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B A N G A L O R E • I N D I A

# **SEVAM- HEALTH LAB MANAGEMENT SYSTEM**

by

Adith AV (2147206)

Yash (2147236)

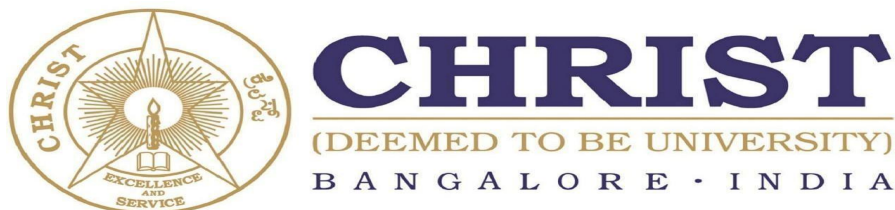
J Maglin Monika(2147252)

Under the guidance of

**Dr. Arul Kumar**

A Project report submitted in partial fulfillment of the requirements for  
the award of degree of Master of Computer Applications of CHRIST  
(Deemed to be University)

MAY - 2022



## CERTIFICATE

*This is to certify that the report titled **SEVAM HEALTH LAB MANAGEMENT** is a bonafide record of work done by **Adith AV (2147206), Yash (2147236) and J Maglin Monika (2147252)** of **CHRIST (Deemed to be University)**, Bengaluru, in partial fulfillment of the requirements of III Trimester MCA during the year 2022.*

**Head of the Department**

Valued-by:

**Faculty In charge**

Names : Dr. Sibin  
Dr. Rohini  
Dr. Arul  
Kumar

Register Number(s) : 2147206,  
2147236,  
2147252

Examination Center : CHRIST (Deemed  
to be University)

Date : 22 May 2022

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I would like to express my special thanks to our mentor Mr Arul Kumar for the time and efforts that he provided throughout the trimester. Your useful advice and suggestions were really helpful to us during the project's completion. In this aspect, I am eternally grateful to you.

I would like to acknowledge that this project was completed entirely by us and not by someone else.

Signature

Adith AV (2147206)

Yash (2147236)

J Maglin Monika (2147252)

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# INTRODUCTION

## Overview:

**Project Name:** Sevam Health Lab Management System

**Document Title:** Software Requirement Specification

**Document No.:** 1

**Document Revision Number:** 1

## Scope:

This document gives the functional as well as non-functional requirements of Sevam Health Lab Management System.

## Audience:

- Project Managers
- Testing team members
- Development team members
- Customers

## Detail about the software system:

This Project is about Health Lab Management System. Initially, there were no online Health Care Lab management systems accessible. When COVID-19 went live, the majority of existing labs had to convert to online, and all new labs had to go online as well. Because there are numerous flaws in current systems, we decided to address many of them through this project.

SEVAM is a user-friendly online lab diagnostic platform. The system provides a complete solution from sample collection to final report update on the medical sample of users where users can book lab tests and can get their reports online . It includes agents conforming to booking with real-time updates on the sample status to the user. This system also includes an Admin side where admin can manage the processes happening from sample collection to report update.

## Existing System and its disadvantage:

Some of the similar existing systems are as follows:

- Lalpathlabs is a medical lab startup which provides real-time booking of agents for sample collection with health packages. It also provides pharmaceutical facilities and sells medicines, suggests doctors.
- Healthians provide pathological laboratory solutions. It provides a variety of facilities including doctor suggestion, sample collection, report generation etc.

- Apollo 247 provides a complete healthcare solution from sample collection, to booking appointments of doctors, online consultancy, report generation and provides home delivery of medicines.
- 1mg is an online medical diagnostic system which provides facilities from online test booking to free doctors' consultancy and also sells medicines with free home delivery.
- Pharmeasy provides medical tests with free consultation of doctors and also provides a full-body-checkup package with certified labs and assured safety.

The major disadvantages of this software is as follows:

- No real-time location sharing of patients for ease of agents to collect samples.
- No Chat bot for solving patient queries.
- No reminders on bookings for patients and agents.
- No feedback on the report generated.

