

**Dr. Appointment**  
**Online Doctor Booking System**  
A Project Report Submitted  
in Partial Fulfilment of the Requirement  
for the Degree in Master of Computer Applications

Undertaken at  
MEDUSIND Solution

By

**Shahul Singh**

**University Roll No : 21STAMCA025**



Department Of Computer Science

St. Anthony's College

Shillong

June, 2023



6th Floor,  
The Great Oasis,  
D-13, Street 21, MIDC,  
Marol, Andheri (East),  
Mumbai - 400093.

O 800.407.0106  
O +91(22)6666.4700  
F +91(22)6666.4701  
info@medusind.com

Date: 08th February 2023

To: **Shahul Singh,**  
Ram Sundar Singh, -, -, -,  
Lalkor Lumheh, Pamlakrai,  
East Khasi Hills,  
Meghalaya – 793200

Dear **shahul,**

This has reference to your application and subsequent interview you had with us. We are pleased to offer you the position of **Project Trainee** for our **Shillong Office** at the below address. **Medusind Solutions, Shillong Technology park Umsawli, New Shillong, Meghalaya – 793012. Landmark – NIFT Campus.**

The internship period is for 6 months from the DOJ & your stipend for the internship period will be Rs. 15,000/- (**Rupees Fifteen Thousand only**) per month.

You are required to join the Organization for your internship on or before **08th Feb 2023**. On joining, please hand over copies of your age proof, qualification certificates, three passport-size photographs, cancelled cheque of your personal bank account, and a letter from your institute for enrolling for the internship. You are required to produce a letter from your Supervisor/Head of Department/Principal/ Institute, indicating your status in the Institution and "No Objection" for allowing you to undergo an Internship program for a period of six months.

On completion of the internship program, your performance will be reviewed by your Supervisor. If the performance is found to be satisfactory, and there are positions vacant for your roles, you will be considered for regular employment with the Company.

You will have to abide by the Company's code of conduct during your internship period.

Kindly sign the duplicate copy of this letter as a token of having received its original and acceptance of the same.

We warmly welcome you and hope that you make this period beneficial. If you are unable to join on the said date, the offer for the internship will stand null and void.

\*Please ensure to bring your Original Documents on the Date of Joining for the verification.

Yours sincerely,

**FOR MEDUSIND SOLUTIONS INDIA PRIVATE LIMITED**

-sd-

**Kranti Munje**

**Chief Human Resources Officer**

Signature Not Verified

Digitally Signed By:  
KRANTI PRASAD MUNJE  
2023.02.08T16:01:00  
ID: U74140MH2001PTC133168

[www.medusind.com](http://www.medusind.com)



Department of Computer Science  
St. Anthony's College, Shillong  
Affiliated to  
North Eastern Hill University, Shillong

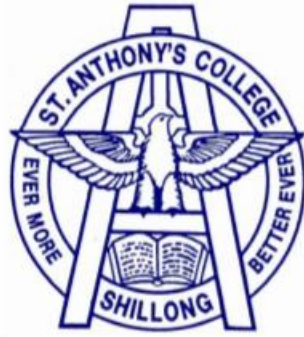
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## **CERTIFICATE**

This is to certify that the project report entitled “Dr. Appointment Management System” is an approved work done by Ms./ Mr. Name of Student (Roll No-21STAMCA025) in the partial fulfilment of the requirement for the award of the degree of Master of Computer Application under North Eastern Hill University, Shillong from St. Anthony's College, Shillong.

---

Dr. Anjan Das  
Director, MCA  
St. Anthony's College  
Shillong – 793001  
Meghalaya



Department of Computer Science  
St. Anthony's College, Shillong  
Affiliated to  
North Eastern Hill University, Shillong

---

## **CERTIFICATE**

This is to certify that the Project work titled, Dr. Appointment Management System bonafide work done by Mr Shahul Singh, North Eastern Hill University, 21SACMCA025, under my guidance during the sixth semester of the course.

---

Internal Guide

DR Medari Janai Tham

Project seminar was held on 13 JULY, 2023 at St. Anthony's College, Shillong

Date:

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External Examiner

## **ACKNOWLEDGEMENT**

I would like to thank our Director, Dr. Anjan Das, and my teachers for having permitted me to carry out this project.

I also want to extend my gratitude towards my project guide, DR Medari Janai Tham for his guidance, support, patience, confidence and belief that she had on me throughout the course of the project.

I would also like to thank the Medusind Solutions Pvt Ltd, Shillong for providing me with all the facilities and infrastructure, which I needed, for the completion of the project.

I would also like to express my gratitude towards my external guide, Mrs. Babita Nehete, project Manager, Medusind for assigning me the project and for guiding and supporting me throughout the project.

Finally, I would like to thank everyone who is involved in this project directly or indirectly and for their support, care and encouragement throughout the course of this project.

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# About the Project

Dr. Appointment System is a web based technology used to book an appointment in a hospital with a doctor.

It consists total 3 modules, i.e. Admin, Doctor, Patient.

- **ADMIN:** Admin will manage doctor and their appointment and will act as an intermediary between doctor and patient.
- **DOCTOR:** Main role of doctor will be to approved to reject booking appointment as per his/her time.
- **PATIENT:** Patient will be able book an appointment with a particular doctor without standing in a queue and will pay the payment online once appointment has been approved.

Main features are as following:

- ❖ Online booking appointment
- ❖ Appointment scheduling
- ❖ E-report, e-prescription
- ❖ Online payment
- ❖ Specific and specialist doctor appointment

# **CLIENT PROFILE**

**Internship Organisation:** Medusind Solution

**Address:** Shillong Technology Park, Umsawli, Shillong – 793012

**No of Staff:** 350 Shillong

**Organisation Structure:** Admin, Location HR, Software-IT, Dental & Medicare.



**Client Organisation:** Medusind Solution

**Client Address:** Shillong Technology Park, Umsawli, Shillong – 793012

**Number of Staff:** 3764(India & US Location)

**Administration:** Admin, Location HR, Software-IT, Dental & Medicare.



# **Synopsis**

**TITLE:** Dr. Appointment System

**Project Developer:**

- KONSAM DEVKANTA SINGH,  
MCA 4<sup>th</sup> SEMESTER (P21mca017)
  
- SHAHUL SINGH  
MCA 4<sup>th</sup> SEMESTER (P21MCA025)

**Proposed Development Environment:**

- Programming Language: C#, HTML, CSS, JAVASCRIPT.
- FRAMEWORK: .NET

**DESCRIPTION:**

Dr.Appointment is a web page through which patient can book an online appointment with a doctor. Once the doctor approved the appointment then patient can proceed with an online payment and confirm his appointment. Dr. Apoinntment will help in generating Prescription online and will be shared with the patient. Patient can also keep track of Height, weight, BMI, BP etc.

