Shree Saurastra Collage of Management and Computer Science

A Project Report

ON

"Hospital Management System"

Academic Year

2021-2022

Developed By

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Under the Guidance of

Bharat Sir

Affiliated with Saurashtra University

SHREE SAURASTRA COLLAGE OF MANAGEMENT AND COMPUTER SCIENCE

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Opp.Bhoomi Ginning, Atkot-jasdan Highway,Atkot-360040

CERTIFICATE

This is certify that Gorasiya Prinsi And Savaliya Ritika with seat no _____ is a final year student of the Bachelor Of Computer Application (BCA) Saurashtra University, and is required to do a six month BCA project work in his/her Five Semester. The experience gained by this project work, not only benefit the student to partially fulfil the requirement of the BCA of Saurashtra University, but also lay a foundation for his/her future career.

H.O.D.
Bharat sir
Shree Saurashtra
Collage of
Mgt.& Comp.Science

Signature of principal
Shree Saurashtra
Collage of
Mgt.& Comp.Science

ACKNOWLEDGEMENT

We take this opportunity to express our gratitude to our guide, Bharat Sir a computer department , Project Guide for their valuable guidance and continual encourage us through out the project. We are heartily thankful to him for his time-to-time suggestion and clarifying the concepts of the topic that helped us a lot during the development of the project, for his help getting a better understanding of the project domain, solving problems encountered during project implementation as well as project testing, and for his precious suggestion for the project, through his experience in project development.

We special thanks to our family members for the moral support given through out our study, Above all we offered. We heartiest regards to "GOD" for given us strength work inspiration.

Thank You.....

Abstract

Hospital was developed following system development stages for smooth running and management of Hospital. The Few months provided by the Saurashtra University examination enabled the system analyst recognize and define the problem in the current manual system. After an information gathering process from several Hospital managed by manual and computerized systems, the system analyst saw that the Hospital Management indeed needed a computerized management system.

The system was developed using visual studio for applications (Microsoft SQL Server) language. This system will indeed help the Hospital Management and the manage and steer the functionality and transactions to realize its maximum potential in addition to its competence in the Hospital.

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Project Profile

- **Project Title** : Hospital Management System
- **Organization** : MatuShri SantokBaa Medical Center
- **Front End Tool** : Microsoft Visual Studio 2010
- **Back End Tool** : Microsoft SQL server 2008
- **Operating System** : Microsoft Window 7
- **Project Team Size** : Two
- **Duration** : Two Month
- **Developed By** : Gorasiya Prinsi
  Savaliya Ritika
- **Project Guide** : Bharat Sir
- **Hardware User** : Intel(R) Pentiums(R) Processor
  4-GB OF RAM
- **Submitted** : Shree Saurashtra Collage of Mgt.&Comp. Science, Atkot

1.Introduction

1.1 Introduction of our Website

We are making the Website which title is “Hospital Management System”. We made this website for the “MatuShri Santokba Medicical Center” .

1.2 Purpose

MatuShri Santokba Hospital is a best medicity. Well equipped With modern apparatus. All type of treatment and investigations are provided free of charged for at minimum of rates. MatuShri Santokba Hospital is a public hospital located in Lathi, Gujarat.

1.3 Project Scope

User Friendly Website

Users have to register to enter the Project.

We Provide…..

- Best Treatment
- Embulace Service
- Emergency Service
- Blood Bank

2.System Analysis

2.1 Analysis of current system

First of all we take a visit of the Hospital. And visit the Matushri SantokBaa Medical Center. He gave the information about the Hospital Management and different Types of work that has been doing in Hospital .

- In that time mostly all the persons show all the things in Website.
- Because in that modern time all the things are available in Website so no need to purchase it from market.

2.2 Analysis of existing system

System analysis is a detailed study of the various operations performed by a system and their relationships within and outside of the system. Here the key question is what all problems exist in the present system? What must be done to solve the problem? Analysis begins when a user or manager begins a study of the program using existing system.

System analysis can be categorized into four parts:

- System Planning and initial investigation.
- Information Gathering.
- Applying analysis tools for structured analysis.
- Cost/Benefit analysis.

3. System Requirement Analysis

3.1 User Characteristic

- User must have knowledge of computer system.
- He must able to remember his username and password.
- He must have knowledge of this system and its functionalities.
- He must have to know how to access Asp.Net.

3.2 Hardware, Software requirement

During this phase of SDLC, one has to enlist the configuration of hardware and support software essential to execute the specified application

Hardware & Software Specification:-

Category	Hardware	Software
Processor	Pentium (R) or latest version	Pentium (R) or latest version
Hard Disk Drive	40 GB or Higher	20 GB or Higher
RAM	256 MB or Higher	64GB or Higher

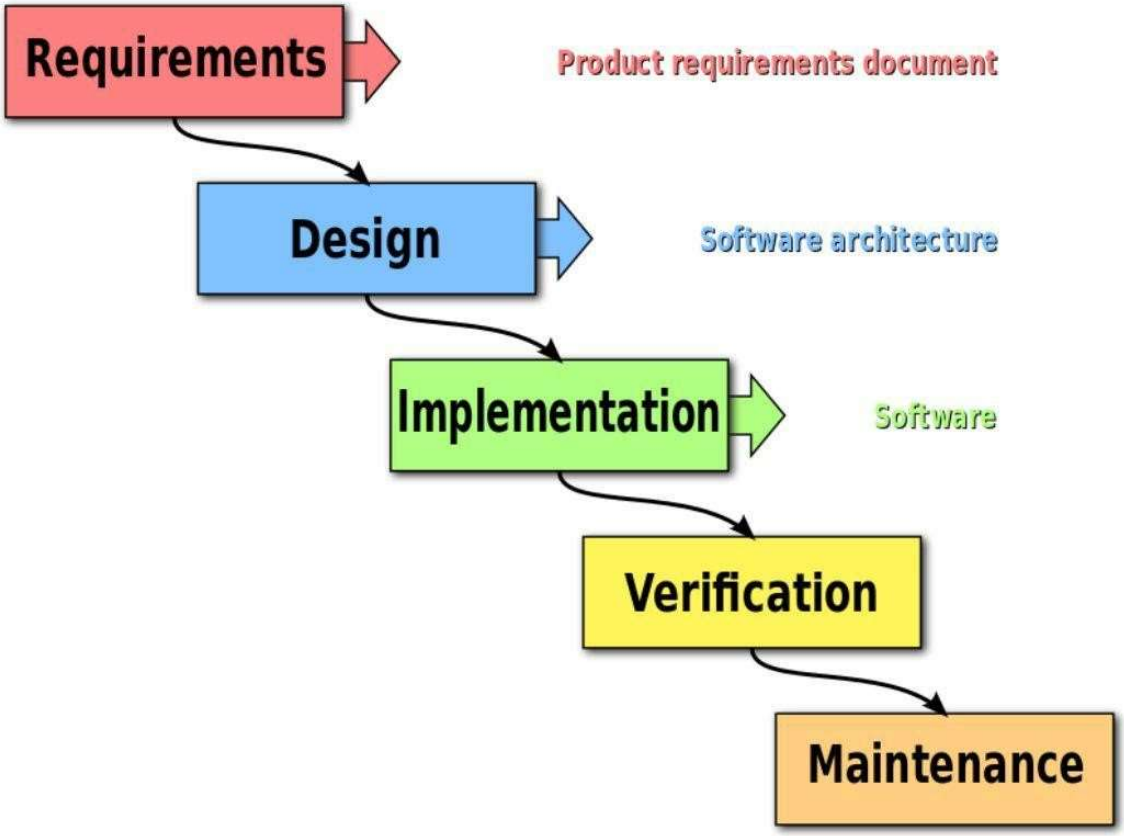
Floppy Disk Drive	1.44 MB or Higher	1.44GB or Higher
Monitor	14'' Color or higher	14" color
Network Devices	Network Adapter	Network Adapter

