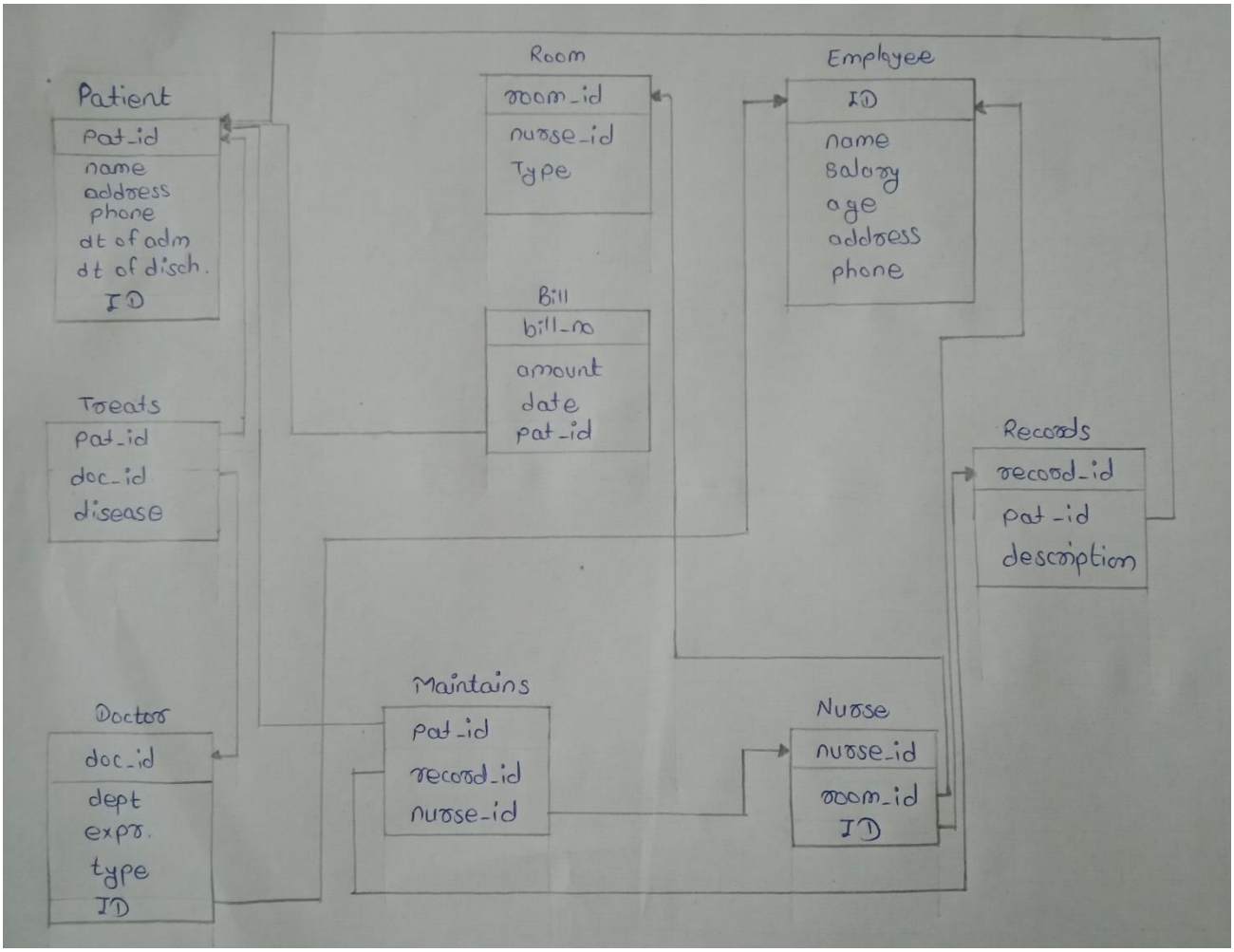
Database is absolutely an integral part of software system. To fully utilize ER Diagram in database engineering guarantee you to produce high quality database design to use in database creation, management and maintenance. An ER model also provides ameans for communication.



ER Diagram for Online Hospital Management System

Schema diagram

- A database schema, along with primary key and foreign key dependencies can be depicted as schema diagram.
- Primary keys are highlighted with greys.
- Arrows represent foreign key.



Schema Diagram for Online Hospital Management System

Software and Hardware requirements

- **Software requirement:**

  - Frontend Development Languages: HTML, CSS, JavaScript
  - Backend Development Languages: PHP, MySQL
  - Applications: XAMPP

- **Hardware requirements:**

  - 64 bit processor
  - Input/Output Devices(mouse, keyboard, display screen)
  - 512 RAM

Project description

EXISTING SYSTEM

Hospitals currently use a manual system for the management and maintenance of critical information. The current system requires numerous paper forms, with data storesspread 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.

PROPOSED SYSTEM

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. Room availability, staff and operating room schedules and patient invoices. 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.

FEASIBILITY STUDY

The feasibility of the project is analyzed in this phase and business proposal is put forth with a very general plan for the project and some cost estimates. During system analysis the feasibility study of the proposed system is to be carried out. This is to ensure that the proposed system is not a burden to the company. For feasibility analysis, some understanding of the major requirements for the system is essential.

HTML:

HTML or Hypertext Markup Language is the standard markup language used to create web pages.
HTML is written in the form of HTML elements consisting of tags enclosed in angle brackets (like <html>). HTML tags most commonly come in pairs like <h1> and </h1>, although some tags represent empty elements and so are unpaired, for example <img>. The first tag in a pair is the start tag, and the second tag is the end tag (they are also called opening tags and closing tags). Though not always necessary, it is best practice to append a slash to tags which are not paired with a closing tag. The purpose of a web browser is to read HTML documents and compose them into visible or audible web pages. The browser does not display the HTML tags, but uses the tags to interpret the content of the page. HTML describes the structure of a website semantically along with cues for presentation, making it a markup language rather than a programming language.
HTML elements form the building blocks of all websites. HTML allows images and objects to be embedded and can be used to create interactive forms. It provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. It can embed scripts written in languages such as JavaScript which affect the behavior of HTML web pages.