## **Proposed System and its advantage:**

An online diagnostic lab reporting system that displays a variety of diagnoses while working. Patients can register on the site and log in with their email and password. After successful registration patients can now examine a variety of tests performed by the lab, as well as their fees. Users can book whatever test they require, and the system will compute prices and allow them to pay online once the booking is complete. The user is allowed to select the agent, time and date according to their convenience. The respective agents selected by the user are sent to their location to collect the samples for testing based on the time selected by the user and these samples are submitted to the laboratory. The lab generates a report for the sample. The patient or user receives an email notification of the test result after successful testing. This system also allows the administrator to upload a copy of the report and have it automatically emailed to the respective patient.

The advantages of the proposed system are as follows:

- This Real-time update on stage completion of samples.
- Setting up reminders for the booked test.
- Suggests doctors/clinics according to the report result.

# **SOFTWARE REQUIREMENTS SPECIFICATION**

## **REQUIREMENT SPECIFICATION:**

### **USERS :**

Admin  
Patients  
Agents

### **MODULES :**

Registers/Sign-in:

Users can register with their email, username and password and login using their username and password. Patients can register and login whereas admin and agents will be provided with username and password to login.

Manage tests :

Admin can add tests,delete tests,update the prices of each test and add discounts if any .

Bookings:

Patients can add a booking , cancel the booking , update the timing of booking, check the cart and pay for it.

Manage bookings:

Agents have the provision to check for new bookings done . The agent can cancel , confirm booking based on his availability.

Booking status:

Check the status of each booking . If the sample is submitted by an agent the admin generates the report for the same.

Notifications / Reminders :

The patient will get status about the reports in their dashboard after submitting the samples. Agents will get a reminder about the bookings made by the patient.

Check their reports:

The patient can check their reports and reports of previous tests.