Software Requirements:-

No.	Software Used	Remarks
1	SQL server 2008	Used as the Back End for the system. It holds the entire database.
2	Microsoft Visual Studio 2010	It is the technology Used as the Scripting language
3	Any Network Operating System	Used on the client side

4. Project Management

4.1 Project Model



5. Feasibility Analysis

Feasibility of the project determines whether it is possible to develop the project or not. There are 3 main factors, which determine the feasibility of the project. They are discussed as follow:-

- *Technical Feasibility*
- *Economical Feasibility*
- *Operational Feasibility*

5.1 Technical Feasibility :-

The technical feasibility takes into consideration the technical requirement and their availability in the market. It determines whether it is possible to develop the proposed system with the present technology or not. The technical possibilities of present system are as follows:-

- *The hardware is currently being used by the company.*
- *Proposed system doesn't require any technical details.*
- *It needs low configuration computer system.*
- *The technical specification is easy available in the market.*

5.2 Economical Feasibility :-

No.	Software	Requirement	Max	Price
1	OS	Windows 7	Windows 7	10580

2	Hard disk	Free space upto 20 GB	150 GB	1490
3	C# & SQL	1 GB	1.5 GB	15000

5.3Operational Feasibility :-

The operational feasibility deals with the matter whether the proposed system fulfils the requirement of the firm. This feasibility determines whether the proposed system covers all the aspect of the current system. The possibility of the operational feasibility is as follows:-

- *The proposed system will fulfill the firms' requirement.*
- *The proposed system covers all the aspect of the working system.*
- *The expected users of the proposed system are honestly eager for the new system.*
- *The changes made in this system are quite beneficially.*

6. System and Database Design

6.1 Database Design :-

The Following are the designs of the tables that shall be used to store the data in the system.

User Master

dbo.UserMaster:...ATA\DATABASE.MDF)

Column Name	Data Type	Allow Nulls
UserID	int	☐
UserName	varchar(30)	☑
UserType	varchar(20)	☑
Password	nvarchar(10)	☑
UserCreationDate	text	☑

Client Registration

dbo.ClientRegistr...ATA\DATABASE.MDF)*

Column Name	Data Type	Allow Nulls
UserID	int	☐
UserName	varchar(30)	☑
BirthDate	text	☑
EmailID	text	☑
MobileNo	nvarchar(10)	☑
Password	nvarchar(10)	☑
	nchar(10)	☑

Patient Registration

dbo.PatientRegist...ATA\DATABASE.MDF)

Column Name	Data Type	Allow Nulls
ID	int	☐
SurName	varchar(30)	☑
Name	varchar(30)	☑
FatherName	varchar(30)	☑
Age	numeric(18, 0)	☑
Gender	varchar(20)	☑
Address	varchar(70)	☑
MobileNo	varchar(10)	☑
EmailID	text	☑
RegistrationDate	text	☑
RelativeMobileNo	varchar(10)	☑
Symtoms	varchar(50)	☑
Department	varchar(20)	☑
AssignDoctor	varchar(30)	☑
WardNo	int	☑
BedNo	int	☑

Doctor Master

dbo.DoctorMaster...TA\DATABASE.MDF)

Column Name	Data Type	Allow Nulls
DrID	int	☐
Name	varchar(50)	☑
Gender	varchar(50)	☑
Age	int	☑
Specialization	varchar(50)	☑
JoinDate	text	☑
BirthDate	text	☑
Address	varchar(50)	☑
MobileNo	varchar(50)	☑
Email	text	☑

Discharge Master

dbo.DischargeMas...TA\DATABASE.MDF)

Column Name	Data Type	Allow Nulls
DischargeNo	int	☐
PatientName	varchar(50)	☑
DischargeDate	text	☑
PatientType	varchar(20)	☑
Charge	money	☑

Ward Master

dbo.WardMaster:...ATA\DATABASE.MDF)*

Column Name	Data Type	Allow Nulls
SrNo	int	☐
WardType	varchar(20)	☑
WardNo	numeric(18, 0)	☑
BedNo	numeric(18, 0)	☑
PatientName	varchar(50)	☑

Medicine Master

dbo.MedicineMast...TA\DATABASE.MDF)