CSS:

It is a style sheet language used for describing the look and formatting of a document written in a markup language. While most often used to style web pages and interfaces written in HTML and XHTML, the language can be applied to any kind of XML document, including plain XML, SVG and XUL. CSS is a cornerstone specification of the web and almost all web pages use CSS style sheets to describe their presentation.

CSS is designed primarily to enable the separation of document content from document presentation, including elements such as the layout, colors, and fonts.

CSS can also allow the same markup page to be presented in different styles for different rendering methods, such as on-screen, in print, by voice (when read out by a speech-based browser or screen reader) and on Braille-based, tactile devices. It can also be used to allow the web page to display differently depending on the screen size or device on which it is being viewed. While the author of a document typically links that document to a CSS file, readers can use a different style sheet, perhaps one on their own computer, to override the one the author has specified. However if the author or the reader did not link the document to a specific style sheet the default style of the browser will be applied.

MySQL:

MySQL is developed, distributed, and supported by Oracle Corporation. MySQL is a database system used on the web it runs on a server. MySQL is ideal for both small and large applications. It is very fast, reliable, and easy to use. It supports standard SQL. MySQL can be compiled on a number of platforms.
The data in MySQL is stored in tables. A table is a collection of related data, and it consists of columns and rows. Databases are useful when storing informationcategorically.

Features of MySQL:

- Leading open source RDBMS
- Ease of use – No frills
- Fast
- Robust
- Security
- Multiple OS support
- Free
- Technical support
- Support large database– up to 50 million rows, file size limit up to 8 Million TB

PHP:

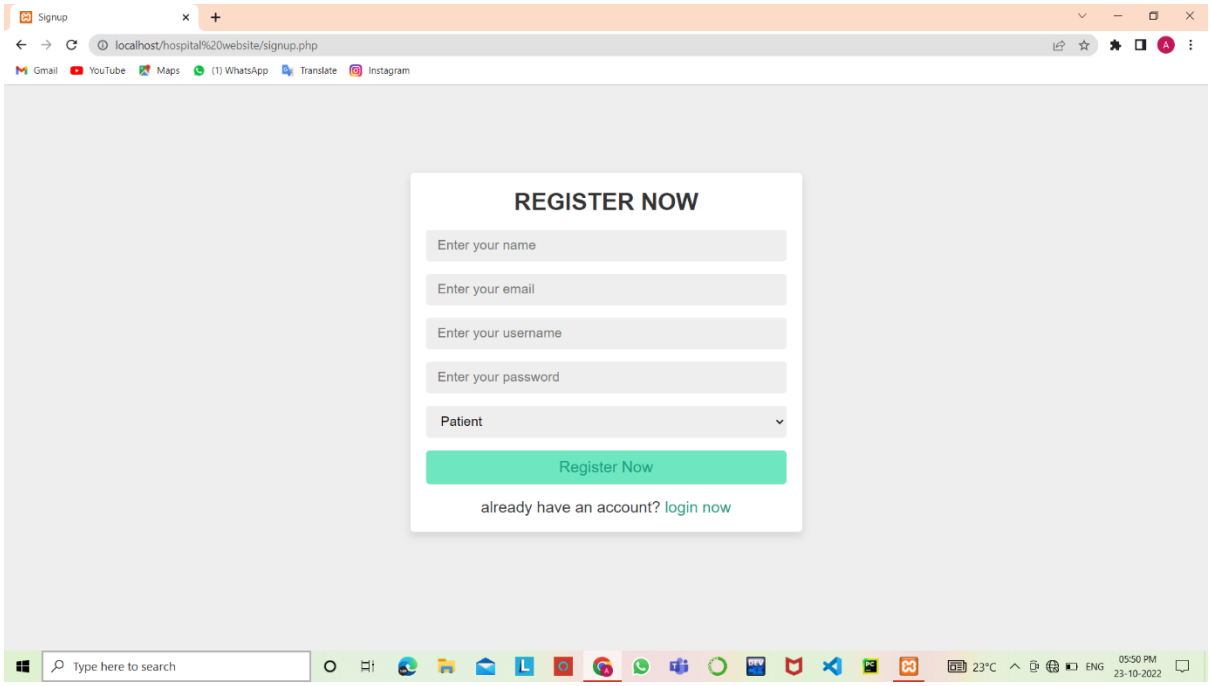
PHP is an acronym for "PHP Hypertext Preprocessor". It is a widely-used, open source scripting language. PHP scripts are executed on the server. PHP costs nothing, it is free to download and use.
PHP files can contain text, HTML, CSS, JavaScript, and PHP code. PHP code are executed on the server, and the result is returned to the browser as plain HTML. PHP files have extension ".php".

WHY PHP?

