

ADMINISTRATION SYSTEM FOR VARDHAN HOSPITAL RAIPUR

A Minor Project Report

Submitted To



Chhattisgarh Swami Vivekanand Technical University
Bhilai, India

*For The Award of Degree of Bachelor of Technology
In Computer Science & Engineering by*

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DECLARATION BY THE CANDIDATE

We the undersigned solemnly declare that the Major project report entitled “**ADMINISTRATION SYSTEM FOR VARDHAN HOSPITAL RAIPUR** ” is based our own work carried out during the course of our study under the supervision of *Dr. J P Patra*.

We assert that the statements made and conclusions drawn are an outcome of the project work. We further declare that to the best of our knowledge and belief that the report does not contain any part of any work which has been submitted for the award of any other degree/diploma/certificate in this University/Deemed university of India or any other country.

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To the best of my knowledge and belief the report

- i) Embodies the work of the candidate himself
- ii) Has duly been completed
- iii) Fulfills the partial requirement of the ordinance relating to the B.E. degree of the University
- iv) Is up to the desired standard both in respect of contents and language for being referred to the examiners.

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CERTIFICATE BY THE EXAMINERS

The project report entitled “***ADMISTRATION SYSTEM FOR VARDHAN HOSPITAL RAIPUR***” has been examined by the undersigned as a part of the examination of Bachelor of Engineering in the faculty of Computer Science & Engineering of Chhattisgarh Swami Vivekanand Technical University, Bhilai.

Internal Examiner

External Examiner

Date:

Date

ACKNOWLEDGEMENT

Working for this project has been a great experience for us. There were moments of anxiety, when we could not solve a problem for the several days. But we have enjoyed every bit of process and are thankful to all people associated with us during this period we convey our sincere thanks to our project guide **Dr. J P Patra** for providing me all sorts of facilities. His support and guidance helped us to carry out the project. We owe a great dept. of his gratitude for his constant advice, support, cooperation & encouragement throughout the project we would also like to express our deep gratitude to respected **Dr. J P Patra** (Head of Department) for his ever helping and support. We also pay special thanks for his helpful solution and comments enriched by his experience, which improved our ideas for betterment of the project. We would also like to express our deep gratitude to respected **Dr. Alok Kumar Jain** (Principal) and college management for providing an educational ambience. It will be our pleasure to acknowledge, utmost cooperation and valuable suggestions from time to time given by our staff members of our department, to whom we owe our entire computer knowledge and also we would like to thank all those persons who have directly or indirectly helped us by providing books and computer peripherals and other necessary amenities which helped us in the development of this project which would otherwise have not been possible.

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LIST OF ABBREVIATIONS

HMS	Hospital Management System
INFO	Information
UML	Unified Modeling Language
SQL	Structured Query Language
OLAP	Online Analytical Processing
SM	Software Maintenance

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ABSTRACT

OBJECTIVE :

Hospitals currently use a manual system for the management and maintenance of critical information. The current system requires numerous paper forms, with data stores spread throughout the hospital management infrastructure. Often information (on forms) 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.

A significant part of the operation of any hospital involves the acquisition, management and timely retrieval of great volumes of information. This information typically involves; patient personal information and medical history, staff information, room and ward scheduling, staff scheduling, operating theater scheduling and various facilities waiting lists. All of this information must be managed in an efficient and cost wise fashion so that an institution's resources may be effectively utilized HMS will automate the management of the hospital making it more efficient and error free. It aims at standardizing data, consolidating data ensuring data integrity and reducing inconsistencies.

1. INTRODUCTION:

Hospitals currently use a manual system for the management and maintenance of critical information. The current system requires numerous paper forms, with data stores spread throughout the hospital management infrastructure. Often information (on forms) 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.

The Hospital Management System (HMS) is designed for Any Hospital to replace their existing manual, paper based system. The new system is to control the following information; patient information, 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

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1.1 PROJECT OVERVIEW :

The Hospital Management System (HMS) is designed for Any Hospital to replace their existing manual, paper based system. The new system is to control the following information; patient information, 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.

A significant part of the operation of any hospital involves the acquisition, management and timely retrieval of great volumes of information. This information typically involves; patient personal information and medical history, staff information, room and ward scheduling, staff scheduling, operating theater scheduling and various facilities waiting lists. All of this information must be managed in an efficient and cost wise fashion so that an institution's resources may be effectively utilized HMS will automate the management of the hospital making it more efficient and error free. It aims at standardizing data, consolidating data ensuring data integrity and reducing inconsistencies.

1.2 SYSTEM DESIGN:

In this software we have developed some forms. The brief description about them is as follow:-

Reception:

The reception module handles various enquiries about the patient's admission and discharge details, bed census, and the patient's movements within the hospital. The system can also handle fixed-cost package deals for patients as well as Doctor Consultation and Scheduling, Doctor Consultancy Fees and Time Allocation.

- Doctor visit schedule
- Doctor Appointment Scheduling
- Enquiry of Patient
- Find History of Patient Enquired.

Administration:

This module handles all the master entry details for the hospital requirement such as consultation detail, doctor specialization, consultancy fee, and service charges.

Employee

- Employee Detail Recording.
- Doctor Type .
- Doctor Master
- Referral Doctor
- **Pharmacy:**

This module deals with all medical items. This module helps in maintaining Item Master, Receipt of Drugs/consumables, issue, handling of material return,

generating retail bills, stock maintenance. It also helps in fulfilling the requirements of both IPD and OPD Pharmacy.

Laboratory:

This module enables the maintenance of investigation requests by the patient and generation of test results for the various available services, such as clinical pathology, X-ray and ultrasound tests. Requests can be made from various points, including wards, billing, sample collection and the laboratory receiving point. The laboratory module is integrated with the in-patient/ outpatient registration, wards and billing modules.

Registration:

This module helps in registering information about patients and handling both IPD and OPD patient's query. A unique ID is generated for each patient after registration. This helps in implementing customer relationship management and also maintains medical history of the patient.

1.3 APPLICATION :

The Hospital Management System (HMS) is designed for Any Hospital to replace their existing manual, paper based system. The new system is to control the following information; patient information, 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.

HMS provides the ability to manage all the paperwork in one place, reducing the work of staff in arranging and analyzing the paperwork of the patients. HMS does many works like:

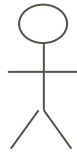
- 1.Maintain the medical records of the patient
- 2.Maintain the contact details of the patient
- 3.Keep track of the appointment datest
- 4.Save the insurance information for later reference
- 5.Tracking the bill payment

2. WORKING PRINCIPLE:

2.1 UML Diagrams:

Actor:

A coherent set of roles that users of use cases play when interacting with the use `cases.



Use case: A description of sequence of actions, including variants, that a system performs that yields an observable result of value of an actor.



UML stands for Unified Modeling Language. UML is a language for specifying, visualizing and documenting the system. This is the step while developing any product after analysis. The goal from this is to produce a model of the entities involved in the project which later need to be built. The representation of the entities that are to be used in the product being developed need to be designed.