## **ANALYSIS MODELING:**

### **Use Case Diagrams:**



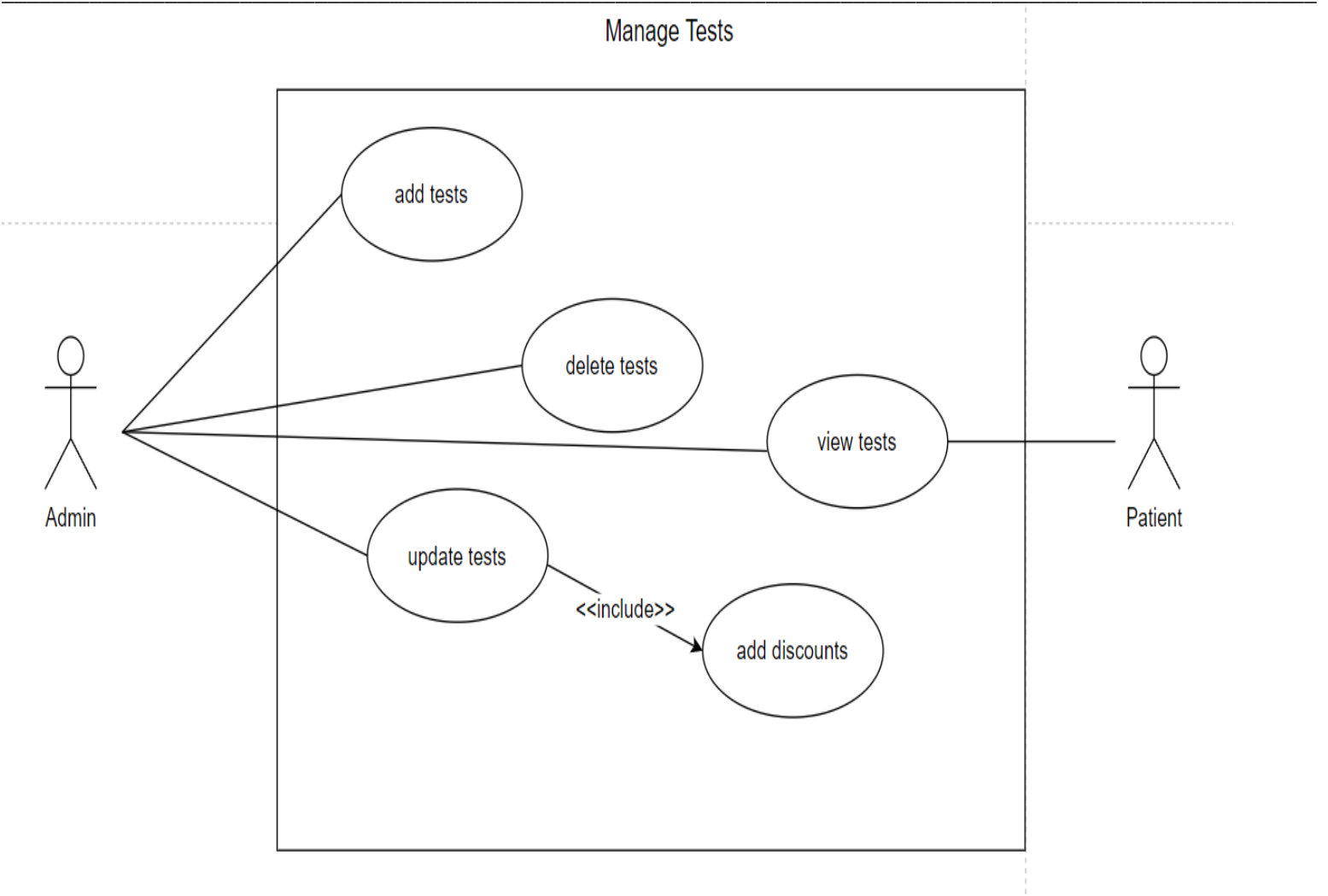


Fig 1: Use case diagram – Admin Manages Test

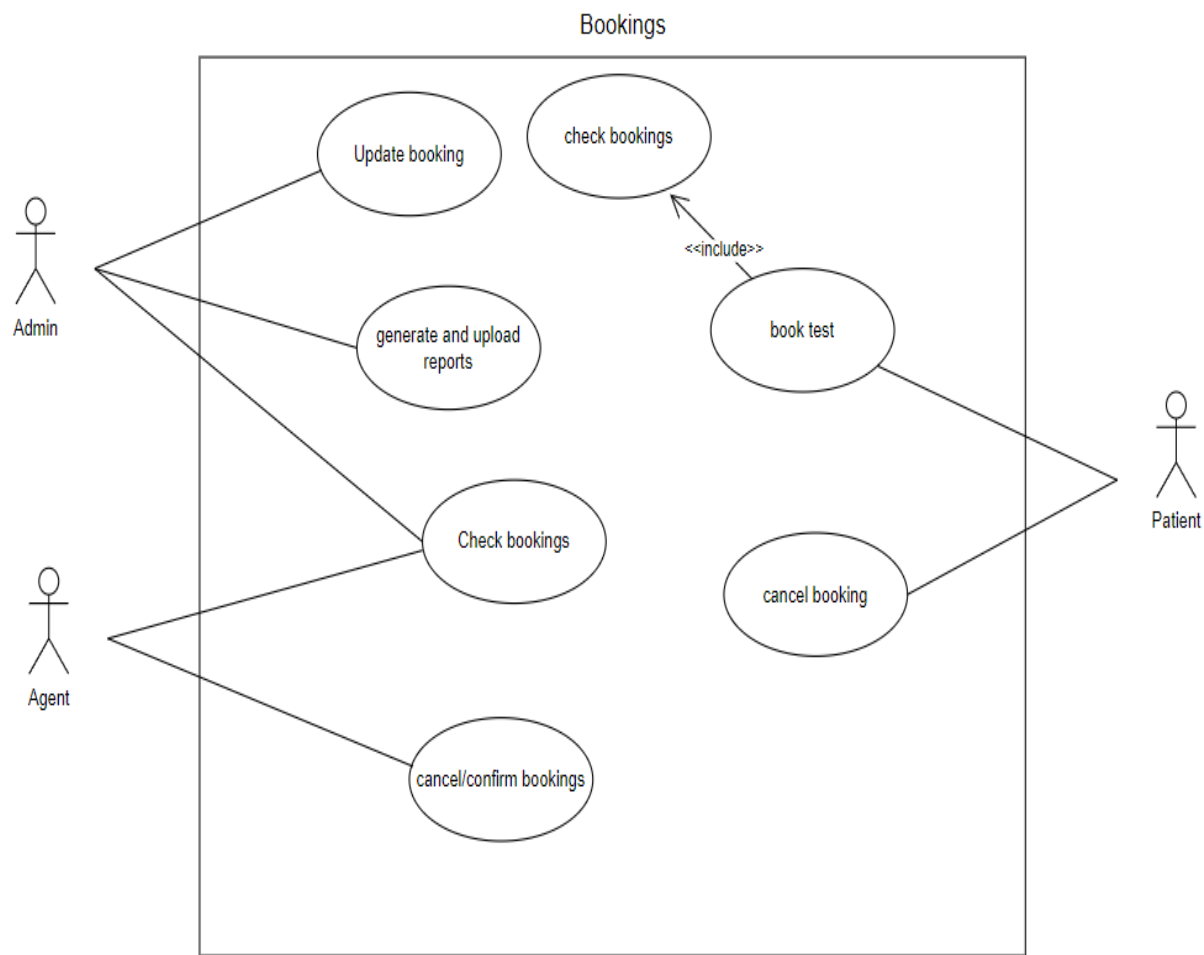


Fig 2: Use case diagram of Patient Booking Test .