# **System Study**

## **Existing System**

- Carry old report and documents every time.
- Patient have to visit another day for the report
- Manual system accept payment only by cash
- Manual Doctor Appointment system
- Wait in queue to meet doctor and discuss your problem

## **Proposed System**

- Appointment Scheduling
- Doctor Availability
- Patient Management
- Doctor Management
- Appointment Management
- Online Report and prescription
- Specific and Specialist Doctor Appointment
- Reduce the waiting time of patients
- Availability and Booked slot are shown in effective graphical user interface
- Reduce Manual Paperwork's

# User Requirements

## Software Requirements

- Running Environment:  
Windows, Mac, Linux & Android
- Developing Environment  
ASP.NET. (Framework)  
HTML, CSS, JAVASCRIPT, C#, BOOTSTRAP5  
MICROSOFT SQL ENVIRONMENT (DATABASE)
- Web Server:  
IIS (Internet Information Services)

## Hardware Requirements

<i>HARDWARE</i>	<i>Minimum</i>	<i>Recommended</i>
RAM	2 GB	4 GB
ROM	128 GB	500 GB
Windows	10 OS or Above	10 OS or Above

# **Feasibility Study**

## ➤ Economic Feasibility

We have estimated that the benefits the organization is going to receive from the proposed system will surely overcome the initial costs and the later on running cost for system.

## ➤ Technical Feasibility

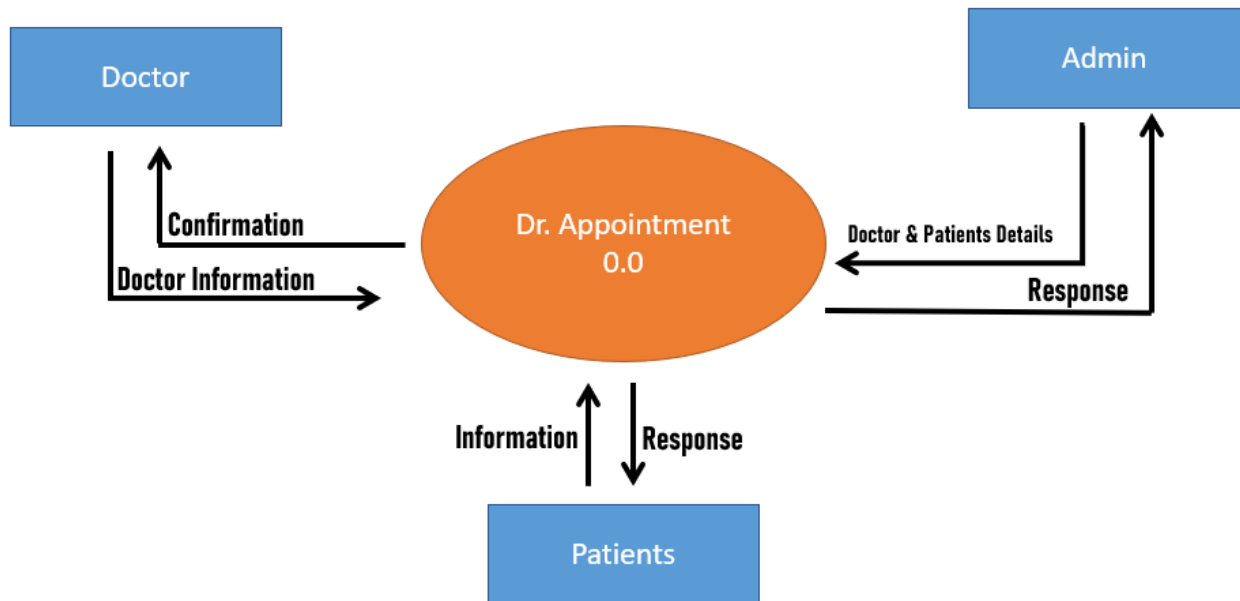
We studied complete functionality to be provided in the system, as described in the System Requirement Specification (SRS).