There are various kinds of methods in software design:

They are as follows:

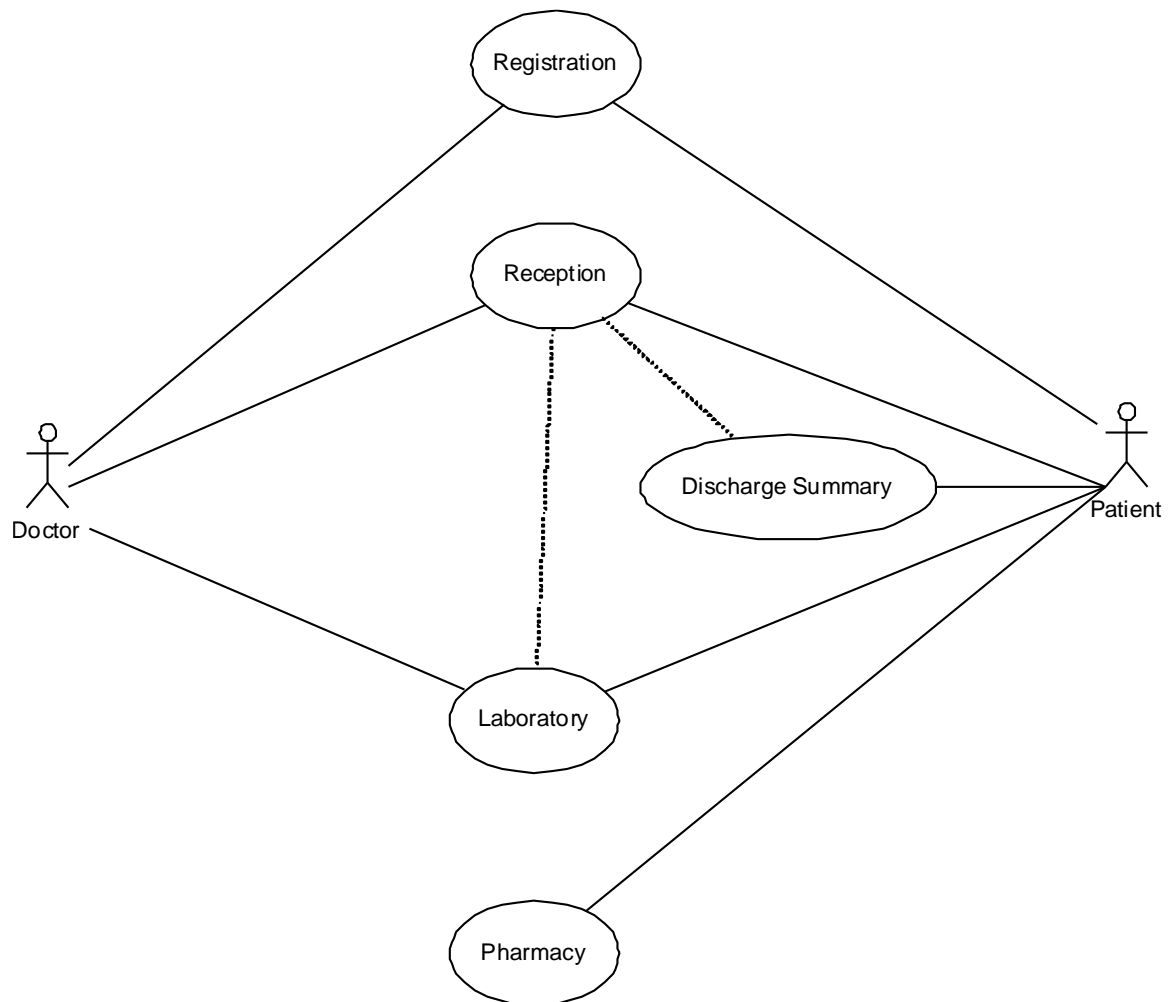
- Use case Diagram
- Sequence Diagram
- Collaboration Diagram
- Activity Diagram

➤ State chat Diagram

2.2 USECASE DIAGRAM:

A Use case is a description of set of sequence of actions. Graphically it is rendered as an ellipse with solid line including only its name. Use case diagram is a behavioral diagram that shows a set of use cases and actors and their relationship. It is an association between the use cases and actors. An actor represents a real-world object.

FIGURE 2.2.1



2.3 SEQUENCE DIAGRAM

Sequence diagram and collaboration diagram are called INTERACTION DIAGRAMS. An interaction diagram shows an interaction, consisting of set of objects and their relationship including the messages that may be dispatched among them.

A sequence diagram is an introduction that empathizes the time ordering of messages. Graphically a sequence diagram is a table that shows objects arranged along the X-axis and messages ordered in increasing time along the Y-axis

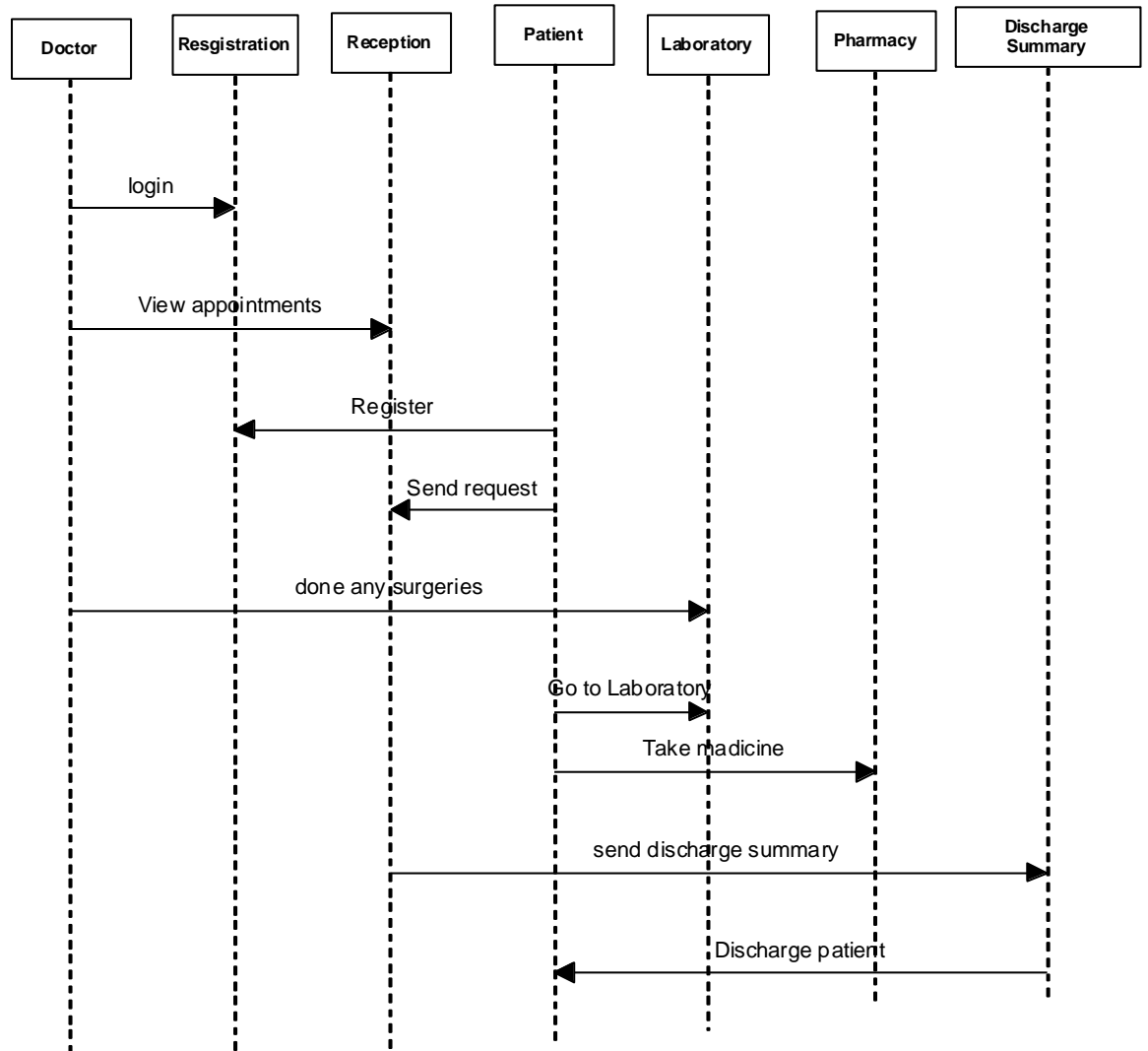


FIGURE 2.3.1

2.4 COLLABORATION DIAGRAM:

A collaboration diagram is an introduction diagram that emphasizes the structural organization of the objects that send and receive messages. Graphically a collaboration diagram is a collection of vertices and arcs.