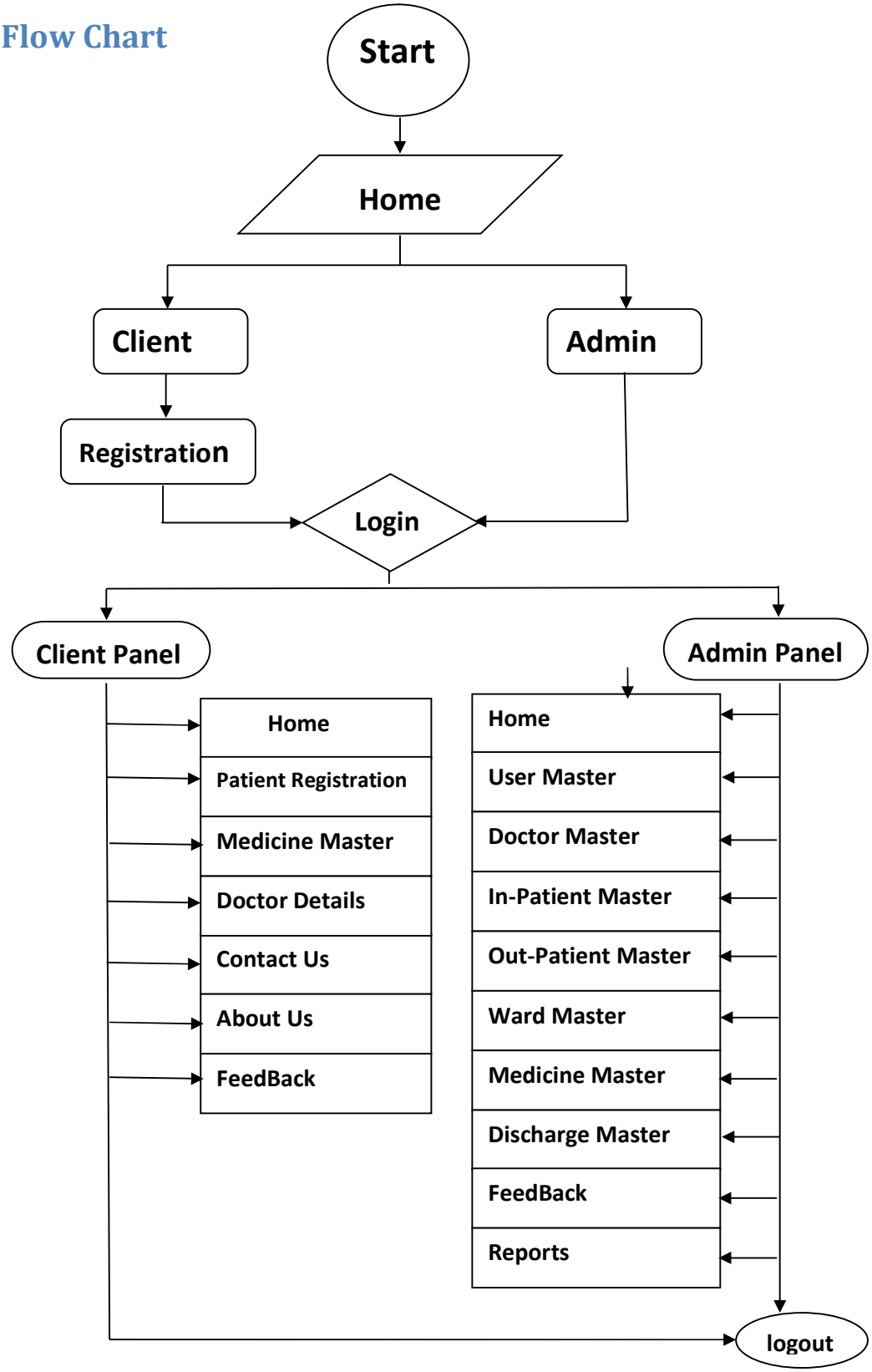
Column Name	Data Type	Allow Nulls
SrNo	int	☐
GenericName	varchar(100)	☑
BrandName	varchar(100)	☑
Price	varchar(50)	☑
Uses	varchar(250)	☑

FeedBack

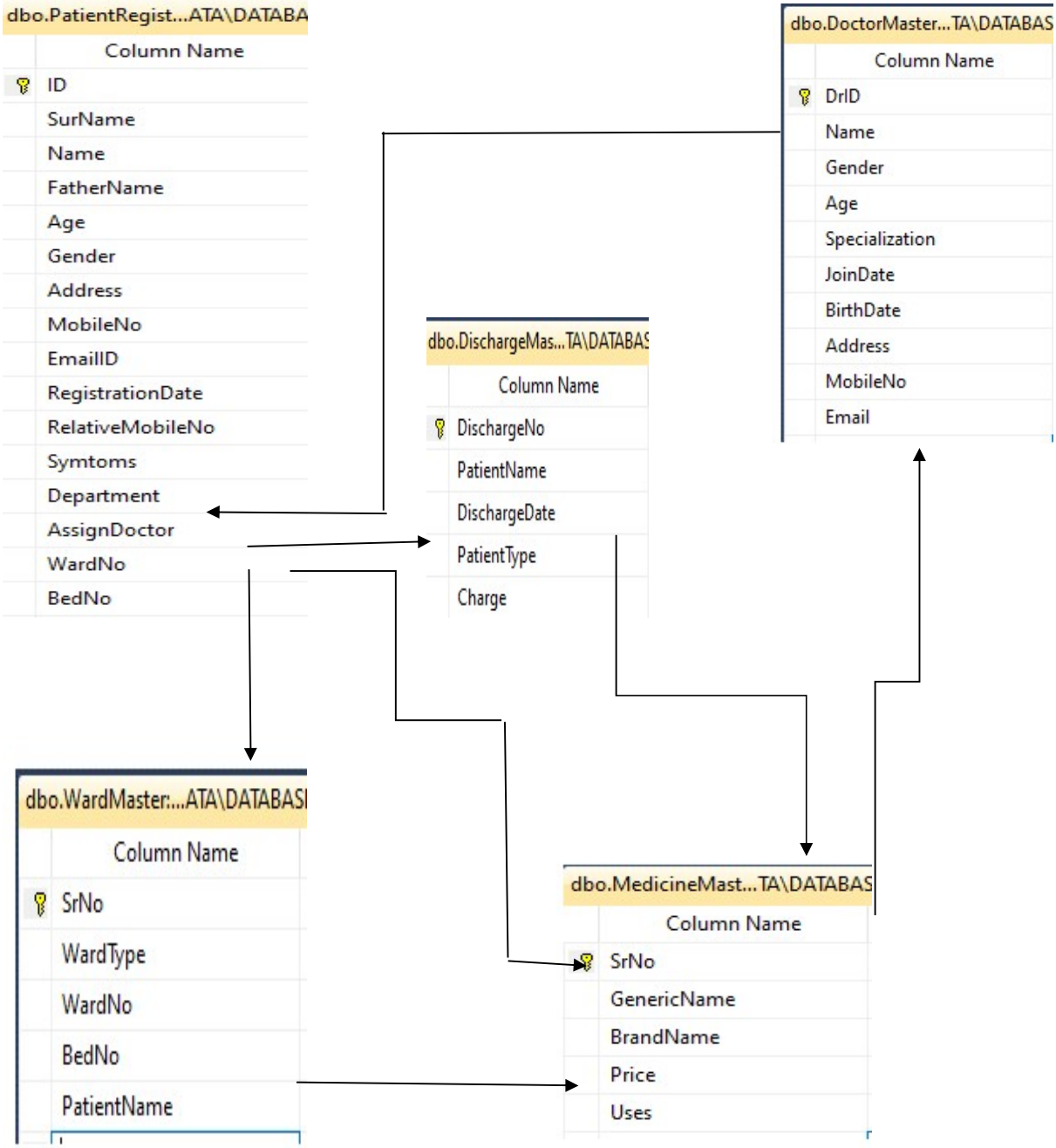
dbo.FeedBack: Ta...ATA\DATABASE.MDF)