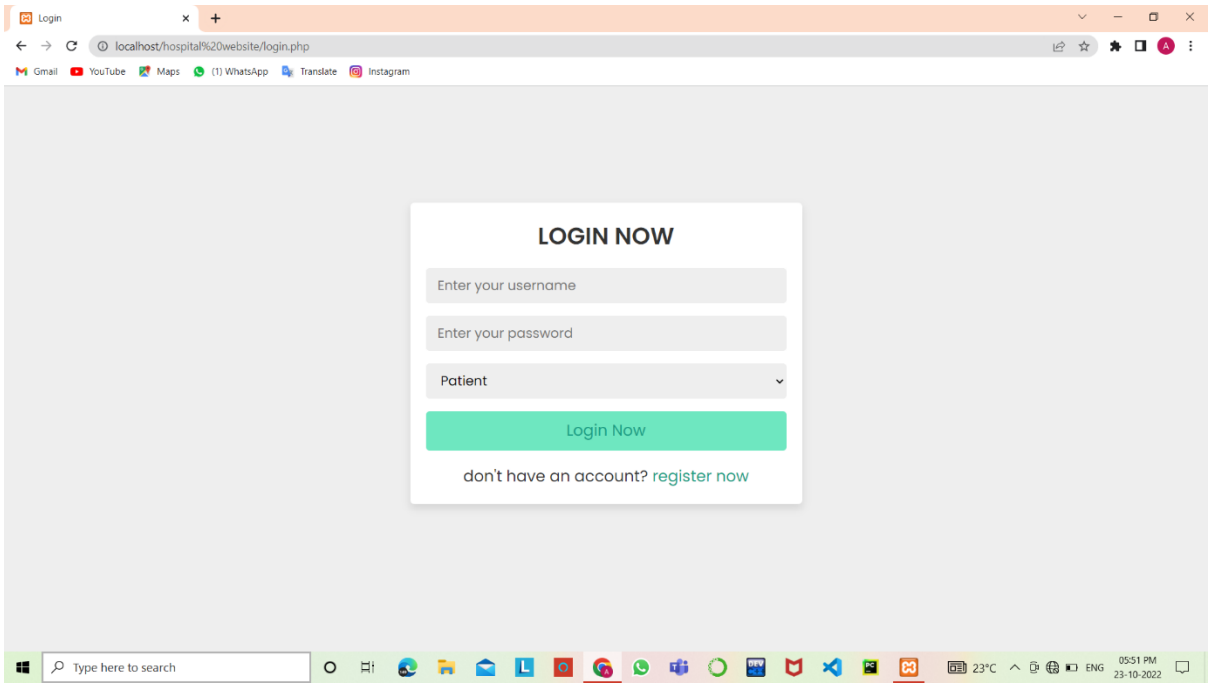
- PHP runs on various platforms (Windows, Linux, Unix, Mac OS X, etc.)
- PHP is compatible with almost all servers used today (Apache, IIS, etc.)
- PHP supports a wide range of databases.

GUI

Registration form:

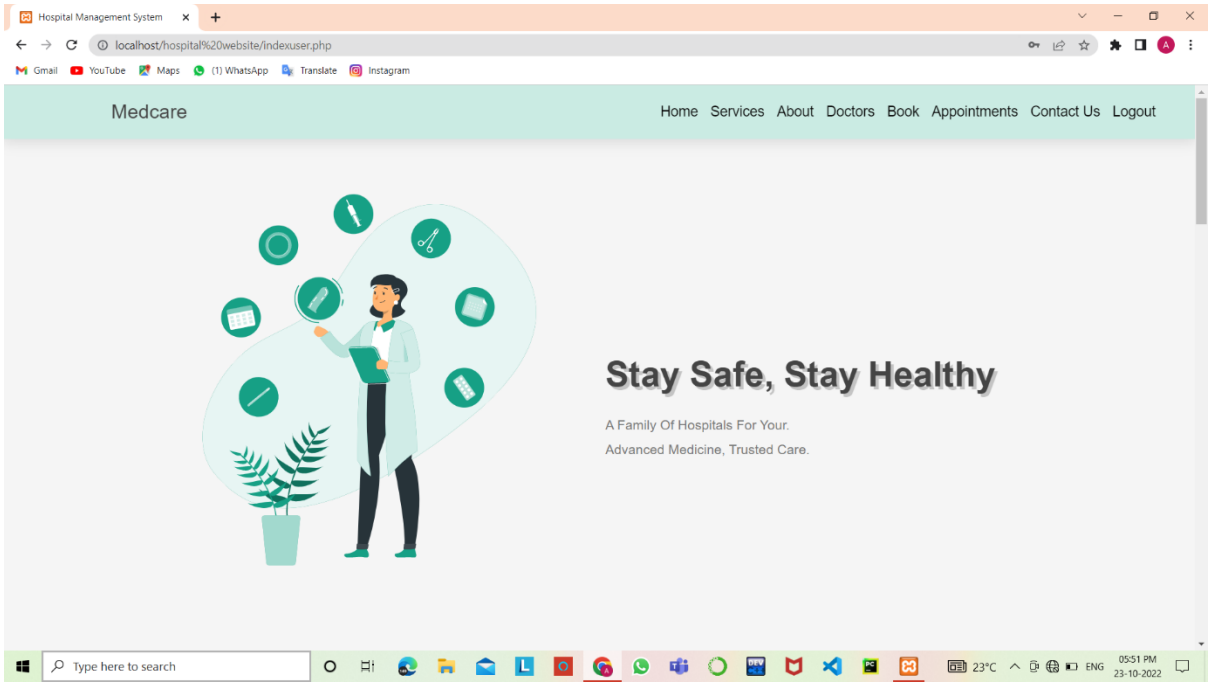


Login Form:

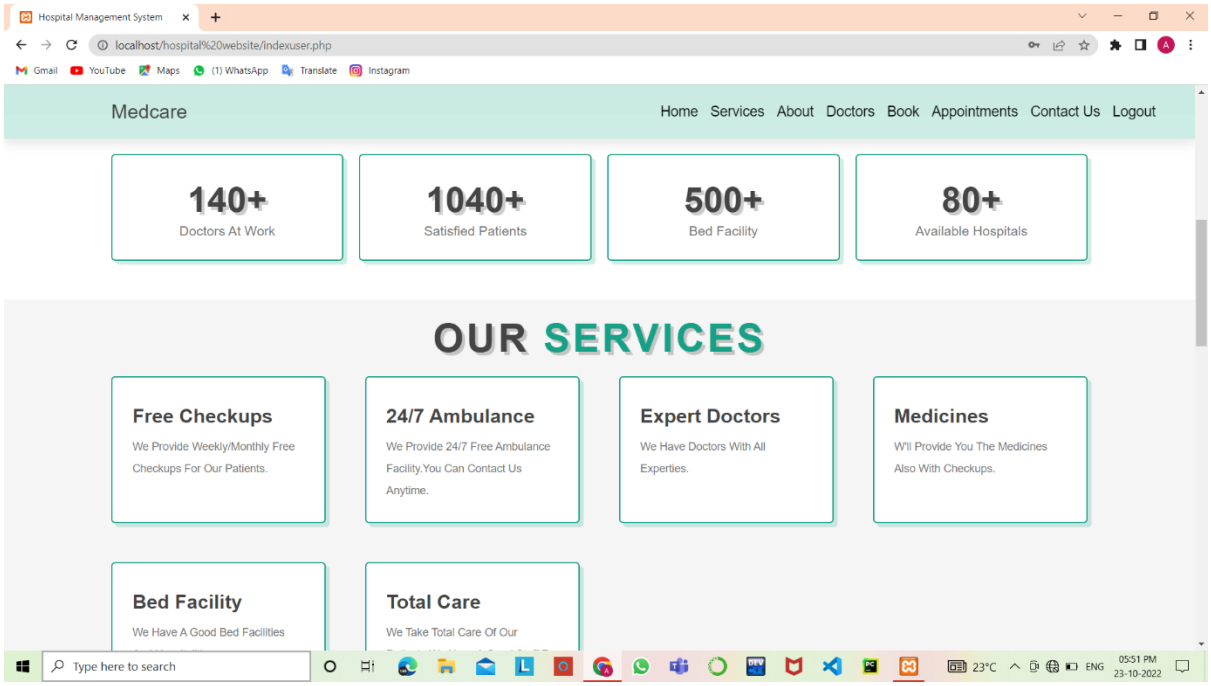


Public Side:

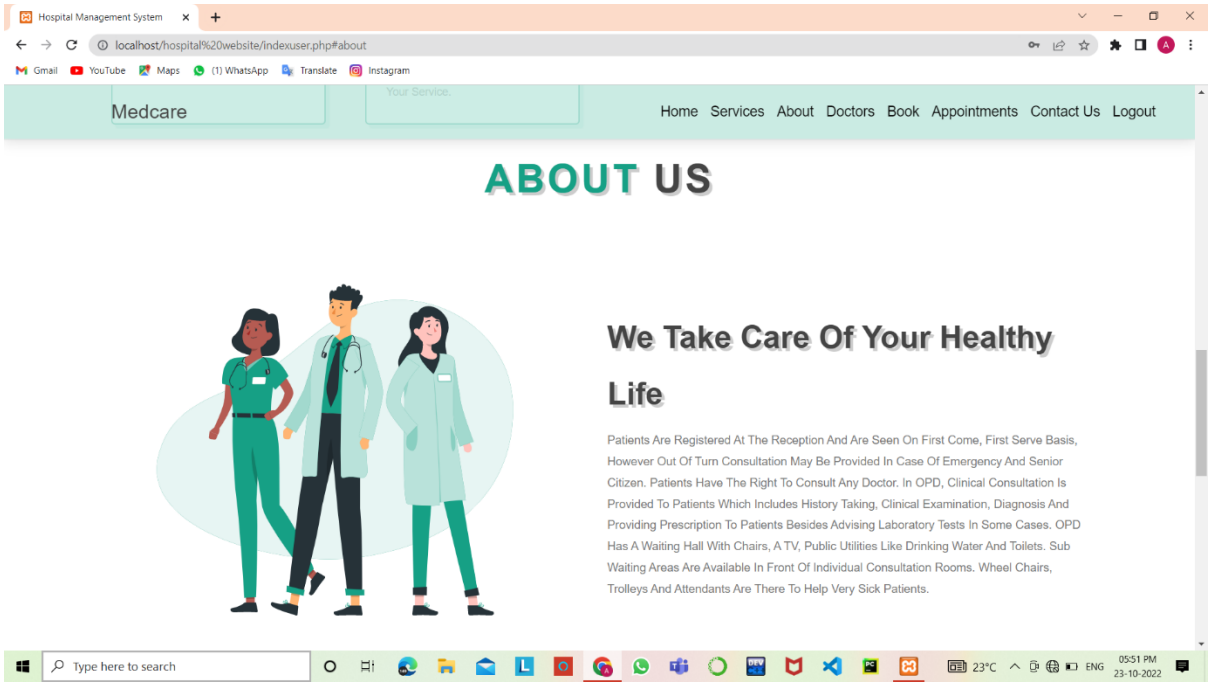
Home Page:



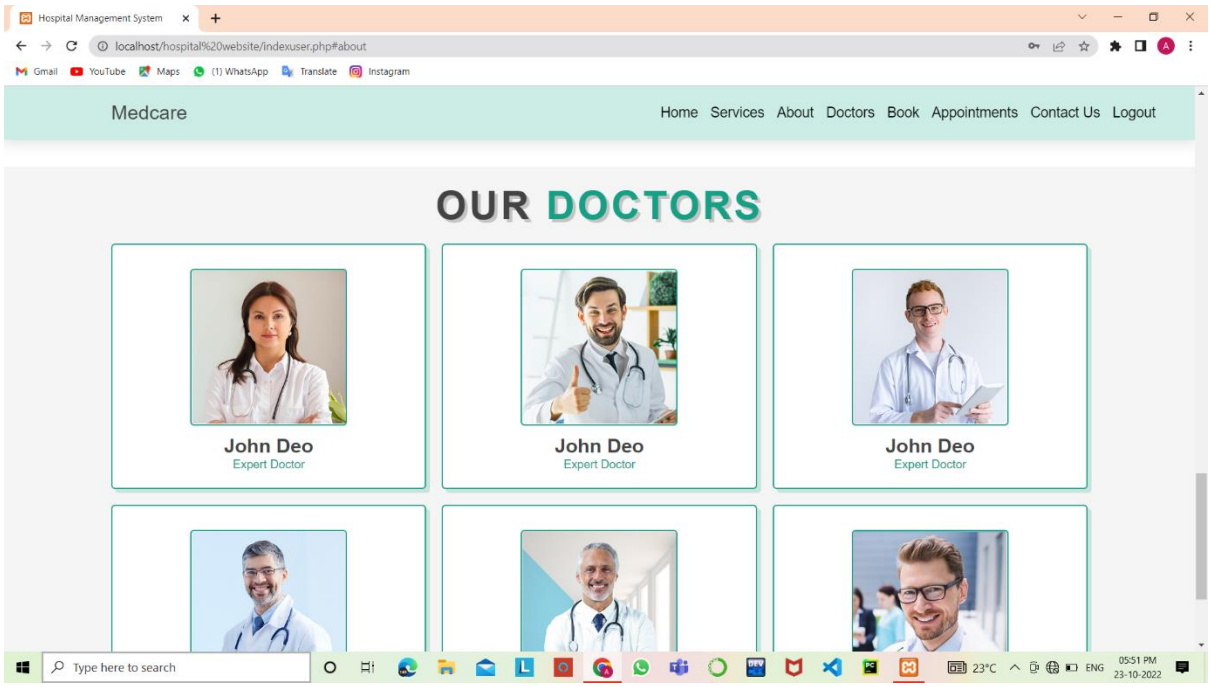
Services:



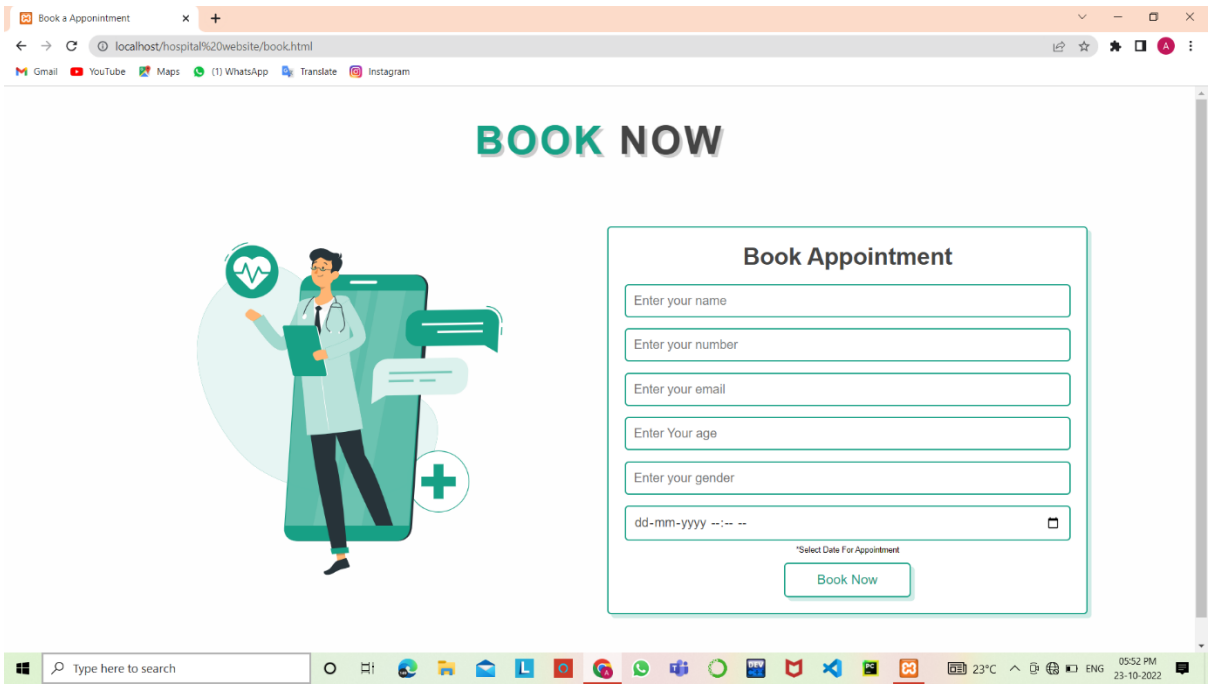
About Us Page:



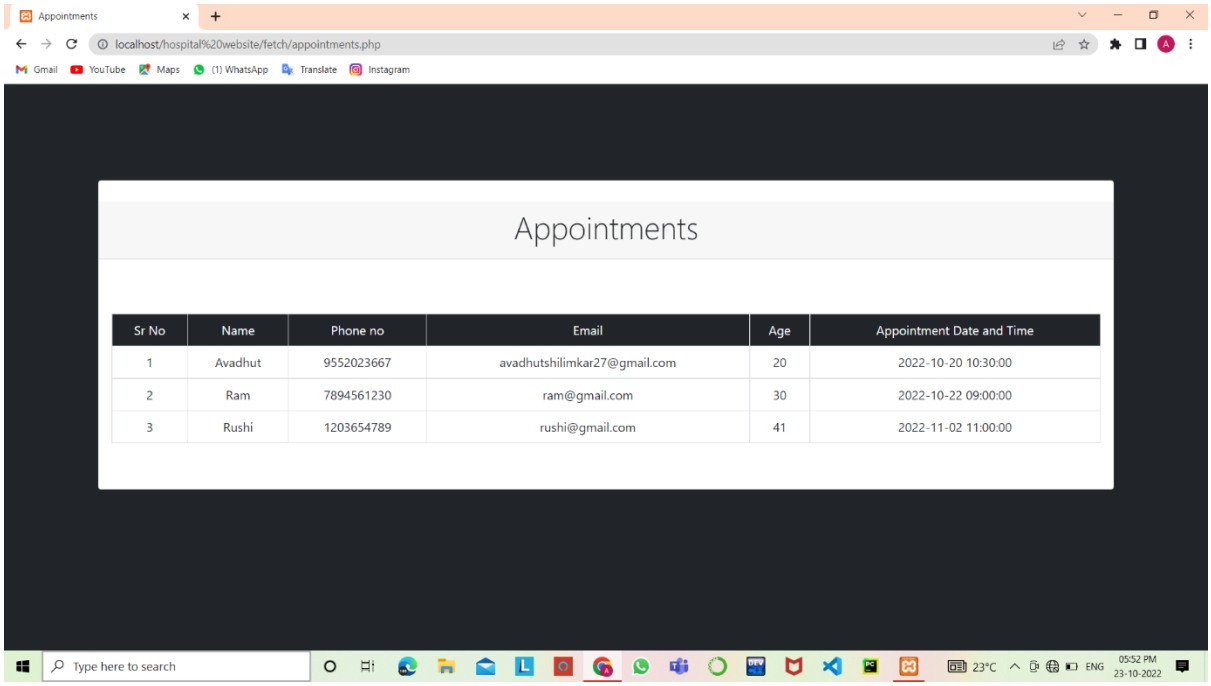
Doctors:



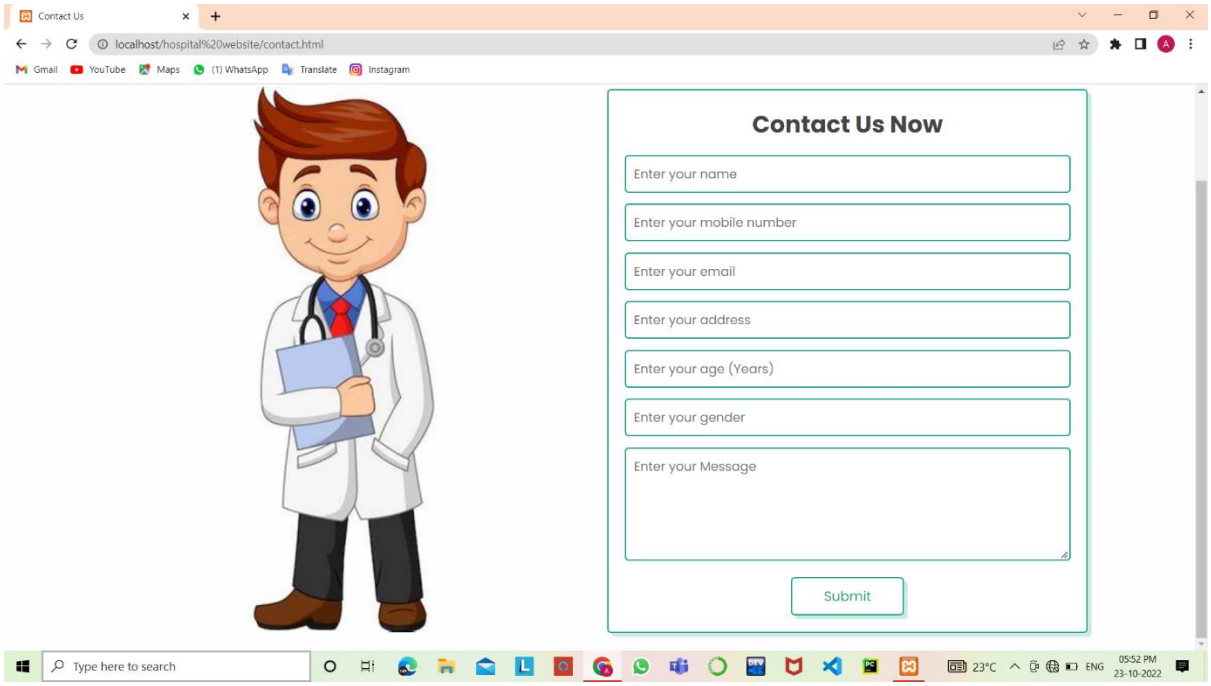
Appointment Booking form:



Booked Appointments:

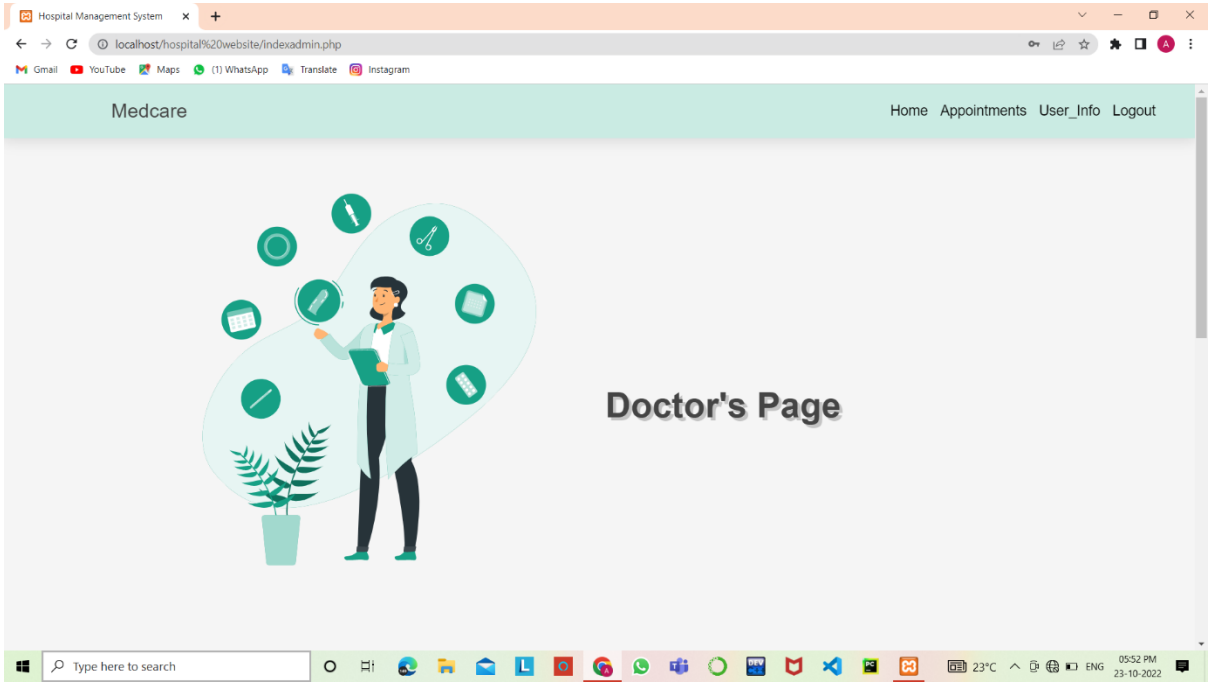


Contact form:

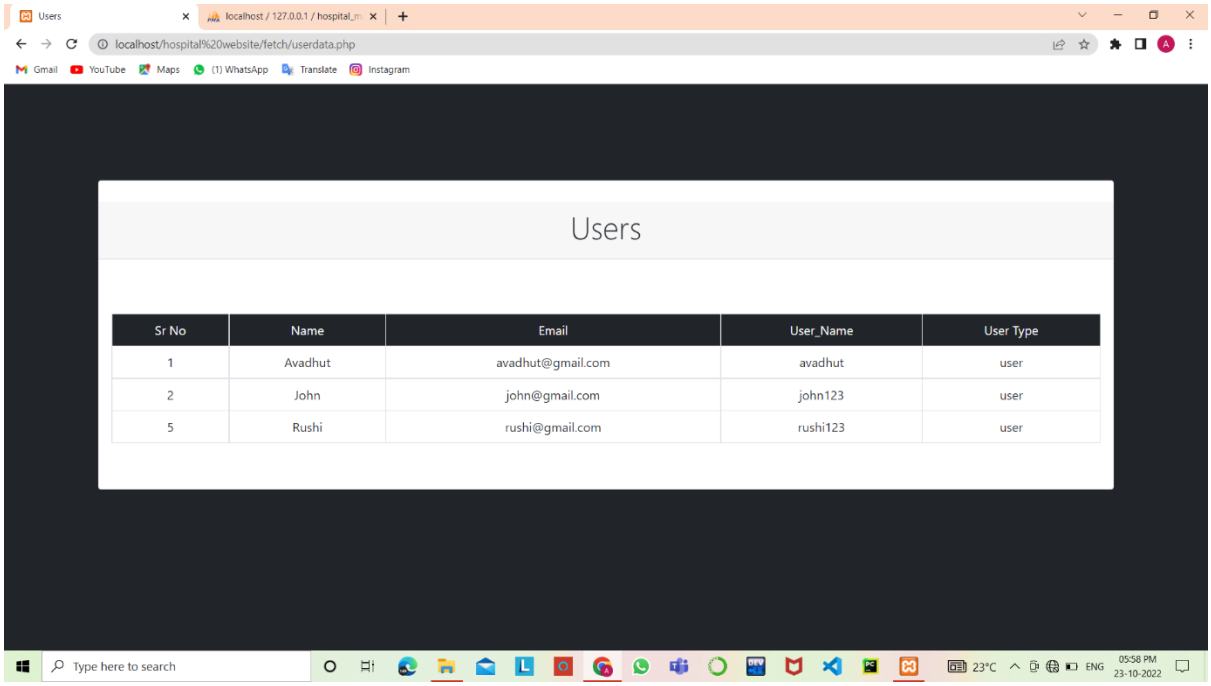


Admin Side:

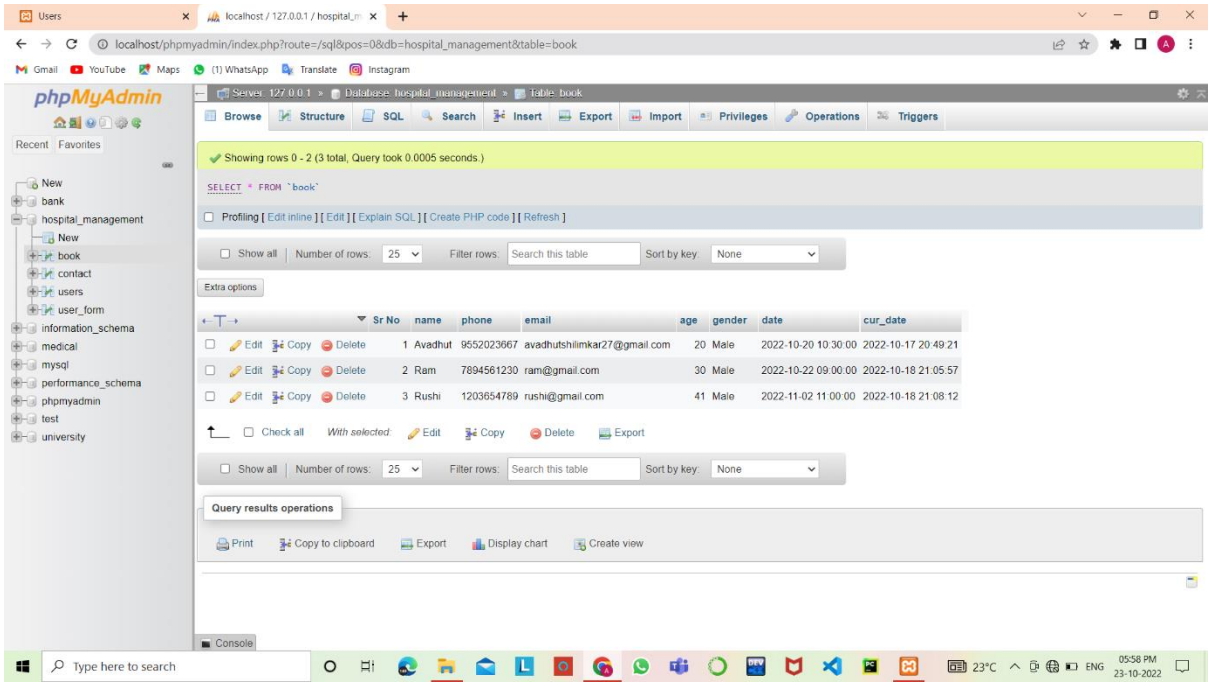
Home Page:



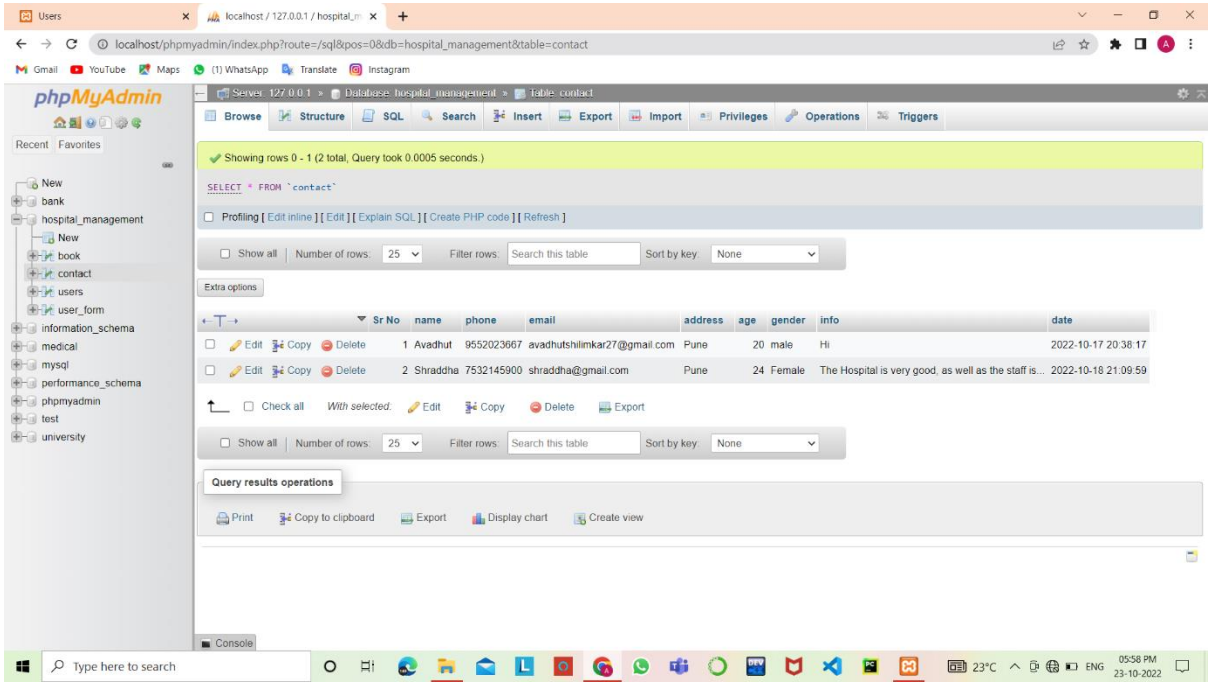
User's Information:



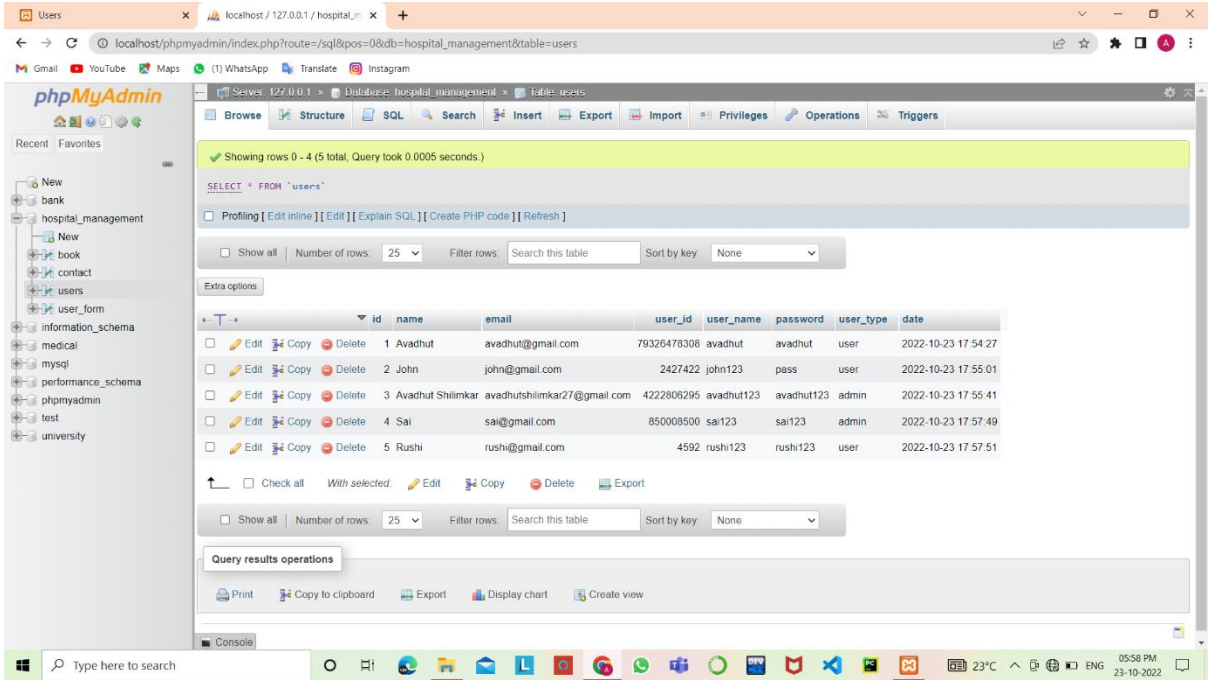
Book table in database:



Contact table in database:



User table in database:



Conclusion

This study embarked on the hospital management system which substitutes the current method of sorting, handling, searching, and keeping of hospital records. This concludes the importance and indispensable nature of the computer and its application in the hospital. The database aimed at reducing paper work in the reception area to reduce the time wasted by patients in the course of waiting for their files to be retrieved. This also reduced the spaced occupied by the files and provide adequate security for patient's medical record. Based on the finding of this study, the design of hospital patient database record will be a solution to the problem being experienced by the current manual method of keeping patient medical records. The study has critically identified the importance associate with using electronic in keeping hospital record to eliminate missing files and enhance speedy retrieval of patient's record. Through the exhausted study and analysis made in this research, it was recommend that General hospital and other medical centre that had been providing health care service should have an automated system for effective operations.