2.5 CLASS DIAGRAM:

Class is nothing but a structure that contains both variables and methods. The Class Diagram shows a set of classes, interfaces, and collaborations and their relating ships. There is most common diagram in modeling the object oriented systems and are used to give the static view of a system. It shows the dependency between the classes that can be used in our system.

The interactions between the modules or classes of our projects are shown below. Each block contains Class Name, Variables and Methods.

2.6 Activity Diagram

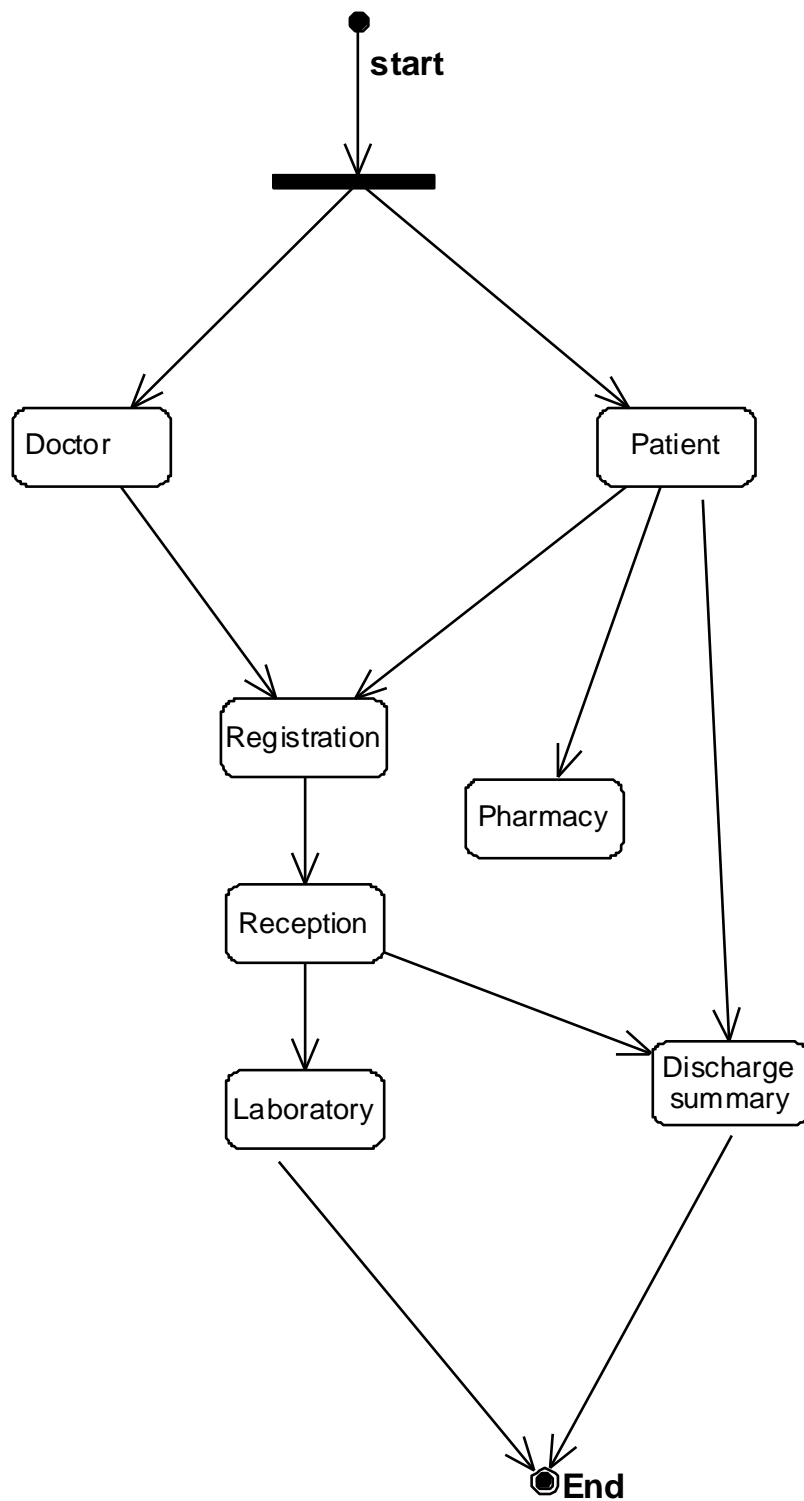


FIGURE 2.6.1

3. SOFTWARE REQUIREMENTS :

- Web Technologies : ASP.NET 2.0
- Language : C#
- Database : SQL SERVER 2005
- Web Server : IIS
- Operating System : WINDOWS XP

3.1 BACK END TECHNOLOGY:

About Microsoft SQL Server 2000

Microsoft SQL Server is a Structured Query Language (SQL) based, client/server relational database. Each of these terms describes a fundamental part of the architecture of SQL Server.

Database

A database is similar to a data file in that it is a storage place for data. Like a data file, a database does not present information directly to a user; the user runs an application that accesses data from the database and presents it to the user in an understandable format.

A database typically has two components: the files holding the physical database and the database management system (DBMS) software that applications use to access data. The DBMS is responsible for enforcing the database structure.

3.2 Structured Query Language (SQL)

To work with data in a database, you must use a set of commands and statements (language) defined by the DBMS software. There are several different languages that can be used with relational databases; the most common is SQL. Both the American National Standards Institute (ANSI) and the International Standards Organization (ISO) have defined standards for SQL. Most modern DBMS products support the Entry Level of SQL-92, the latest SQL standard (published in 1992).

Scalability

The same database engine can be used across platforms ranging from laptop computers running Microsoft Windows® 95/98 to large, multiprocessor servers running Microsoft Windows NT®, Enterprise Edition

Data warehousing

SQL Server includes tools for extracting and analyzing summary data for online analytical processing (OLAP). SQL Server also includes tools for visually designing databases and analyzing data using English-based questions.

System integration with other server software

SQL Server integrates with e-mail, the Internet, and Windows.