Column Name	Data Type	Allow Nulls
RegistrationNo	int	☐
Name	varchar(30)	☑
ContactNo	nvarchar(10)	☑
EmailID	text	☑
Message	varchar(100)	☑

6.2 Flow Chart

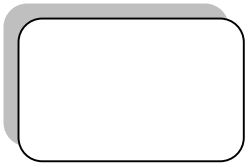


6.3 E-R Diagram

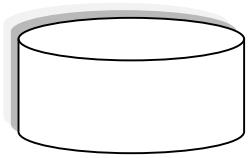


6.4 Data Flow Diagram

Represent data flow

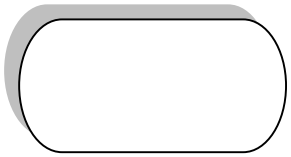


Represent a Form

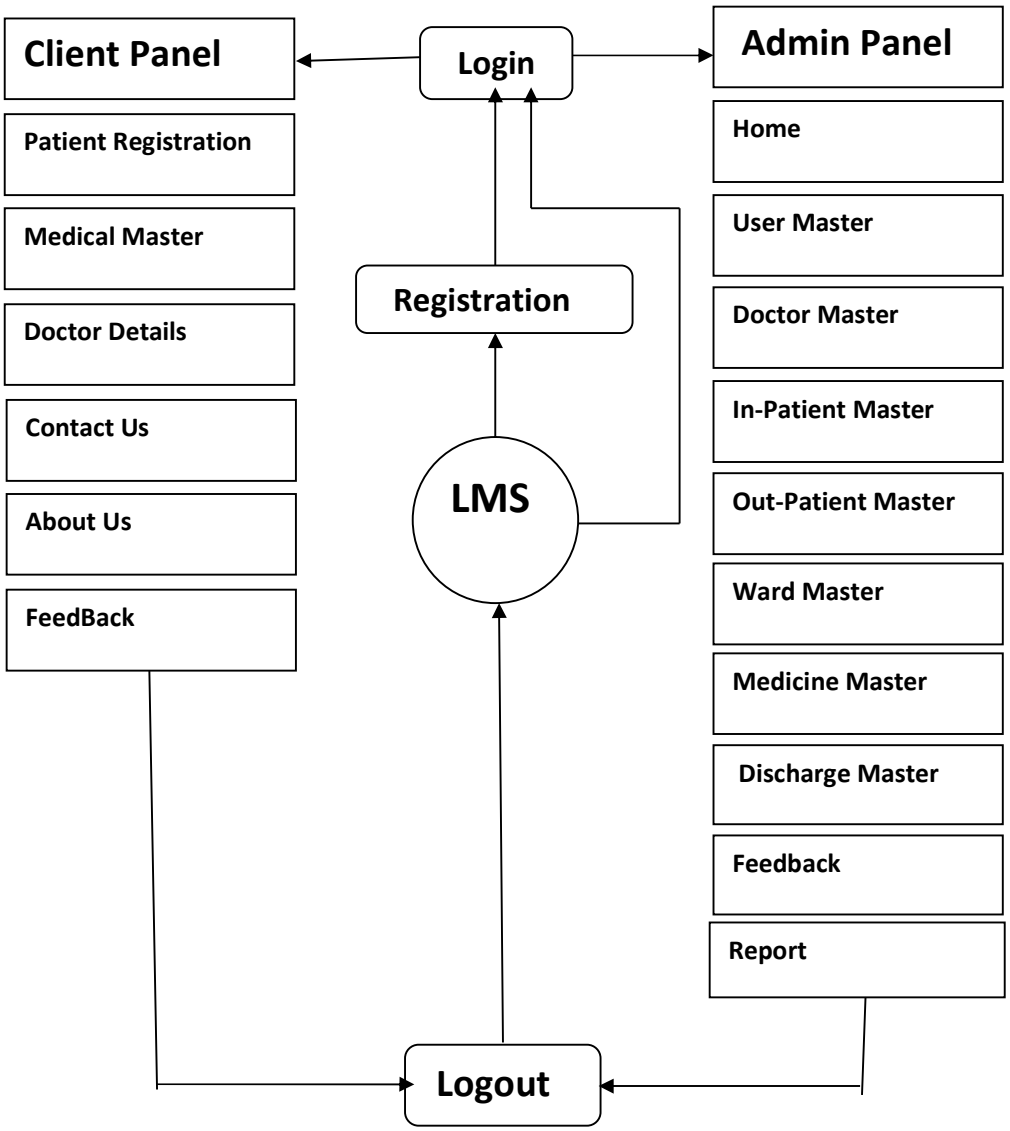


Represent a data table

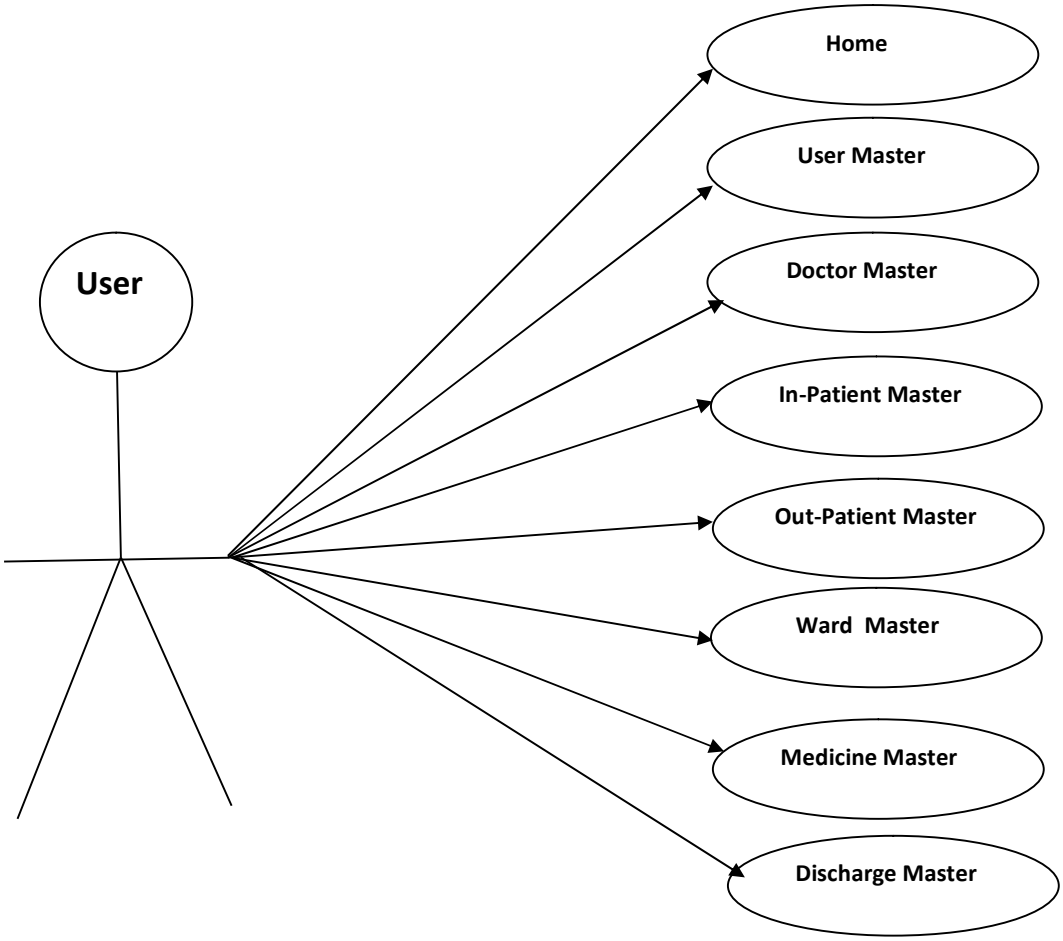
Represent a Report



Represent a Processing


Client Panel
Login
Admin Panel
Patient Registration
Medical Master
Doctor Details
Contact Us
About Us
FeedBack
Registration
LMS
Home
User Master
Doctor Master
In-Patient Master
Out-Patient Master
Ward Master
Medicine Master
Discharge Master
Feedback
Report
Logout

6.5 UseCase Diagram



7.Screenshot

Home

Registration

Login

Gelery

Rules&Regulation

Rules&Regulation

SrNo	Rules
1.	Know the hospital rules.
2.	Take Permission before you visit your patient.
3.	Be clean.
4.	Do not smoke anywhere in the hospital.
5.	Give respect to the medical professionals.
6.	Do not damage or remove hospital property or the property of other patients.
7.	Stay for a short time as prescribed in the notice.
8.	Observe and follow the signs, notices, and precautions in and around the Hospital.
9.	Don't help the patient get out of bed or give food or drink or any kind of seductive without an approval from treating doctors..
10.	Don't park your vehicle at non designated areas.