## ➤ Operational Feasibility

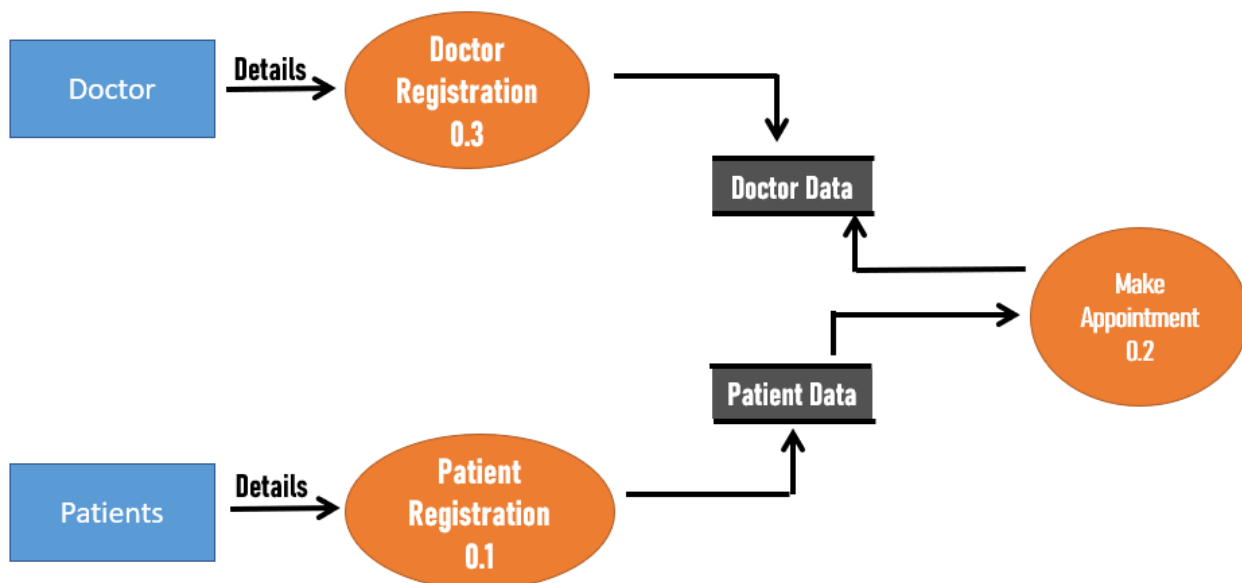
## ➤ Time Feasibility

# DATA FLOW DIAGRAM

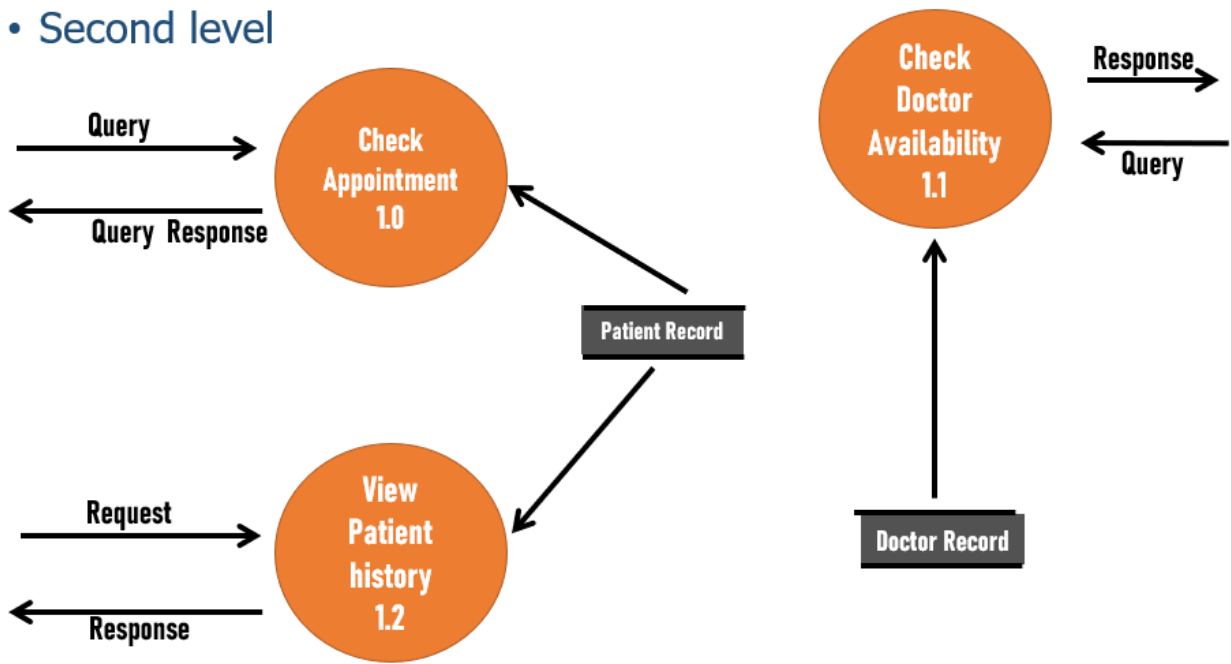
- Level 0 (Context Level Diagram)



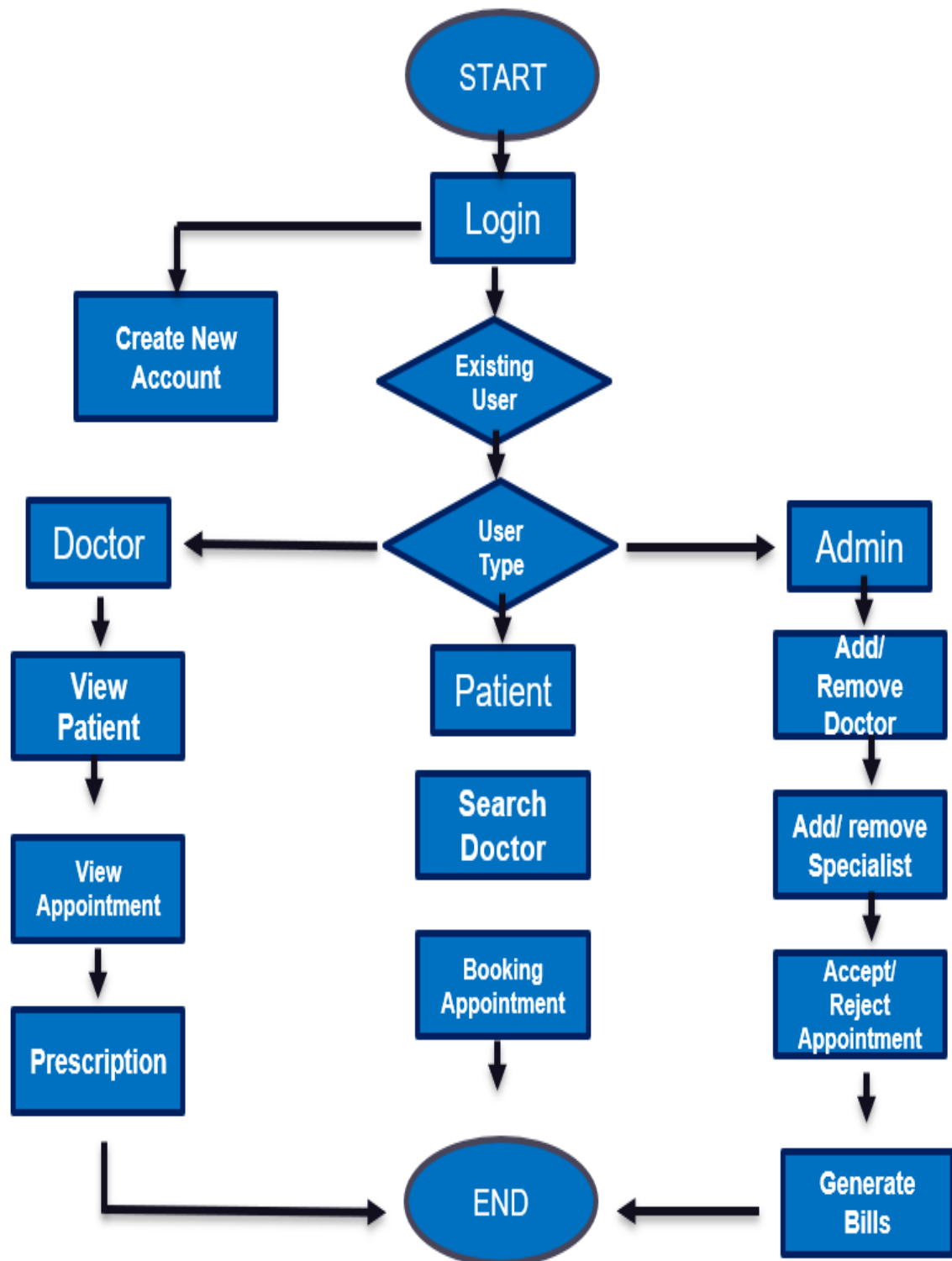
- First level:



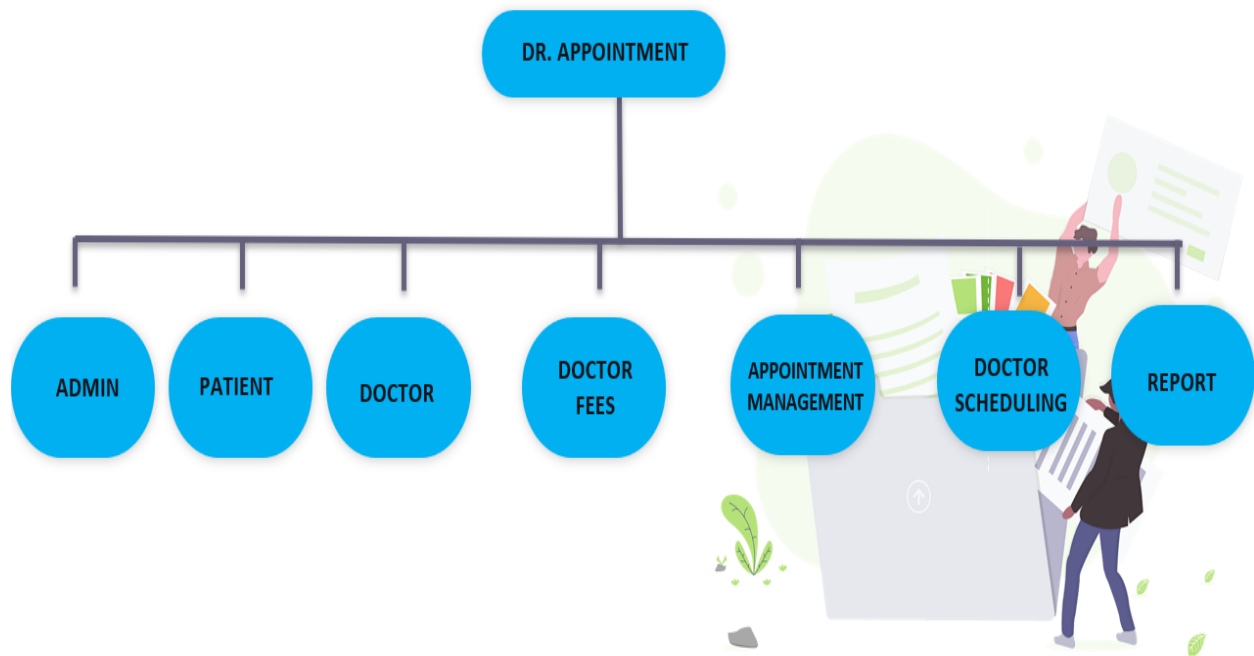
- Second level



## Flow Chart

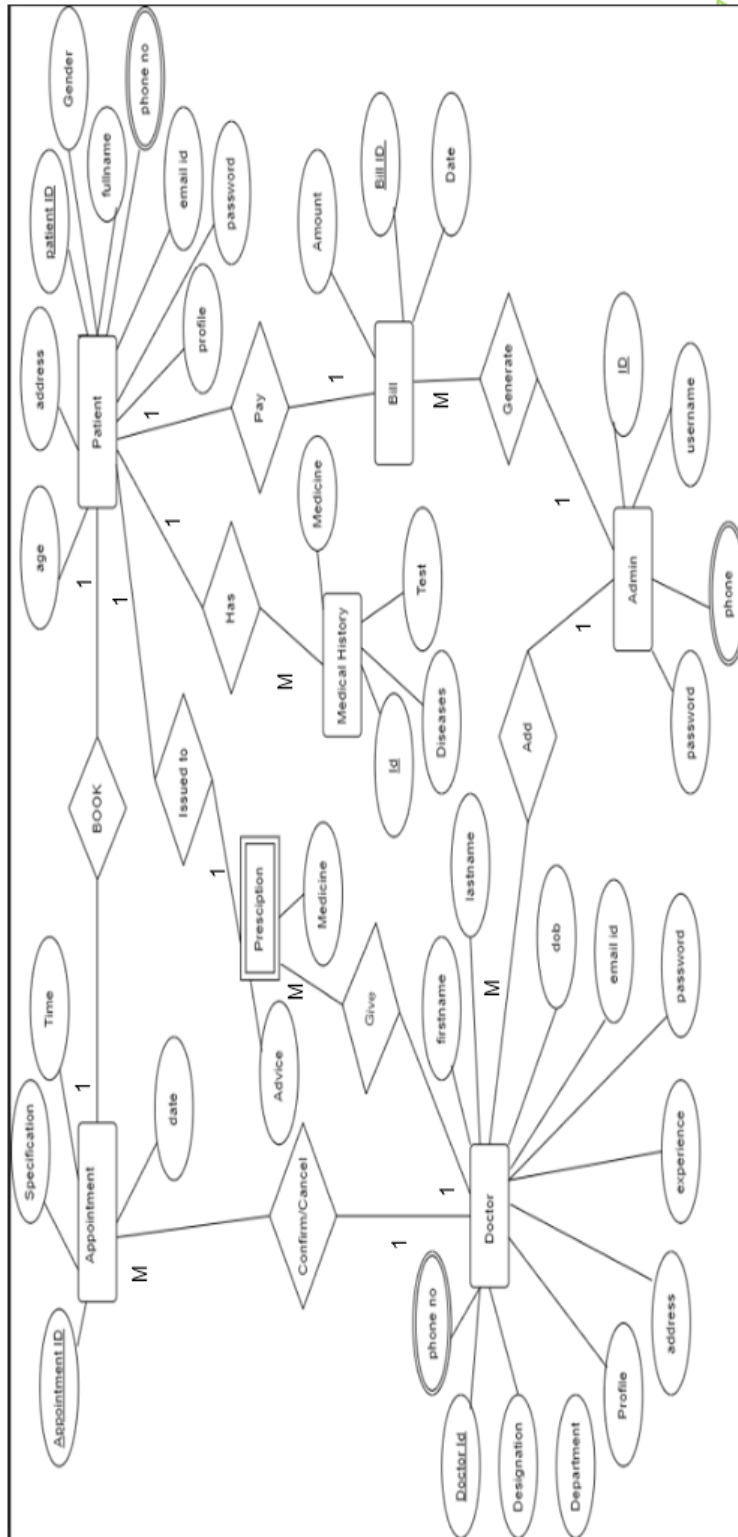


# Module Design

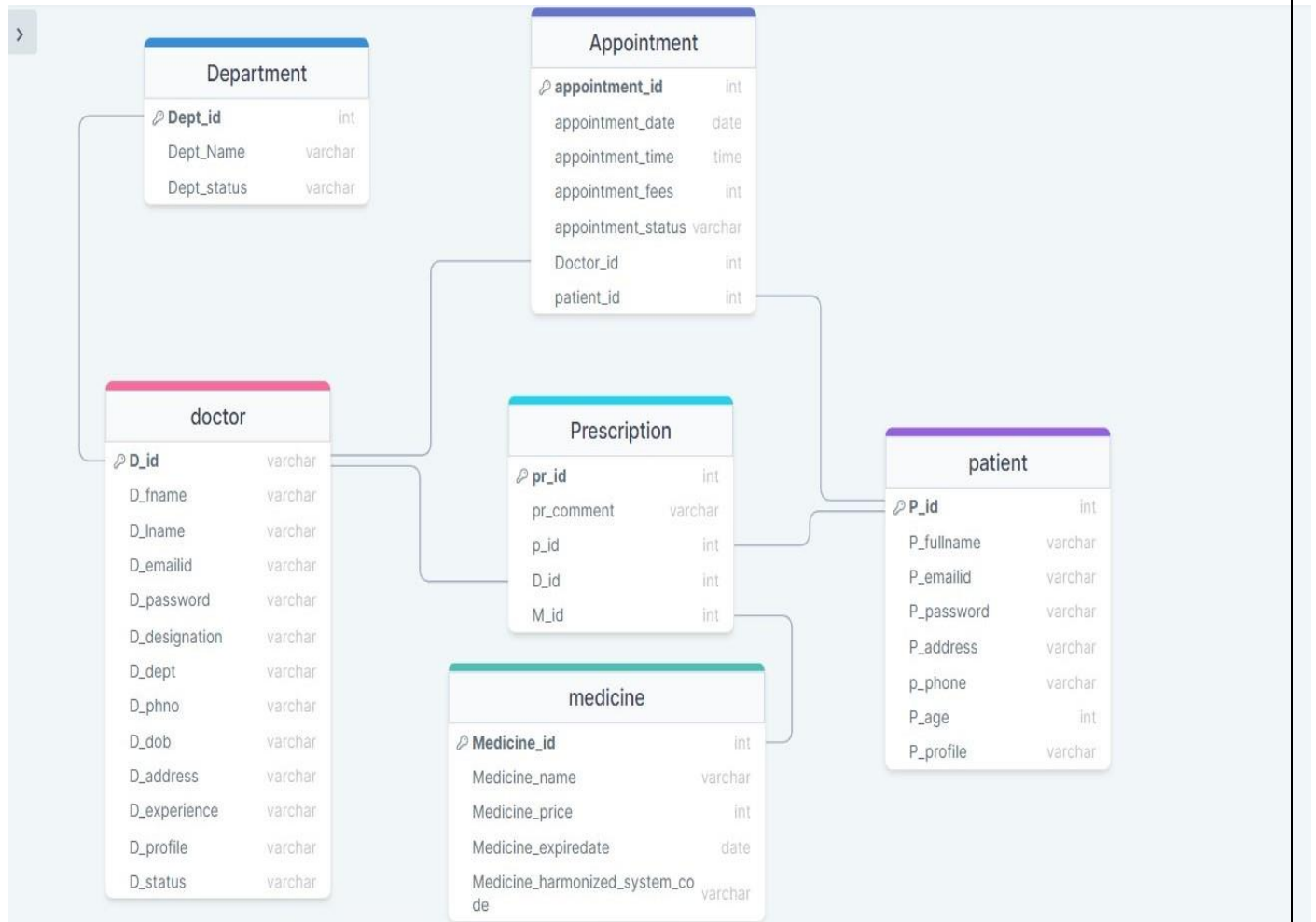




## Entity Relationship Diagram



# Database Design



# Data Dictionary

## Patients Table:

NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
Id	INT,IDENTITY	PRIMARY KEY	Primary Key of patient table
fullname	VARCHAR[30]	NOT NULL	Complete Name of patient
emailid	VARCHAR[30]	NOT NULL	Email-id of patient
password	VARCHAR[10]	NOT NULL	Password of patient
address	VARCHAR[30]	NOT NULL	Address of patient
Phone	INT[10]	NOT NULL	Mobile no of patient
Age	INT[10]	NOT NULL	Patient's age
Profile	VARCHAR[30]	NOT NULL	Profile Picture
gender	CHAR[1]	NOT NULL	Patient's gender

### **DOCTOR TABLE:**

NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
Id	INT,IDENTITY	PRIMARY KEY	Primary key of doctor table
Fname	VARCHAR[30]	NOT NULL	First Name of doctor
Lname	VARCHAR[30]	NOT NULL	Last Name of doctor
Emailed	VARCHAR[30]	NOT NULL	Email-id of doctor
password	VARCHAR[15]	NOT NULL	Password of doctor
designation	VARCHAR[20]	NOT NULL	Designation of doctor
Dept	VARCHAR[20]	NOT NULL	Department of doctor
Phno	VARCHAR[10]	NOT NULL	Mobile no of doctor
Dob	DATE	NOT NULL	Doctor's date of birth
address	VARCHAR[20]	NOT NULL	Doctor's location
experience	VARCHAR[200]	NOT NULL	Experience of doctor
Profile	VARCHAR[20]	NOT NULL	Doctor profile picture
Gender	CHAR[1]	NOT NULL	Doctor Gender