Databases

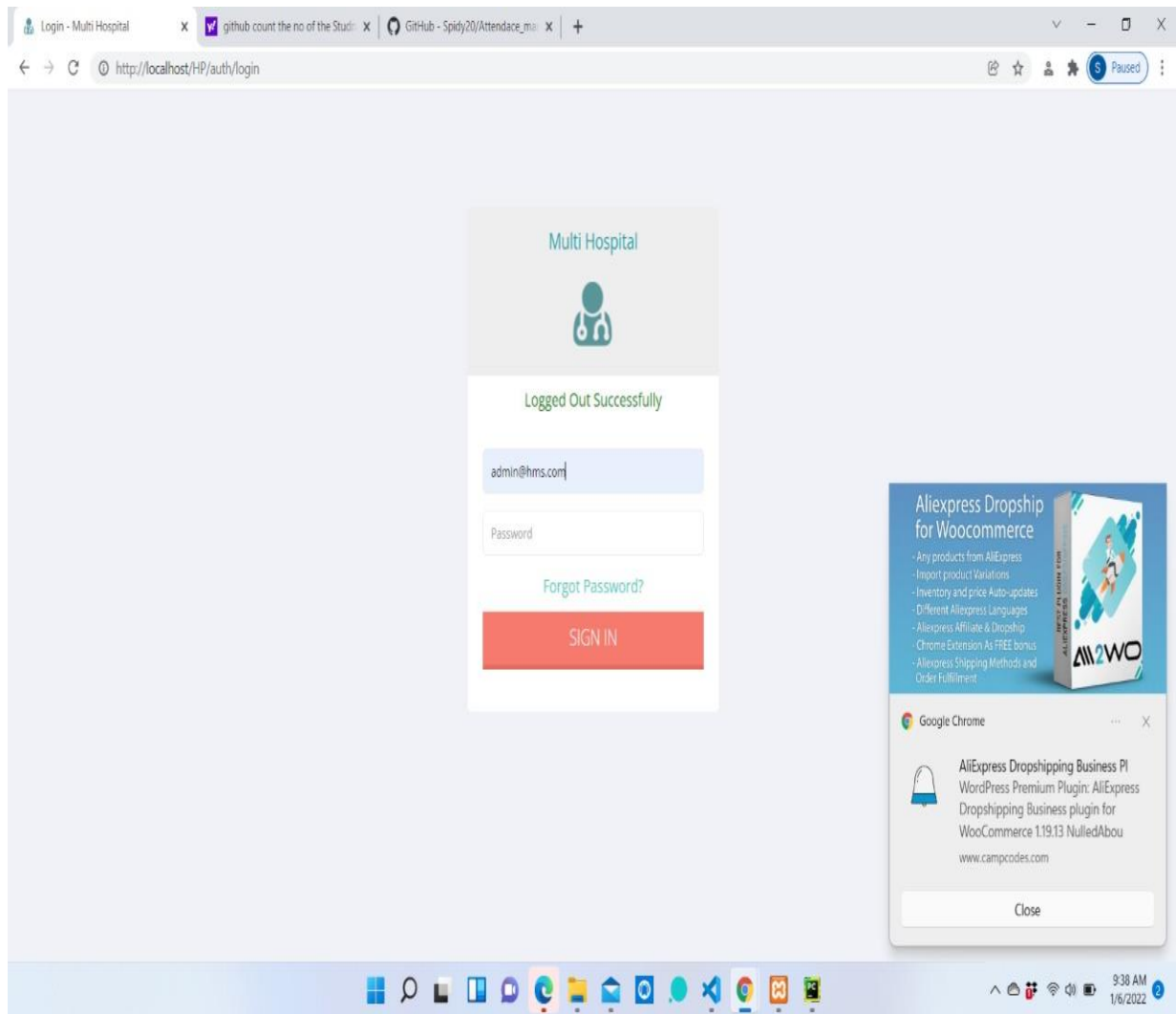
A database in Microsoft SQL Server consists of a collection of tables that contain data, and other objects, such as views, indexes, stored procedures, and triggers, defined to support activities performed with the data. The data stored in a database is usually related to a particular subject or process, such as inventory information for a manufacturing warehouse

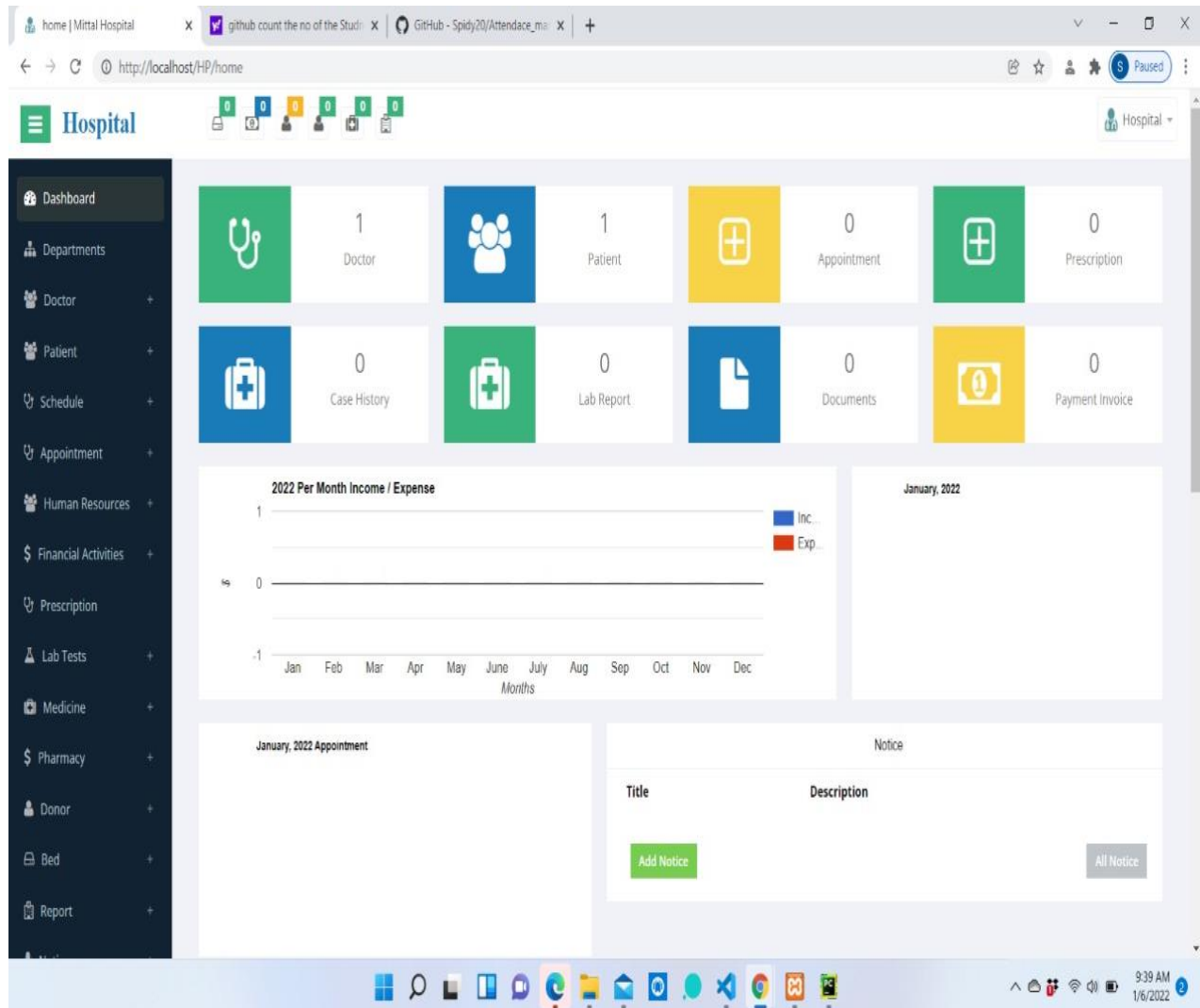
4. Hardware Requirements:

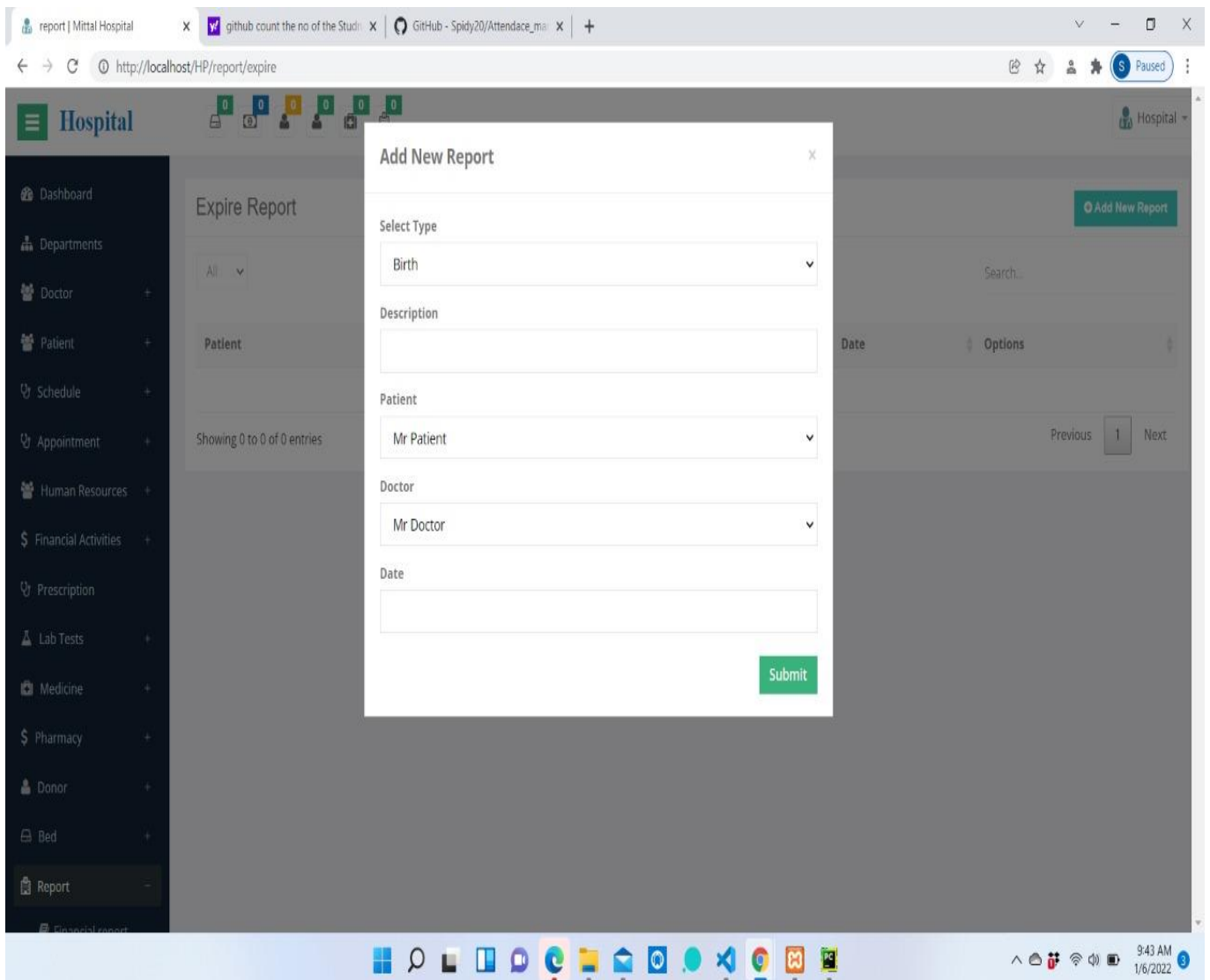
- Pentium-IV(Processor).
- 256 MB Ram
- 512 KB Cache Memory
- Hard disk 10 GB
- Microsoft Compatible 101 or more Key Board

5. SNAPSHOTS:

FIGURE 5.1 (HOME PAGE)







patient | Mittal Hospital x github count the no of the Stud x GitHub - Spidy20/Attendance_ma x +

← → ↻ http://localhost/HP/patient

Hospital 0 0 0 0 0 0 Hospital

Dashboard
Departments
Doctor +
Patient -
 Patient List
 Payments
 Case Manager
 Documents
 Schedule +
 Appointment +
 Human Resources +
 Financial Activities +
 Prescription
 Lab Tests +
 Medicine +
 Pharmacy +

Patient Database **Add New**

100 ▾ Copy Excel CSV PDF Print Search...

Patient ID	Name	Phone	Due Balance	Options
33	Mr Patient	+0123456789	\$0	Edit Info History Payment Delete

Showing 1 to 1 of 1 entries Previous 1 Next

OneDrive
Screenshot saved
The screenshot was added to your OneDrive.

localhost/HP/patient

9:39 AM 1/6/2022

The screenshot displays a web application for a hospital management system. The browser window shows the URL `http://localhost/HP/doctor`. The application has a dark sidebar with the following menu items: Dashboard, Departments, Doctor (selected), List Of Doctors, Treatment History, Patient, Schedule, Appointment, Human Resources, Financial Activities, Prescription, Lab Tests, Medicine, Pharmacy, Donor, and Bed. The main content area is titled 'Doctors' and features an 'Add New' button. Below the title is a search bar and a table of doctors. The table has columns for Doctor Id, Name, Email, Phone, Department, Profile, and Options. A single entry is shown for Doctor Id 149, Mr Doctor, with email doctor@hms.com and phone +0123456789, working in the Cardiology department as a Cardiac Specialized. The Options column for this entry contains buttons for Info, Edit, Appointments, Holiday, Time Schedule, and Delete. At the bottom of the table, it says 'Showing 1 to 1 of 1 entries' with 'Previous' and 'Next' navigation links.

Doctor Id	Name	Email	Phone	Department	Profile	Options
149	Mr Doctor	doctor@hms.com	+0123456789	Cardiology	Cardiac Specialized	Info Edit Appointments Holiday Time Schedule Delete

appointment | Mittal Hospital x github count the no of the Stud... x GitHub - Spidy20/Attendance_ma... x +

← → ↻ http://localhost/HP/appointment/todays

Hospital 0 0 0 0 0 0 Hospital

Dashboard

Departments

Doctor +

Patient +

Schedule +

Appointment -

All

Add

Todays

Upcoming

Calendar

Request

Human Resources +

Financial Activities +

Prescription

Lab Tests +

Todays Appointments

Add Appointment

All

Copy Excel CSV PDF Print

Search...