Hospital Time

Facilities

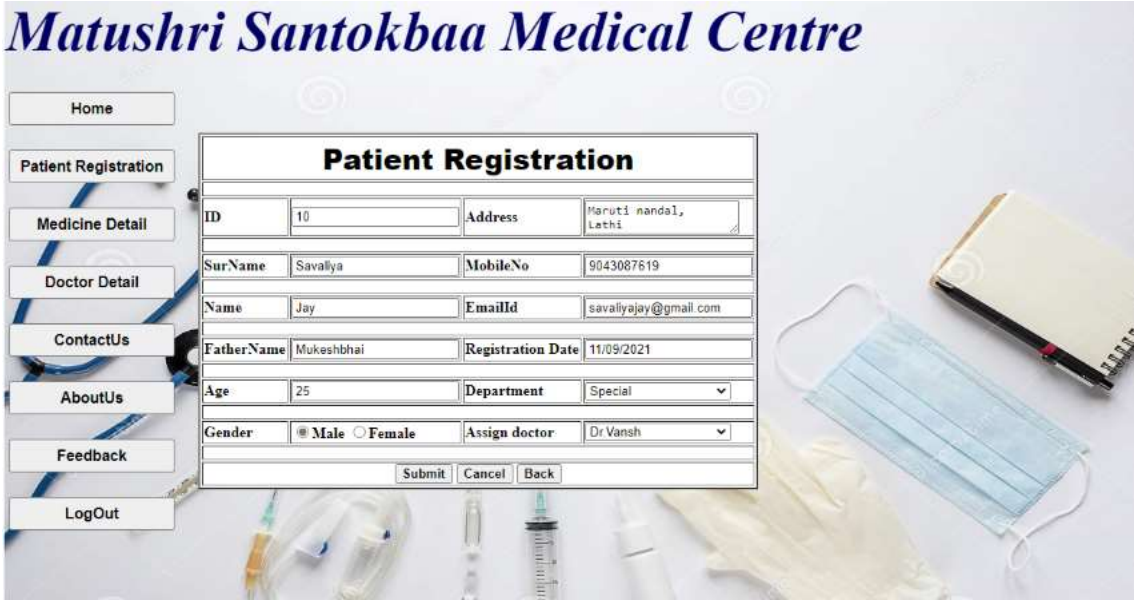
Contact Us

About Us

❖Client Panel

Home

Patient Registration



Medicine Details

Doctor Details

Contact Us

About Us

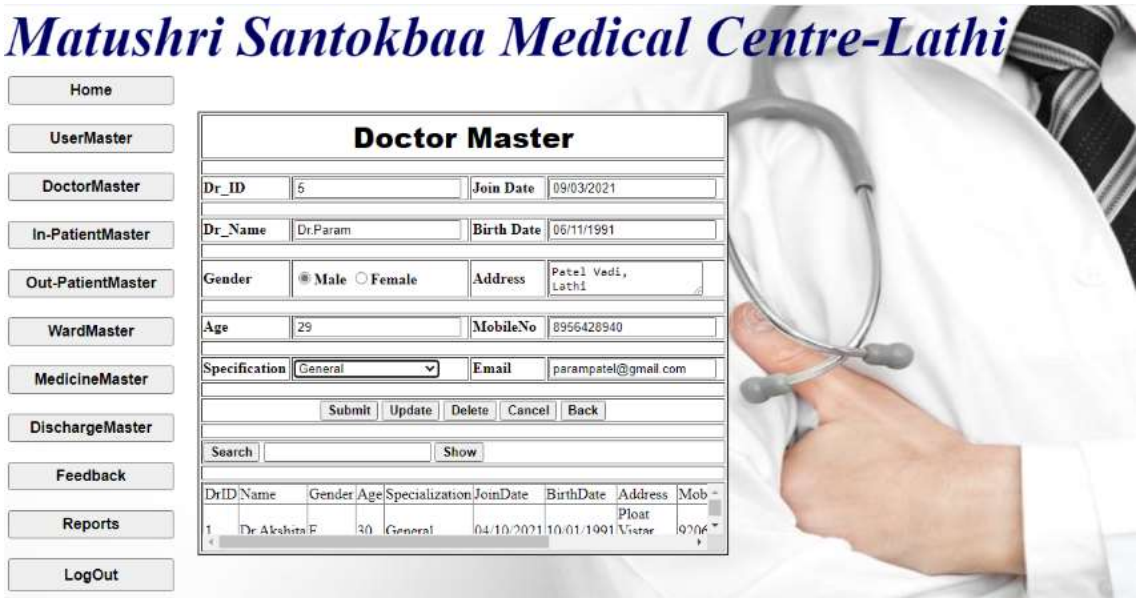
FeedBack

❖Admin Panel

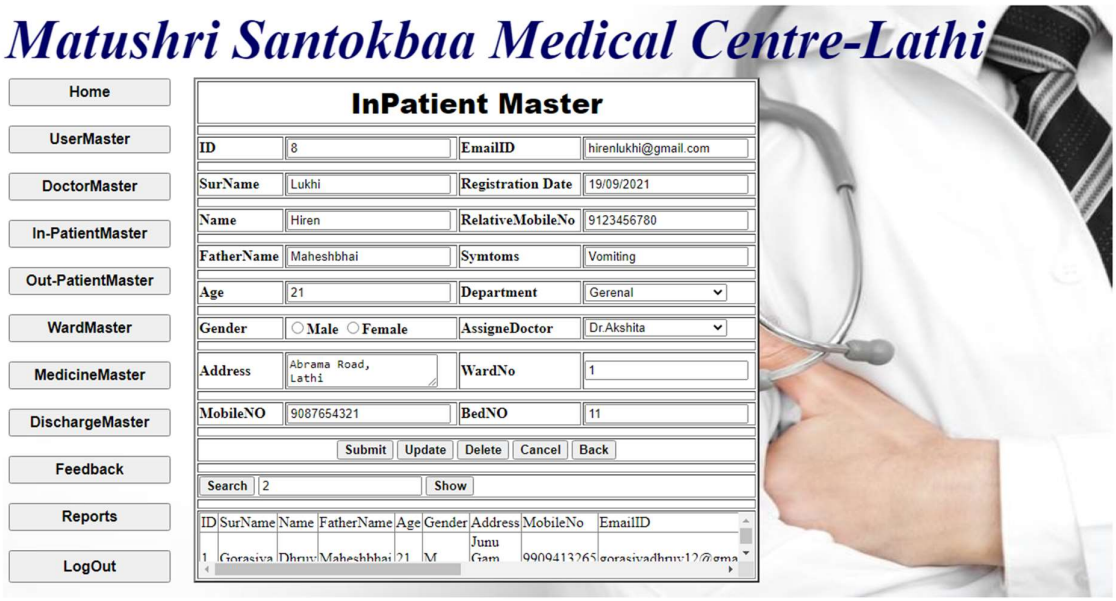
Home

User Master

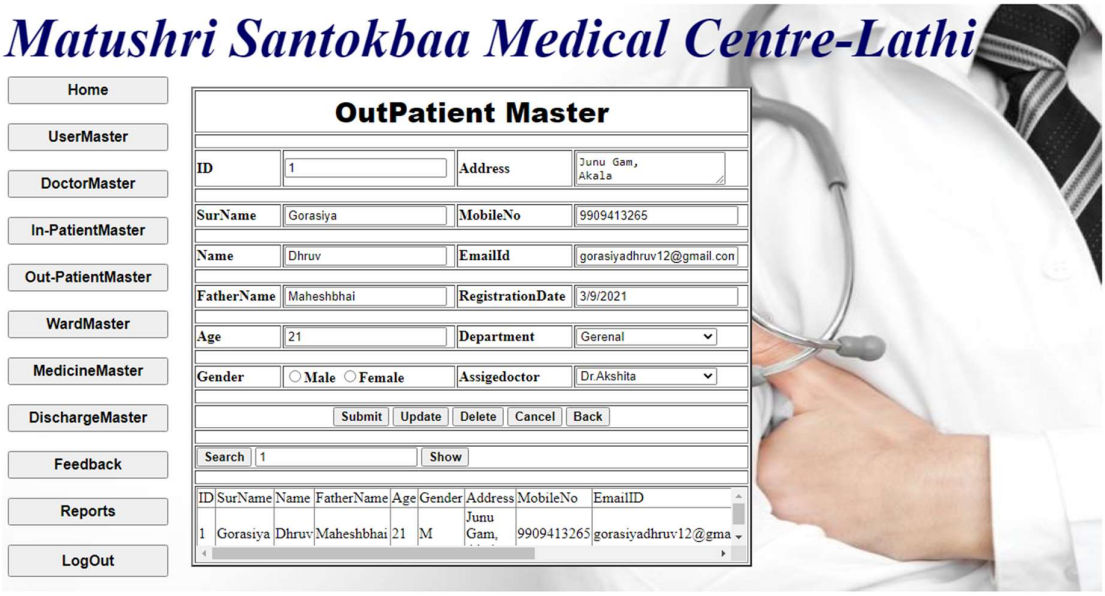
Doctor Master



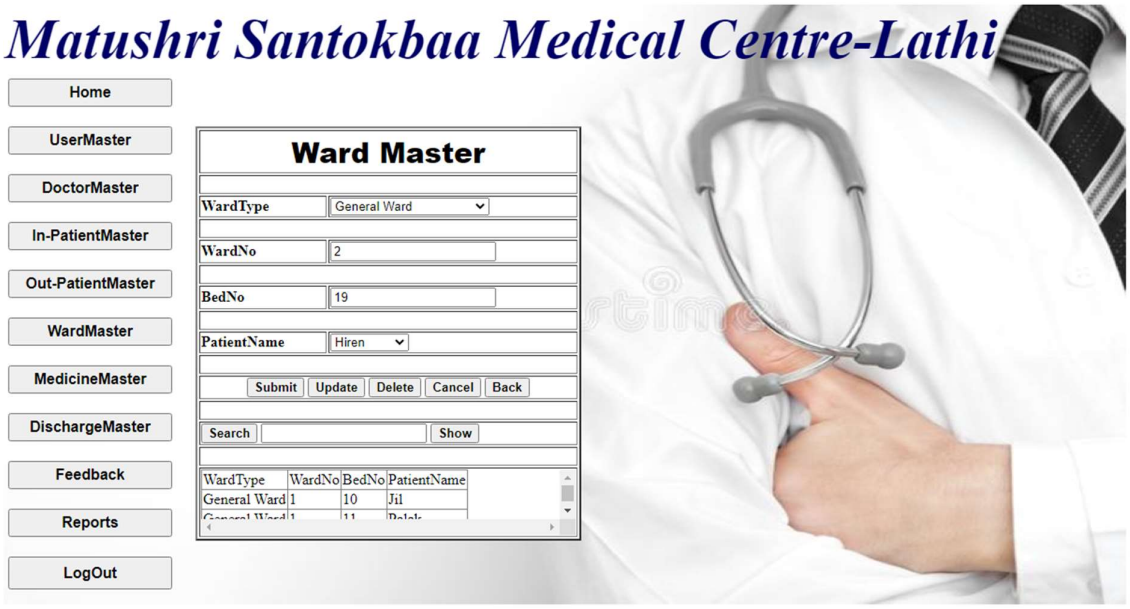
In-Patient Master



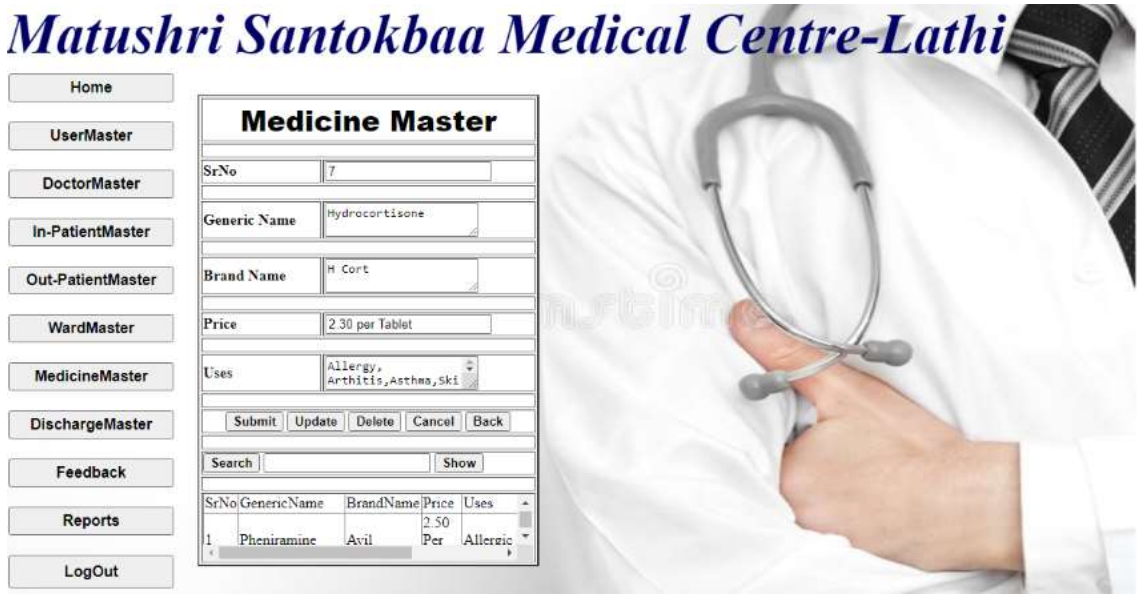
Out-Patient Master



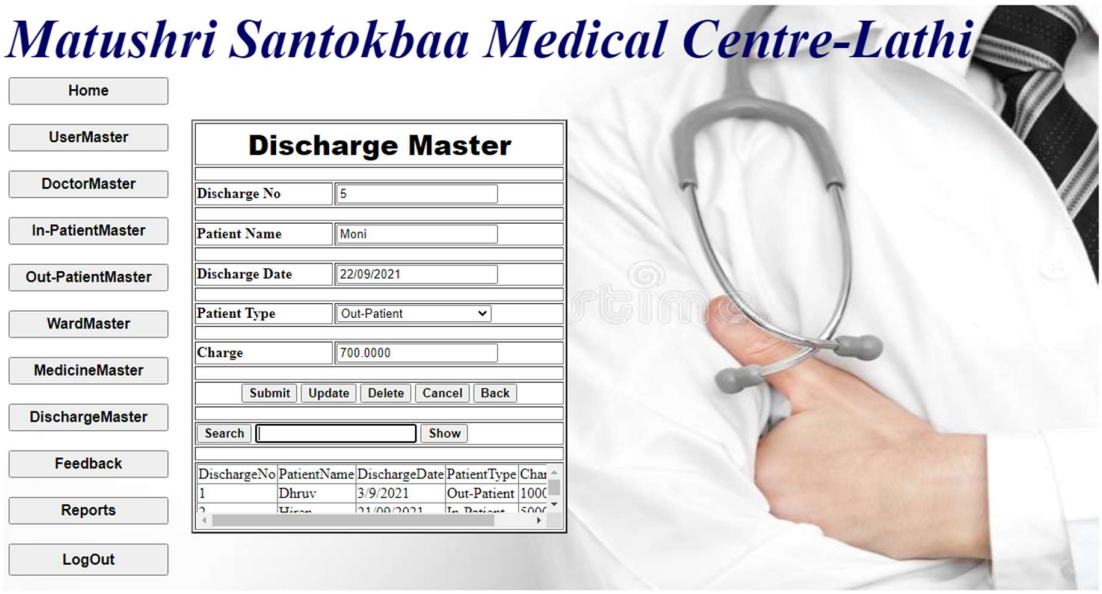
Ward Master



Medicine Master

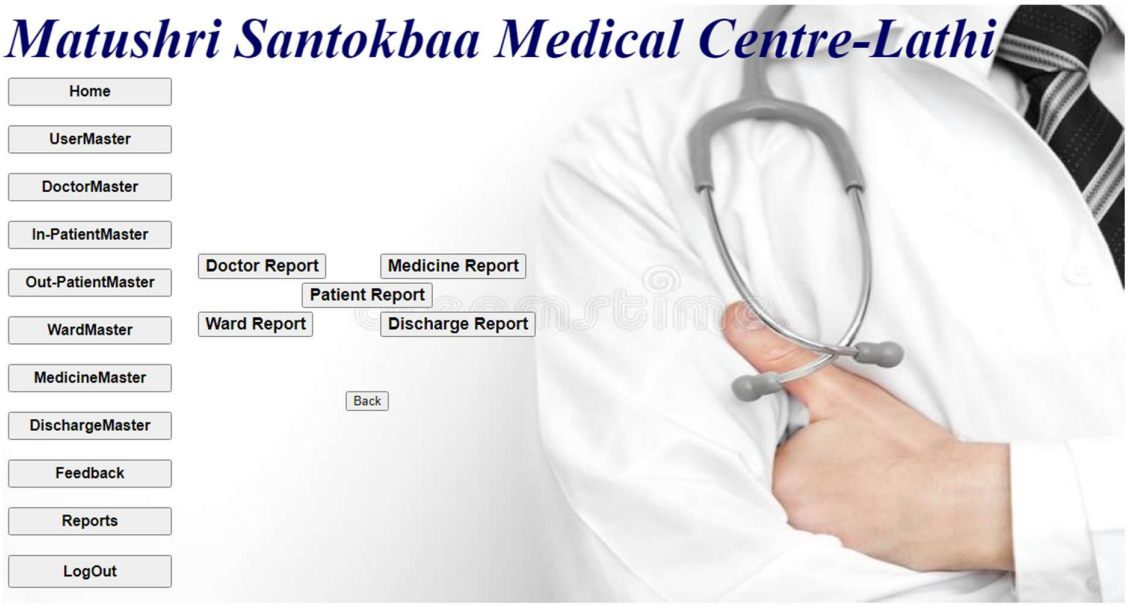


Discharge Master

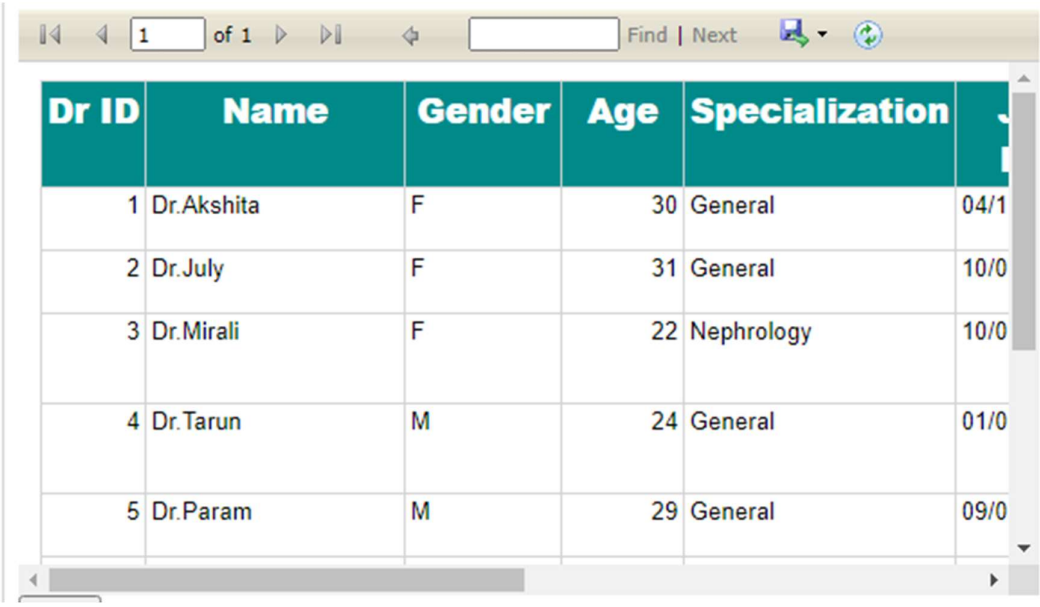


FeedBack

Reports



Doctor Report



1 of 1 Find | Next

Dr ID	Name	Gender	Age	Specialization	J
1	Dr.Akshita	F	30	General	04/1
2	Dr.July	F	31	General	10/0
3	Dr.Mirali	F	22	Nephrology	10/0
4	Dr.Tarun	M	24	General	01/0
5	Dr.Param	M	29	General	09/0

Medicine Report

1 of 1 Find | Next

Sr No	Generic Name	Brand Name
1	Pheniramine	Avil
2	Promethazine	Avomin
3	Ibuprofeb	Brufen