### **Appointment Table:**

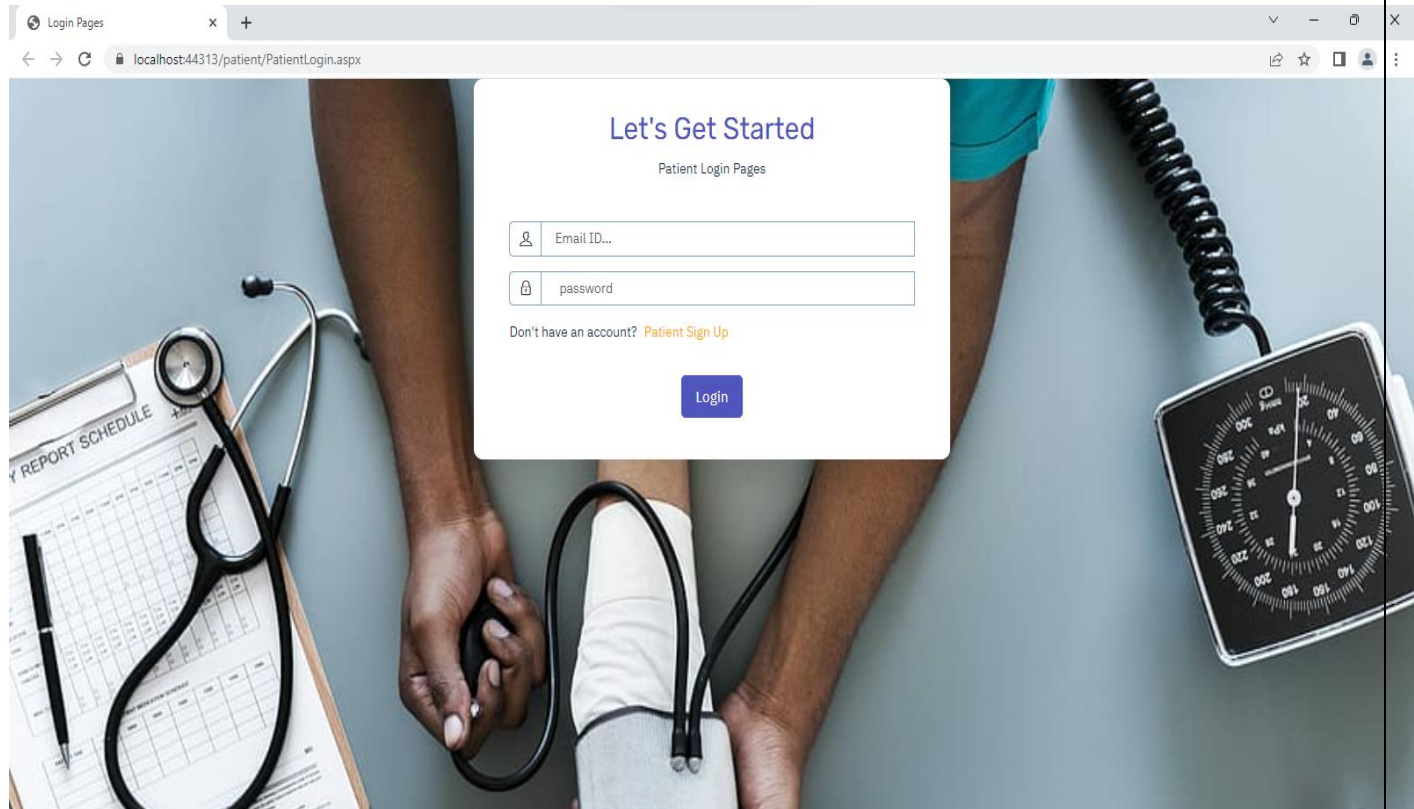
NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
appointment_id	INT,IDENTITY	PRIMARY KEY	Primary key of the Appointment table
appointment_date	DATE	NOT NULL	Appointment Date
appointment_time	TIME	NOT NULL	Appointment Time
appointment_fees	INT[30]	NOT NULL	Appointment Fees
appointment_status	VARCHAR[30]	NOT NULL	Appointment status
Doctor ID	INT[10]	FOREIGN KEY,NULL, References Doctor Table	Doctor ID
Patient ID	INT[10]	FOREIGN KEY,NULL, References Patient Table	Patient ID which book an appointment

## **Medicine:**

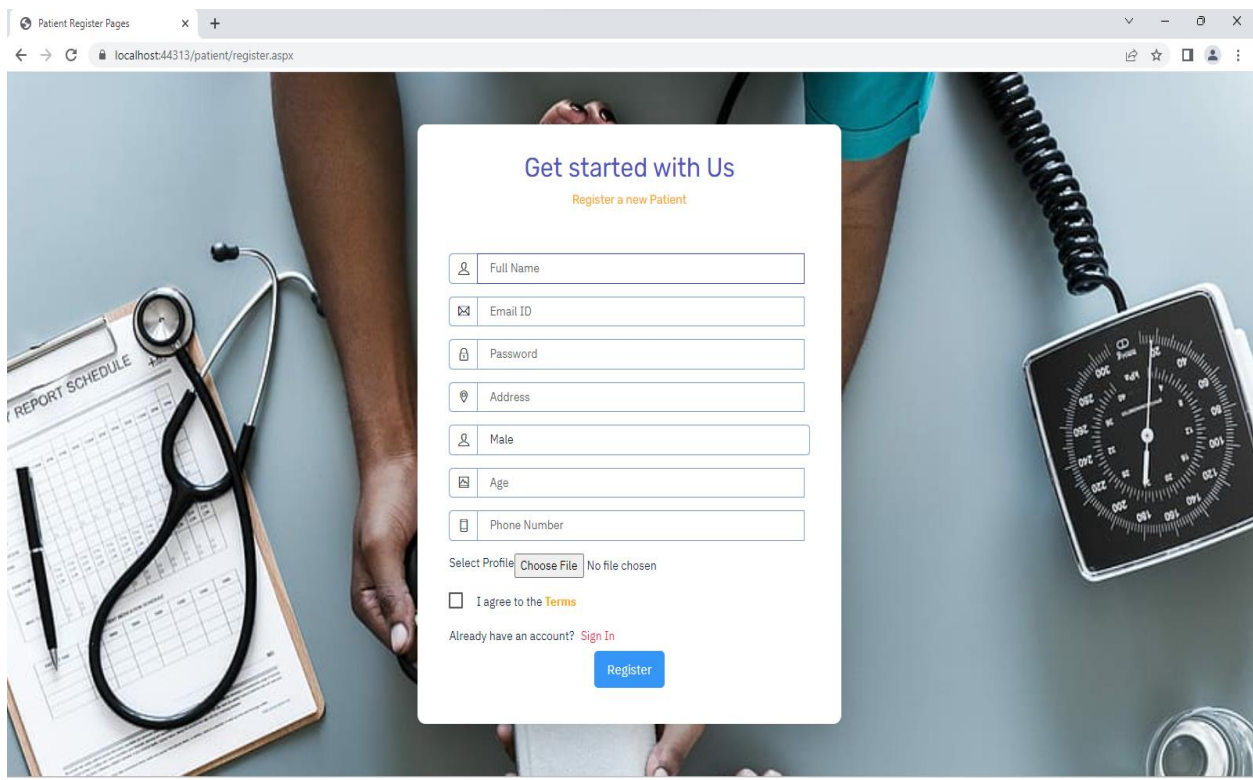
NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
appointment_id	INT,IDENTITY	PRIMARY KEY	Primary key of the Appointment table
appointment_date	DATE	NOT NULL	Appointment Date
appointment_time	TIME	NOT NULL	Appointment Time
appointment_fees	INT[30]	NOT NULL	Appointment Fees
appointment_status	VARCHAR[30]	NOT NULL	Appointment status
Doctor ID	INT[10]	FOREIGN KEY,NULL, References Doctor Table	Doctor ID
Patient ID	INT[10]	FOREIGN KEY,NULL, References Patient Table	Patient ID which book an appointment