**Architectural Diagram:**

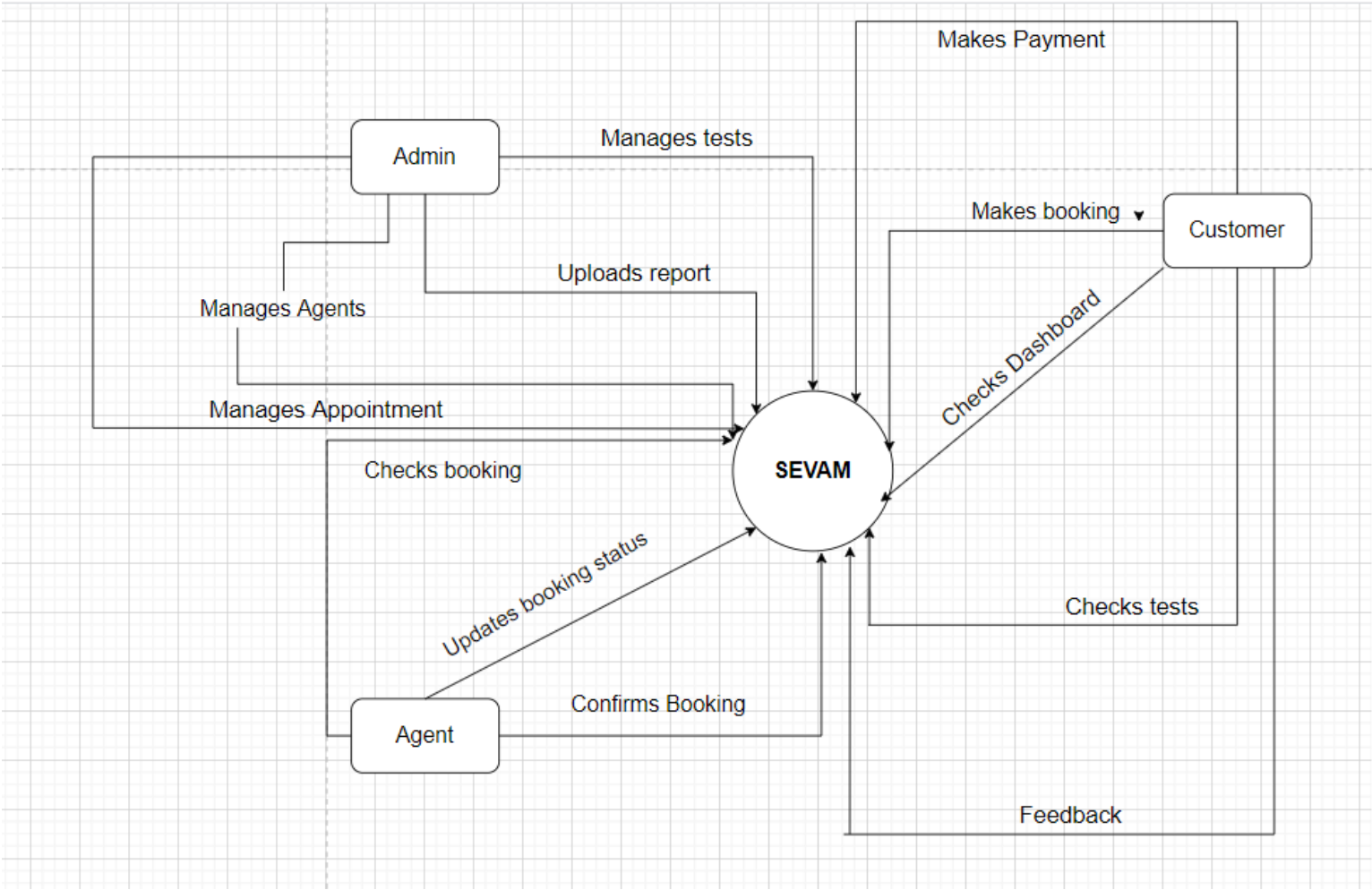