4	Hyoscine Butyl Bromide	Buscopan
5	Aspirin	Ecosprin
6	Metoclopramide	Perinorm
7	Hydrocortisone	H Cort
8	Diclofenac	Vovern

Ward Report

1 of 1 Find | Next

Ward Type	Ward No	Bed No	Pat
General Ward	1	11	Hiren
General Ward	1	14	Parul
General Ward	1	10	Shubh
General Ward	1	19	Sahil

Patient Report

1 of 1 Find | Next

ID	Sur Name	Name	Fathe
1	Gorasiya	Dhruv	Maheshbl
2	Lukhi	Hiren	Maheshbl
3	Pandya	Parul	Rameshb
4	Kalathiya	Vruti	Bharatbh
5	Gelani	Moni	Ashokbha
6	Gabani	Shubham	Maheshbl
7	Savaliya	Sahil	Maheshbl

Discharge Report

1 of 1 Find | Next

Discharge No	Patient Name	Discharge Date	Patient Type
1	Dhruv	3/9/2021	Out-Patient
2	Hiren	21/09/2021	In-Patient
3	Parul	22//09/2021	In-Patient
4	Vruti	22/09/2021	Out-Patient
5	Moni	22/09/2021	Out-Patient
6	Shubham	22/09/2021	In-Patient
7	Sahil	24/09/2021	In-Patient

8. Project Limitation & Features

➢ Advantage Of Project

- This Website is on computer based so the user must have Knowledge about computer system and Asp.net.
- User can not do any changes itself in coding.