ID	Patient	Doctor	Date - Time	Remarks	Status	Options
No data available in table						

Showing 0 to 0 of 0 entries

Previous 1 Next

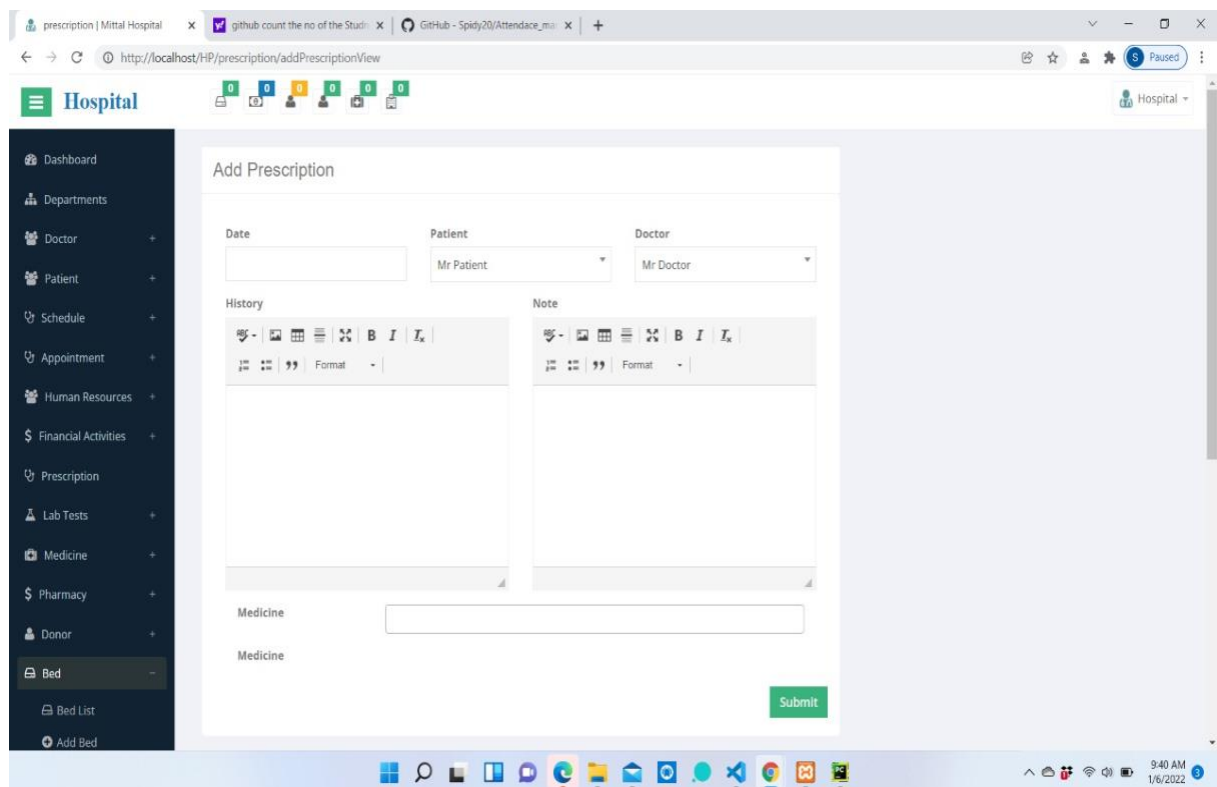
OneDrive

Screenshot saved

The screenshot was added to your OneDrive.

localhost/HP/appointment/todays

9:39 AM 1/6/2022



lab | Mittal Hospital

github count the no of the Studi... | GitHub - Spidy20/Attendance_ma... | +

http://localhost/HP/lab

Hospital

0 0 0 0 0 0

Hospital

Dashboard
Departments
Doctor
Patient
Schedule
Appointment
Human Resources
Financial Activities
Prescription
Lab Tests
Lab Reports
Add Lab Report
Template
Medicine
Pharmacy
Donor

Add Lab Report

Date: 06-01-2022 Patient: Select

Refd By Doctor: Select Template: Select

Report

Format

Submit

Lab Report

100 Copy Excel CSV PDF Print Search...

Report Id	Patient	Date	Options
No data available in table			

Showing 0 to 0 of 0 entries Previous Next

9:42 AM 1/6/2022

patient | Mittal Hospital

github count the no of the Studi... | GitHub - Spidy20/Attendance_ma... | +

http://localhost/HP/patient

Hospital

0 0 0 0 0 0

Hospital

Dashboard
Departments
Doctor
Patient
Patient List
Payments
Case Manager
Documents
Schedule
Appointment
Human Resources
Financial Activities
Prescription
Lab Tests
Medicine
Pharmacy

Patient Database

100 Copy Excel CSV PDF Print Search...

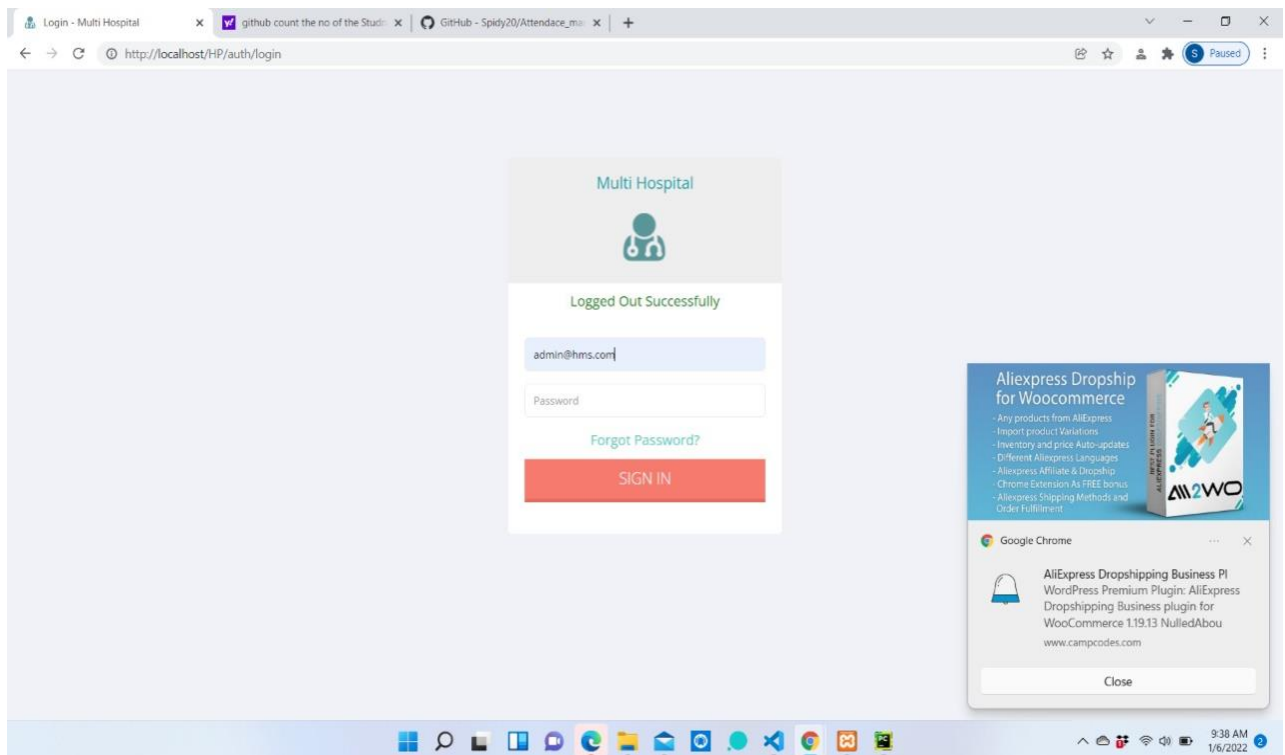
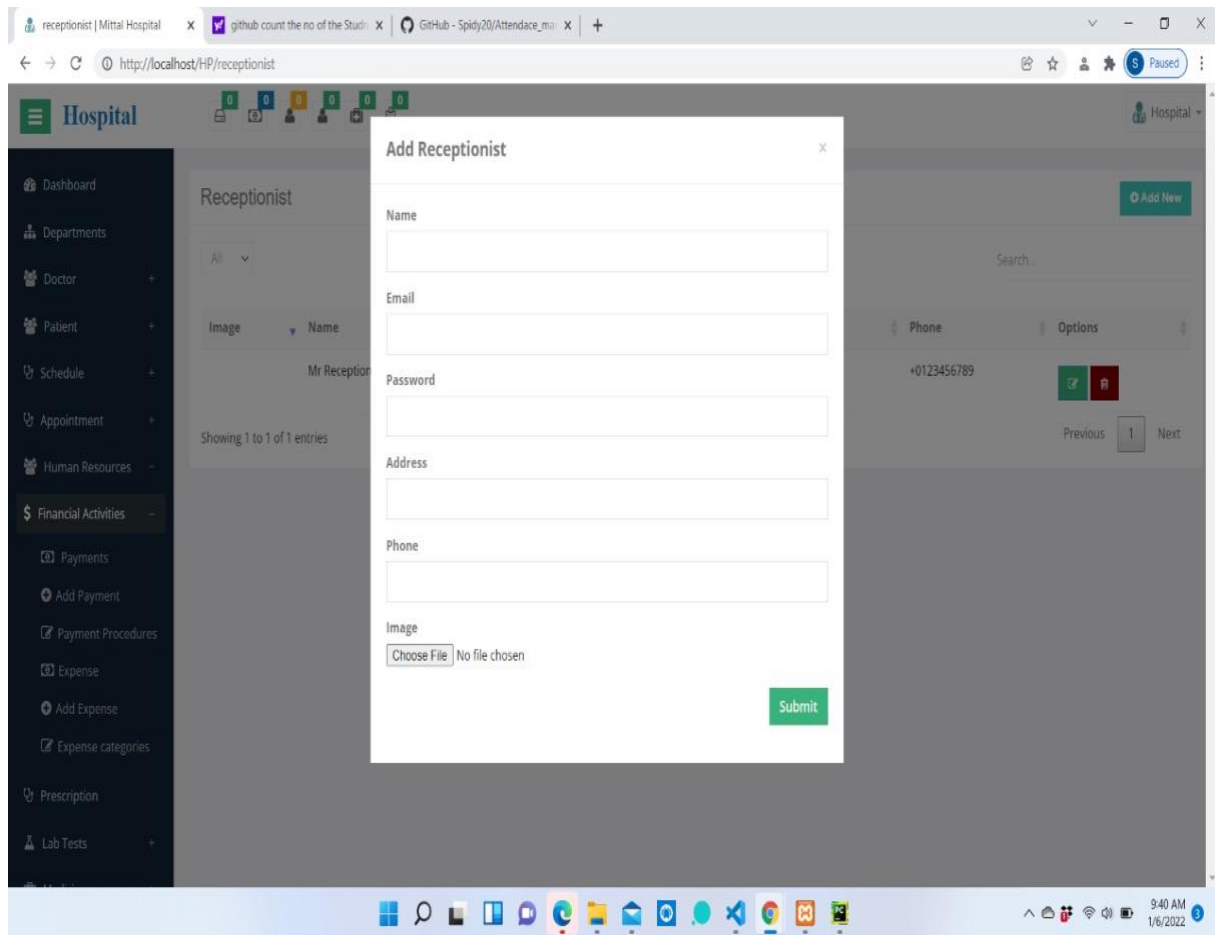
Patient ID	Name	Phone	Due Balance	Options
33	Mr Patient	+0123456789	\$0	Edit Info History Payment Delete