# Input/output Screen

## PATIENTS LOGIN:



## PATIENTS REGISTRATION:



The screenshot shows a web browser window with the address bar displaying 'localhost:44313/patient/register.aspx'. The page features a medical-themed background with a stethoscope, a clipboard labeled 'REPORT SCHEDULE', and a blood pressure monitor. A white registration form is centered on the page.

**Get started with Us**  
Register a new Patient

Full Name  
Email ID  
Password  
Address  
Male  
Age  
Phone Number

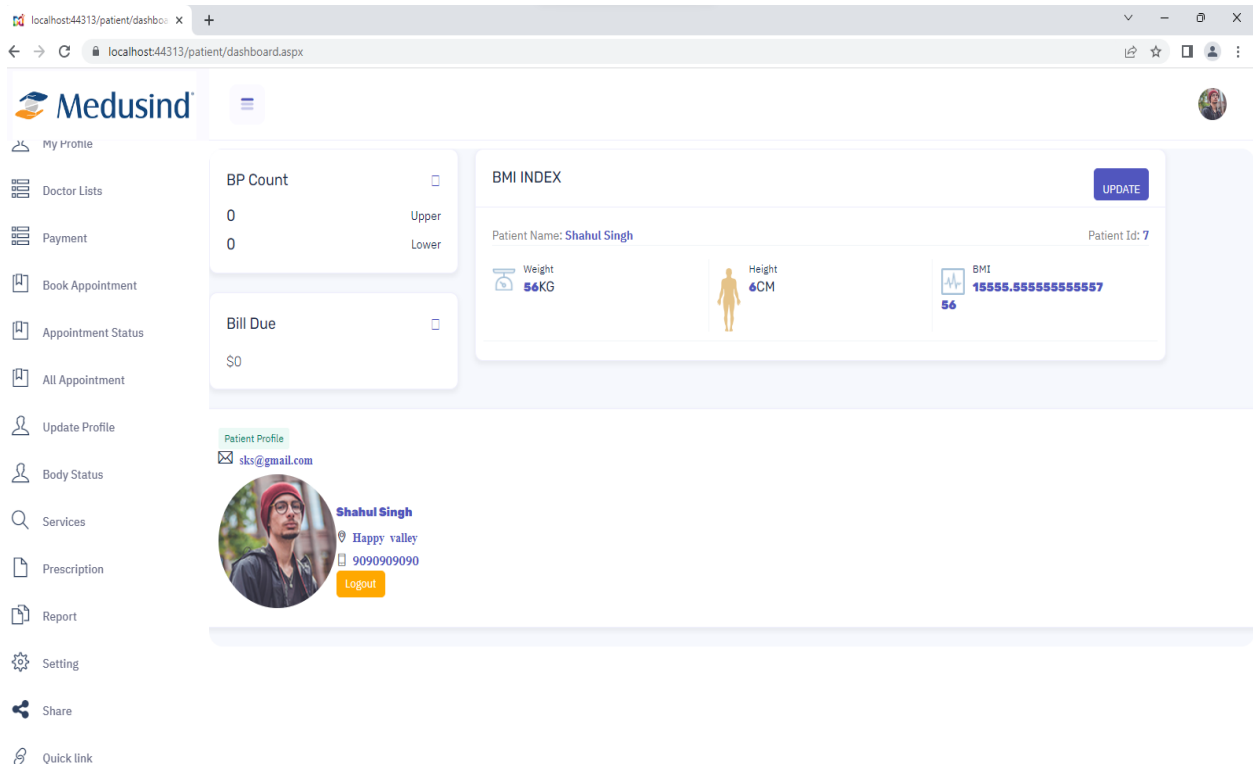
Select Profile  No file chosen

☐ I agree to the [Terms](#)

Already have an account? [Sign In](#)



# PATIENTS DASHBOARD:



The screenshot displays the Medusind Patients Dashboard in a web browser. The browser's address bar shows the URL `localhost:44313/patient/dashboard.aspx`. The dashboard features a sidebar on the left with a list of navigation items: My Profile, Doctor Lists, Payment, Book Appointment, Appointment Status, All Appointment, Update Profile, Body Status, Services, Prescription, Report, Setting, Share, and Quick link. The main content area is divided into several sections. At the top, there's a 'BP Count' section with two input fields for 'Upper' and 'Lower' values, both currently set to '0'. Below this is a 'Bill Due' section showing a value of '\$0'. To the right of these is a 'BMI INDEX' section with an 'UPDATE' button. This section displays patient information: 'Patient Name: Shahul Singh' and 'Patient Id: 7'. It also shows three metrics: 'Weight 54KG', 'Height 6CM', and 'BMI 15555.555555555557' with a '56' indicator. At the bottom of the dashboard, there's a 'Patient Profile' section featuring a profile picture of a man with a red beanie, the name 'Shahul Singh', the location 'Happy valley', the phone number '9090909090', and a 'Logout' button. The email address 'skv@gmail.com' is also visible.