- In future it must have changes in requirement so it might be having big changes in coding.

➢ Limitation Of Project

- The computer needs continuously electricity in case of power failure.
- All works is to be done manually.
- Speed depends on the computer RAM or processor. ϖ
- Server can be overloaded.
- The student can not be registered online

9. Testing

Black Box-Testing:-

Black box testing assume the code to be a black box that resourced to input Stimuli. The testing focuses on the output to various of types of stimuli in The targeted deployment environments . It focuses on validation tests , boundary ,condition, destructive testing , reproducibility tests, performance tests, globalization, And security-related testing..

The following input is required for black box testing:

- Requirements
- Functional
- Specification
- High-level design
- Document
- Application block source code

White Box-Testing:-

White box testing assumes that the tester can take a look at the code for the application block and create test cases that look for any potential failure scenarios. During white box testing, you analyze the code of the application block and prepare test cases for testing the functionality to ensure that the class is behaving in accordance with the specifications and testing for robustness.

10. Conclusion

With the permission from Saurashtra university, To develop a system that would computerize the books an article. The system analyst has been able to come to a successfully access.

As he concludes, he is grateful that the system will be able to server it's intended purpose an meet it's objectives to the satisfaction of the library management.

In this short document I have tried to cover most of the areas of concern in writing a project report. Naturally, this is not the last word on the subject. If you have time, you should have a look at one or more of the books recommended in the references and bibliography.

11. Reference

A. Website Name:-

1. **www.google.com**
2. **monarch_computer@rediffmail.com**

B. Reference :-

- **Complete reference (ASP.NET)**
- **ASP.NET 4.0 PROGRAMMING**

THANK
YOU