Showing 1 to 1 of 1 entries Previous 1 Next

OneDrive
Screenshot saved
The screenshot was added to your OneDrive.

localhost/HP/patient

9:39 AM 1/6/2022



DATABASE TABLES:

Doctor Registration

Name	NULL / NOTNULL	TYPE	KEY
Name	Null	Varchar (20)	
Loginid	Null	Varchar(20)	
password	Null	Varchar(20)	
Department	Null	Varchar(20)	
Specialization	Null	Varchar(20)	
Phonenumber	Null	Bigint	
Address	Null	Varchar(20)	
Email	Null	Varchar(20)	

Employee Registration

Name	NULL / NOTNULL	TYPE	KEY
Name	Null	Varchar (20)	
Loginid	Null	Varchar(20)	
password	Null	Varchar(20)	
Department	Null	Varchar(20)	
Phonenumber	Null	Bigint	
Address	Null	Varchar(20)	

Inpatient Registration

Name	NULL / NOTNULL	TYPE	KEY
Patientname	Null	Varchar (20)	
Patientid	Not Null	Varchar(20)	Primary
Gender	Null	Varchar(20)	
Age	Null	Int	
Phoneres	Null	Bigint	
Phonemob	Null	Bigint	
Maritual	Null	Varchar(20)	
Occupation	Null	Varchar(20)	
Admid	Null	Int	
Admdate	Null	Datetime	
Admtime	Null	Datetime	
Status	Null	Varchar(20)	
Symptoms	Null	Varchar(20)	
Department	Null	Varchar(20)	
Wardno	Null	Int	
Bedno	Null	Int	
Doctor	Null	Varchar(20)	

Out Patient Registration

Name	NULL / NOTNULL	TYPE	KEY
Patientname	Null	Varchar (20)	
Patientid	Not Null	Varchar(20)	Primary
Gender	Null	Varchar(20)	
Age	Null	Int	
Address	Null	Varchar(20)	
Assigndoctor	Null	Varchar(20)	
Phoneres	Null	Bigint	
Phonemob	Null	Bigint	
Oupdate	Null	Datetime	
Department	Null	Varchar(20)	

For Patient Information

Name	NULL / NOTNULL	TYPE	KEY
pid	Not null	Varchar(20)	Foreign
Patientname	Null	Varchar(20)	
Age	Null	Int	
Department	Null	Varchar(20)	
Doctor	Null	Varchar(20)	

For Surgery Information

Name	NULL / NOTNULL	TYPE	KEY
pid	Not null	Varchar(20)	Foreign
Patientname	Null	Varchar(20)	
Age	Null	Int	
Department	Null	Varchar(20)	
Doctor	Null	Varchar(20)	

For Blood test

Name	NULL / NOTNULL	TYPE	KEY
Patienttype	Null	Varchar(20)	
Patientid	Null	Varchar(20)	
Patientname	Null	Varchar(20)	
Mediclatestype	Null	Varchar(20)	
Bloodgroup	Null	Varchar(20)	
Haemoglobin	Null	Varchar(20)	
Bloodsugar	Null	Varchar(20)	
Sacid	Null	Varchar(20)	
Description	Null	Varchar(20)	

For Urine test

Name	NULL / NOTNULL	TYPE	KEY
Patienttype	Null	Varchar(20)	

Patientid	Null	Varchar(20)	
Patientname	Null	Varchar(20)	
Mediclatestype	Null	Varchar(20)	
Color	Null	Varchar(20)	
Clarity	Null	Varchar(20)	
Odor	Null	Varchar(20)	
Specificgravity	Null	Varchar(20)	
Glucose	Null	Varchar(20)	
Description	Null	Varchar(20)	

For Operation

Name	NULL / NOTNULL	TYPE	KEY
Patienttype	Null	Varchar(20)	
Patientid	Null	Varchar(20)	
Patientname	Null	Varchar(20)	
Refdoctor	Null	Varchar(20)	
Operationtype	Null	Varchar(20)	
Operatonresult	Null	Datetime	

For Pharmacy Information

Name	NULL / NOTNULL	TYPE	KEY
Patienttype	Null	Varchar(20)	
Patientid	Null	Varchar(20)	
Department	Null	Varchar(20)	
Patientname	Null	Varchar(20)	
Medicine	Null	Varchar(20)	

MODULE:

Implementation:

Implementation is the stage where the theoretical design is turned into a working system. The most crucial stage in achieving a new successful system and in giving confidence on the new system for the users that it will work efficiently and effectively.

The system can be implemented only after thorough testing is done and if it is found to work according to the specification.

It involves careful planning, investigation of the current system and its constraints on implementation, design of methods to achieve the change over and an evaluation of change over methods a part from planning. Two major tasks of preparing the implementation are education and training of the users and testing of the system.

TESTING:

The testing phase is an important part of software development. It is the computerized system will help in automate process of finding errors and missing operations and also a complete verification to determine whether the objectives are met and the user requirements are satisfied.

Software testing is carried out in three steps:

1. The first includes unit testing, where in each module is tested to provide its correctness, validity and also determine any missing operations and to verify whether the objectives have been met. Errors are noted down and corrected immediately. Unit testing is the important and major part of the project. So errors are rectified easily in particular module and program clarity is increased. In this project entire system is divided into several modules and is developed individually. So unit testing is conducted to individual modules.

2. The second step includes Integration testing. It need not be the case, the software whose modules when run individually and showing perfect results, will also show perfect results when run as a whole. The individual modules are clipped under this major module and tested again and verified the results. This is due to poor interfacing, which may results in data being lost across an interface. A module can have inadvertent, adverse effect on any other or on the global data structures, causing serious problems.