localhost:44313/patient/dashboard.aspx

Medusind

My Profile

Doctor Lists

Payment

Book Appointment

Appointment Status

All Appointment

Update Profile

Body Status

Services

Prescription

Report

Setting

Share

Quick link

BP Count

0

Upper

0

Lower

Bill Due

\$0

BMI INDEX

UPDATE

Patient Name: Shahul Singh

Patient Id: 7

Weight 54KG

Height 6CM

BMI 15555.555555555557

56

Patient Profile

skv@gmail.com

Shahul Singh

Happy valley

9090909090

Logout

# DOCTOR LIST:

localhost:44313/patient/doctorlist.aspx





Medusind

Appointments

Doctor

Reports

Doctors

			
First Name: Dr Binesh, PHD DEPT: GENERAL MEDICINE Phn no: 9089765433	First Name: Dr Sekhar, Doctor DEPT: CARDIOLOGY Phn no: 9089765548	First Name: Dr Kumar, Dr DEPT: CARDIOLOGY Phn no: 9089708877	First Name: Dr Mark, Dr DEPT: CARDIOLOGY Phn no: 9089608977

# BOOK AN APPOINTMENT:

The screenshot shows a web browser window with the URL `localhost:44313/patient/book_appointment.aspx`. The page features the Medusind logo and a user profile for `sks@gmail.com` (Shahul Singh). A sidebar on the left contains navigation links: My Profile, Doctor Lists, Payment, Book Appointment, Appointment Status, All Appointment, Update Profile, Body Status, Services, Prescription, Report, Setting, Share, and Quick link. The main content area is titled "Book Your Appointment" and contains the following form fields:

- Choose Department:** A dropdown menu with the placeholder text "--Select Departments--".
- Doctors:** A dropdown menu with the placeholder text "-- Select Doctors --".
- Timing:** A dropdown menu with the placeholder text "-- Select Timing--".
- Available Days:** A text input field.
- Choose Date:** A date picker with the placeholder text "mm-dd-yyyy".
- Fees:** A text input field.
- Your Problems / Symtoms:** A text input field.

At the bottom of the form, there are two buttons: "Cancel" (orange) and "BOOK" (blue).

# BOOK AN APPOINTMENT WITH DATA:

The screenshot shows a web browser window with the URL `localhost:44313/patient/book_appoint.aspx`. The page features a sidebar menu on the left with the Medusind logo and various navigation options: My Profile, Doctor Lists, Payment, Book Appointment, Appointment Status, All Appointment, Update Profile, Body Status, Services, Prescription, Report, Setting, Share, and Quick link. The main content area is titled "Book Your Appointment" and contains several input fields: "Choose Department" (CARDIOLOGY), "Doctors" (Dr Sekhar), "Timing" (02 to 03 PM), "Availabe Days" (Mon to Thur), "Choose Date" (06-28-2023), and "Fees" (900). There is also a text input field for "Your Problems / Syntoms". At the bottom of the form are two buttons: "Cancel" and "BOOK". The top right corner of the page shows the user's email (`sks@gmail.com`), name (Shahut Singh), and a "Logout" link.

localhost:44313/patient/book\_ap x +

localhost:44313/patient/book\_appoint.aspx

Medusind

My Profile

Doctor Lists

Payment

Book Appointment

Appointment Status

All Appointment

Update Profile

Body Status

Services

Prescription

Report

Setting

Share

Quick link

sks@gmail.com  
Shahut Singh Logout

Book Your Appointment

Choose Department  
CARDIOLOGY

Doctors  
Dr Sekhar

Timing  
02 to 03 PM

Availabe Days  
Mon to Thur

Choose Date  
06-28-2023

Fees  
900

Your Problems / Syntoms

Cancel BOOK

# TRACK AN APPOINTMENT STATUS:

The screenshot displays the Medusind web application interface. The browser address bar shows the URL `localhost:44313/patient/appointment.aspx`. The application features a sidebar with navigation links: Doctor-Lists, Payment, Book.Appointment, Appointment.Status, All.Appointment, Update.Profile, Body.Status, Services, Prescription, Report, Setting, Share, and Profile Page. The main content area is titled "Your Appointment Info" and contains a table with the following data:

Appointment ID	Appointment Date	Appointment Time	Doctor Name	Consultation Fees	Payment Status
23	06-26-2023 00:00:00	12 to 01 PM	Dr Binesh	450	paid

Below the table, there is a section titled "Trace your Appointment" with a green header. It includes a text input field containing "23" and a red "Check Status" button. Underneath, a progress bar shows the stages of the appointment process: Booked, Approved, Ongoing, Treatment, and Completed. The "Approved" stage is currently active, indicated by a green circle with the number 2.

## **Future Enhancements**

Some additional feature's that can be increment into the web page in the future are as follows:

- Buying online medicine prescribed by doctor.
- Medicine stock management by admin.
- Leave management system from doctor modules.
- Giving Laboratory/ x-ray results from admin modules.

## **Conclusion**

Our project is only a humble venture to satisfy the needs to manage their project work. Several user friendly coding have also adopted. The system itself also provides a quick view of their appointment at the Home page. These functions could indirectly help to reduce the number of missed medical appointments and patient's no-show up for their appointment. However, the display of bio-data such as X-rays and laboratory results are not included in the system due to technical constrain. The system will not be able to diagnose or prescribe drug for usage. The system is mainly designed to facilitate appointment booking between the patient and the health personnel. In compensation, additional modules such as Announcement, Medical case record and block/unblock schedule will further enhance the usability and functionality of the system and allow a flexible management of patient's appointment. The system delegates some administrative work to the patients by allowing them to manage their own appointment and personal profiles. Time will not be wasted on converting paper-based appointment record into electronic-based. The system further helps to reduces healthcare personnel workload by allowing them to generate medical

reports easily. They could now maximize their competence and allocate more time to maximize service quality.

## **Bibliography**

- <https://slidesgo.com/faqs> and <https://slidesgo.com/slidesgo-school>
- [https://www.youtube.com/watch?v=HTJc4wj\\_dyk](https://www.youtube.com/watch?v=HTJc4wj_dyk)
- <https://www.medusind.com/>
- <https://www.youtube.com/watch?v=WSRcpqAraxo>
- <https://www.c-sharpcorner.com/blogs/registration-form-in-asp-net>
- [https://www.academia.edu/43270754/FEASIBILITY\\_ANALYSIS\\_REPORT\\_Online\\_patient\\_treatment\\_system](https://www.academia.edu/43270754/FEASIBILITY_ANALYSIS_REPORT_Online_patient_treatment_system)
- <https://www.studocu.com/in/document/gopal-narayan-singh-university/management/project-ppt/25056050>