Fig3: Architectural Diagram

Entity Relationship Diagram

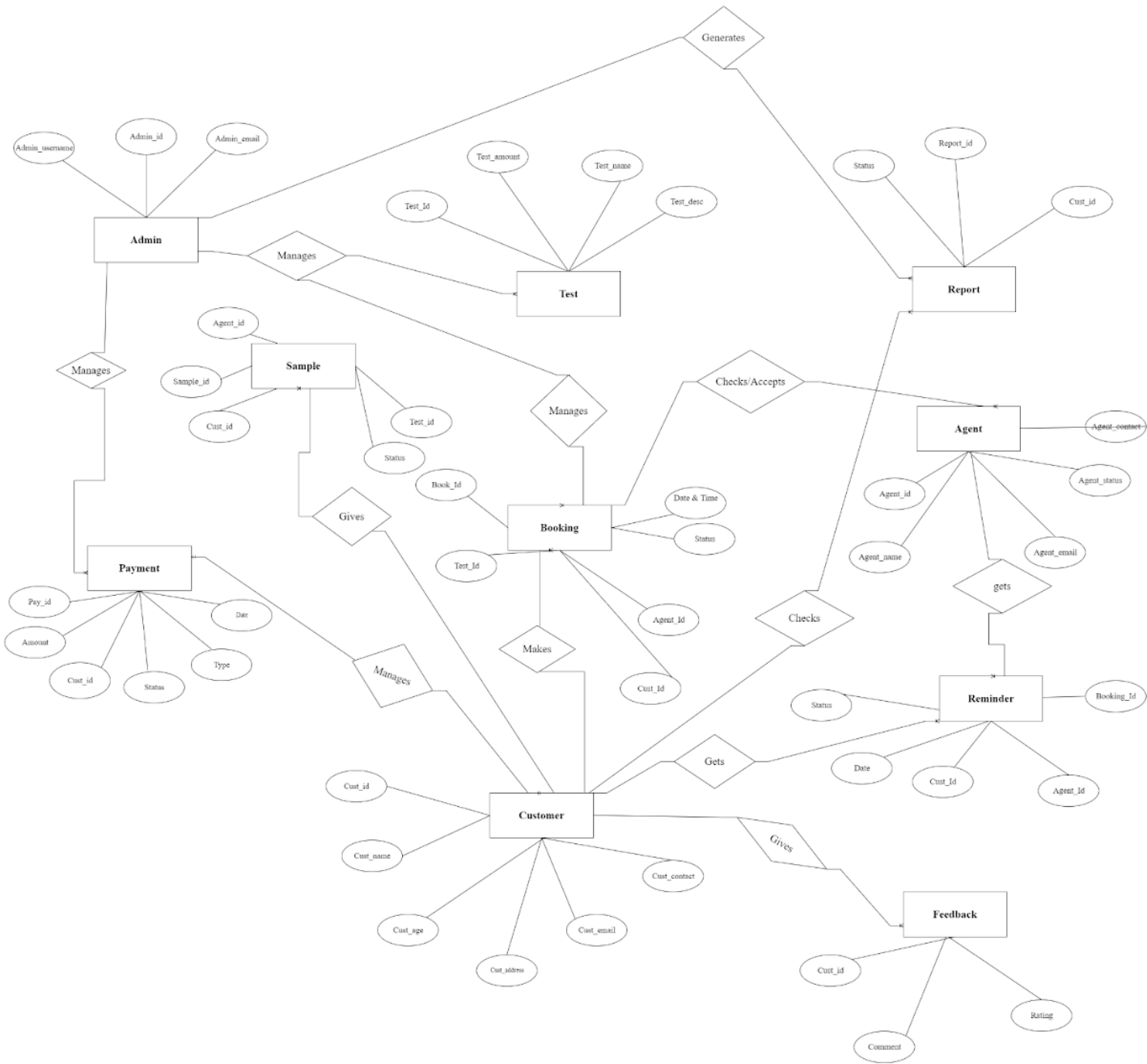
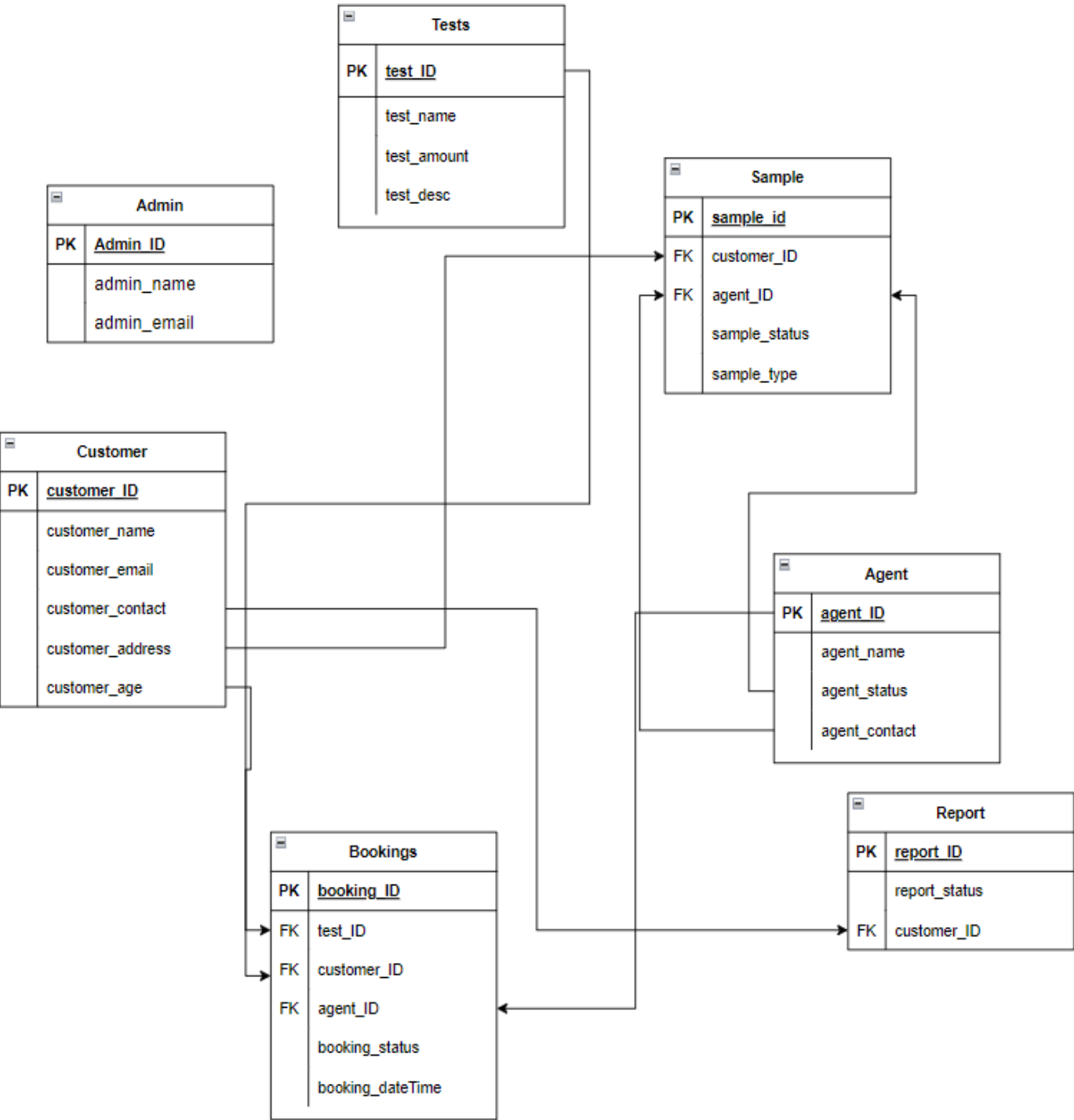