3. The final step involves validation and testing which determines which the software functions as the user expected. Here also some modifications were. In the completion of the project it is satisfied fully by the end user

Maintenance and environment:

AS the number of computer based systems, grievance libraries of computer software began to expand. In house developed projects produced tones of thousand soft program source statements. Software products purchased from the outside added hundreds of thousands of new statements. A dark cloud appeared on the horizon. All of these programs, all of those source statements- had to be corrected when false were detected, modified as user requirements changed, or adapted to

new hardware that was purchased. These activities were collectively called software Maintenance.

The maintenance phase focuses on change that is associated with error correction, adaptations required as the software's environment evolves, and changes due to enhancements brought about by changing customer requirements. Four types of changes are encountered during the maintenance phase.

- Correction
- Adaptation
- Enhancement
- Prevention

FUNCTIONALITIES

The hospital management system organizes the stable functioning of daily tasks and interactions. This is a special tool to support the smooth operating of the software components that are vital for the clinic administration. The hospital records management software keeps a track of all the operations, stores the users' data, performs its analysis and generates the reports. The medical institution is given the opportunity to collect its information in one place. It includes the patient and doctors' records as well as the data concerning financial affairs, supply management, etc. Furthermore, it is only processed, classified and accessible for authorized users. The hospital database management system provides users with data security due to all regulations. Implementation of different functions empowers smooth and clear functionality.

Any clinic should store medical histories, test results, prescribed treatments, etc. The good hospital database management system will do it for you. All the details are securely stored for the access of the doctor and can be provided to the patients by their requests. They can receive the test results or medical reports by email or the user account. When the written form is required, printing will take only a few minutes for the clinic staff.

Another function is connected with managing finances. The hospital accounting software estimates the patients' payments. It might remind the bank account where you can check performed operations and the billing status of each customer.

Moreover, the hospital record management system is capable of generating regular reports of the tracked data including healthcare, staff efficiency, finances, [inventory](#), and facility utilization, etc. This greatly helps the clinic authorities in making reasonable policy decisions. Therefore, any of these functions are designed to make the clinic management system easy to use, comprehensive, powerful and reliable.

FEATURES

Reduced costs and workload

The effective distribution of resources is vital to good care and the overall well-being of the organization. A well-managed workload and efficient budgeting, in particular, allow for optimal planning of hospital performance. Subject-based alternatives due software with extensive scheduling capabilities can also improve doctor-patient communication. In addition, it is possible to keep track of clinical, patient, and financial data if all records and transactions are preserved in the system.

Improved patient experience

Increasing hospital administration software's consistency, scalability, and dependability enhances patient care and experience, making a healthcare practice's operations significantly more efficient.

Proper data management can prevent such healthcare issues as delayed care for patients who require immediate medical attention. Thus, hospital management software would improve the effectiveness and appeal of healthcare services to their key audience: doctors and patients.

Improved workflow

Using a system that can manage all types of medical data, inventory, results, and reporting can significantly boost a hospital's efficiency. In addition, the software filters data automatically, resulting in speedier operational procedures and the removal of time-consuming, repetitive tasks that humans need to undertake.

Human errors are the second biggest cause of healthcare mismanagement, and the hospital management system dramatically minimizes the likelihood of this occurring. For example, there is less likelihood of duplication, record typos, or other errors with improved data management.

Improved Processes

Automation is one of the main benefits here. It helps to optimize the user experience. Medical specialists, patients, and hospital authorities can interact online, make the appointments and exchange information.

Digital medical records

The hospital database includes all the necessary patient data. The disease history, test results, prescribed treatment can be accessed by doctors without much delay in order to make an accurate diagnosis and monitor the patient's health. It enables lower risks of mistakes.

Staff interaction

It is vital to engage all of your employees for improved coordination and teamwork. They do not need to make special requests and wait for a long time for an answer. Each specialist will be in charge of certain process stage and can share outcomes with colleagues just in one click.

Facility management

Hospitals authorities are able to manage their available resources, analyze staff work, reduce the equipment downtime, optimize the supply chain, etc. Another fact to mention is that hospital staff deal with the digital data instead of endless paperwork.

Financial control and tax planning

The management has the ability to monitor different financial operations including expenses, profits, and losses, paying bills and taxes, in and outpatient billing. The financial awareness helps to analyze business prospects quite clear and move in the right direction.

Market strategy

Due to the high market competitive nature, the medical industry is also open to all the different innovations that enable communication between patients, doctors, suppliers, and marketing services providers.

Insurance claims processing

Integration with health insurance services improves the experience of the patients and brings benefits to the institution. It allows you to be innovative and

helps both the patient and hospital to handle many aspects of the insurance process successfully.

Less time consuming

As the services and interactions are improved in all possible ways, everything is being planned with greater precision. It saves the time of all the system users and provides them with up-to-date information.

Patient self-service

Patients have their own system accounts where the list of various actions can be performed. They are able to make online requests or reservation, receive the test results, receive the consultation of the medical specialists and many more.

Better customer experience

Since the clinic management system is patient-oriented, the treatment process can be less stressful. Doctors have more time for the examination and interaction with patients. In addition, all the requested information can be received online

FUTURE ENHANCEMENTS:

This application avoids the manual work and the problems concern with it. It is an easy way to obtain the information regarding the various travel services that are present in our System.

Well I and my team member have worked hard in order to present an improved website better than the existing one's regarding the information about the various activities. Still, we found out that the project can be done in a better way. Primarily, In this system patient login and then go to reception. By using this patient will send request for consulting the doctor. Reception will set the date for doctor appointments. After that doctor see his appointments and see the patients, surgeries also done.

The next enhancement is, we will develop online services. That mean, if patient have any problems he can send his problem to the doctor through internet from his home then doctor will send reply to him. In this patients have some login name and password.

LIMITATIONS:

Other few technical challenges that fail the implementation of HMS in the healthcare industry includes Networks and computer have different maintenance problems, lack of no standards for Data entry and data retrieval, difficulties in training users technically to use HMS. Healthcare professionals feel threatened due to the fear of being identified in case of error. Integration of units need to precise planning. otherwise, no foresight in the management, it will result in none compensate consequences, Lack the skills of Managers to contract with private sector and lack of powerful private sector caused outsourcing is failed. Occasionally costs and inpatient days increased, staff workload per case increased due to the higher proportion of patients in the immediate. The researchers in a study have identified three main human challenges that are being a barrier in adopting the HMS in healthcare industries namely. Shortage of professional healthcare faculty who have in-depth knowledge of HMS and other similar technologies. Poor acceptance of HMS Software, Shortage of health informatics professionals who are well capable of establishing and implementing the techniques.

CONCLUSION:

The package is designed in such a way that future modifications can be done easily. The following conclusion can be deduced from the development of the project. Automation of the entire system improves the efficiency .It provides a friendly graphical user interface which proves to be better when compared to the existing system. It gives appropriate access to the authorized users depending on their permissions.It effectively overcomes the delay in communications.Updating of information becomes so easier. System security, data security and reliability are the striking features.The System has adequate scope for modification in future if it is necessary.

REFERENCE:

The following books were referred during the analysis and execution phase of the project

MICROSOFT .NET WITH C#

Microsoft .net series

ASP .NET 2.0 PROFESSIONAL

Wrox Publishers

ASP .NET WITH C# 2005

Apress Publications

C# COOK BOOK

O reilly Publications

PROGRAMMING MICROSOFT ASP .NET 2.0 APPLICATION

Wrox Professional Guide

BEGINNING ASP .NET 2.0 E-COMMERCE IN C# 2005

Novice to Professional.

WEBSITES:

www.google.com

www.microsoft.com