Fig4: Entity Relationship Diagram

Relationship Schema:



**Table Description:**

**ADMINREG**

Field_name	Data Type	Constraint	Description
Admin_id	integer(4)	Primary Key	Unique id for admin
Admin_username	varchar(20)	Not Null	Username of the admin
Admin_email	varchar(20)	UNIQUE	Email of admin

**USEREG**

Field_name	Data_type	Constraint	Description
Cust_id	integer(4)	Primary Key	Unique ID for customer
Cust_name	varchar(20)	Not Null	Name of the customer
Cust_age	integer(2)	Not Null	Age of the customer
Cust_address	varchar(20)	Not Null	Address of the customer
Cust_email	varchar(20)	UNIQUE	Email of customer
Cust_contact	integer(15)	UNIQUE	Contact number of customer

**AGENTREG**

Field_name	Data_type	Constraint	Description
Agent_id	integer(4)	Primary Key	Unique ID for agent
Agent_name	varchar(20)	Not Null	Name of the agent
Agent_email	varchar(20)	Not Null	Email of the agent
Agent_contact	integer(15)	UNIQUE	Contact number of agent

**APPOINTMENT**

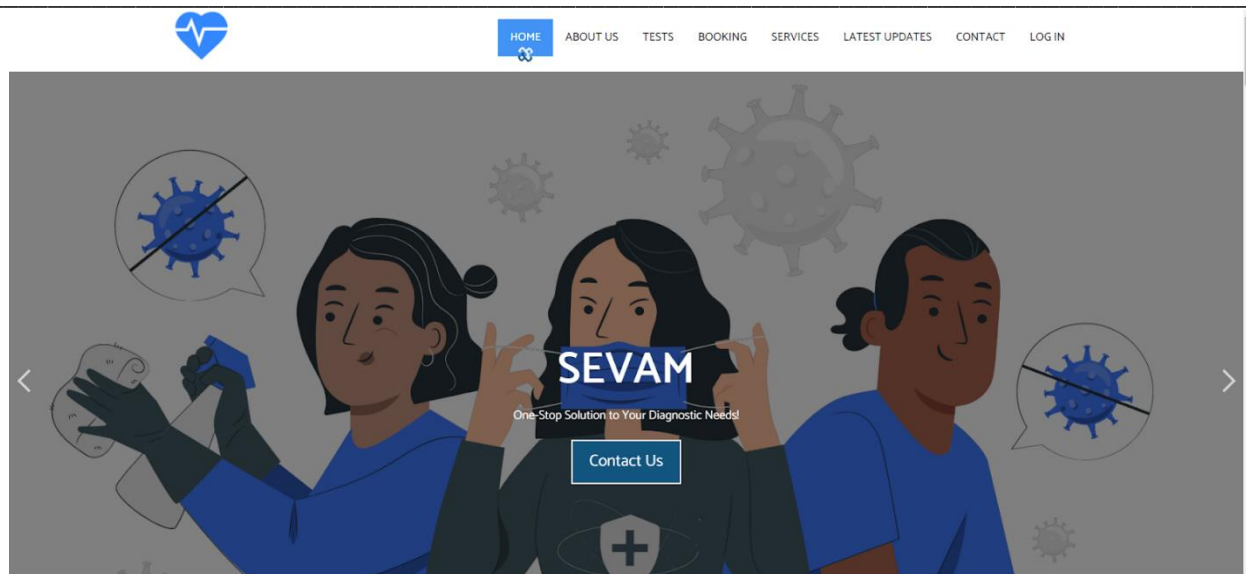
Field_name	Data_type	Constraint	Description
Book_Id	integer(4)	Primary Key	Unique id of each booking

Test	varchar(20)	Foreign Key	Name of test
Cust_Id	integer(4)	Foreign Key	Unique id of customer
agent	varchar(20)	Not Null	Unique name of agent
Status	varchar(20)	Not Null	Available or unavailable
Date	Date	Not Null	Date of appointment
Time	Time	Not Null	Timing of appointment
Ag_status	varchar(20)	Not Null	Update on status
Report	varchar(20)	Not Null	Update on report

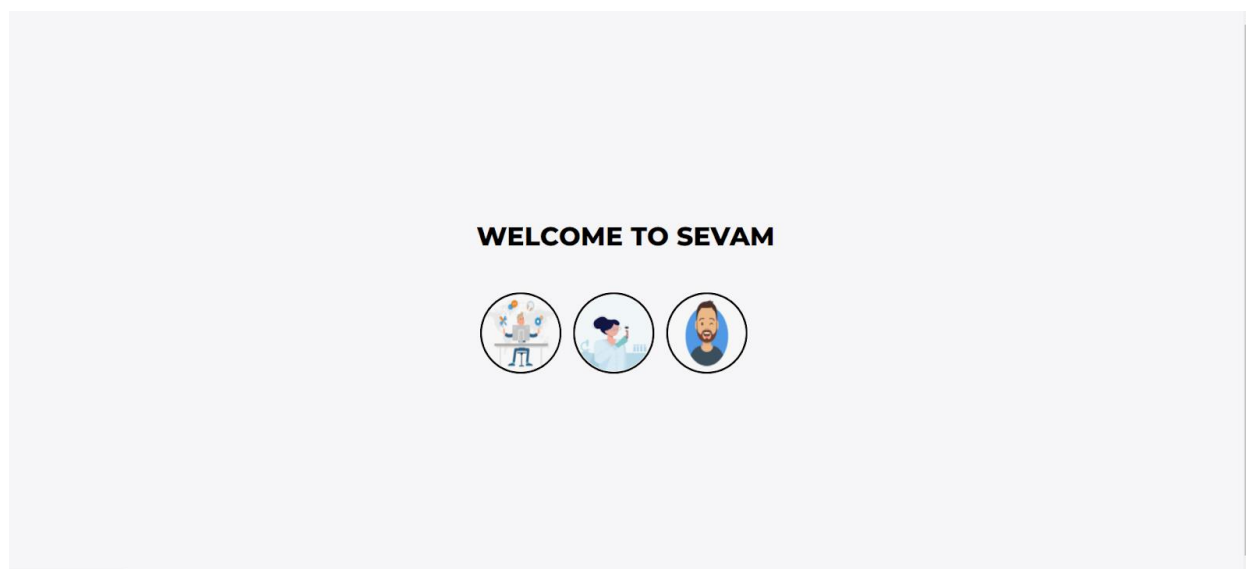
**TESTDB**

Field_name	Data_type	Constraint	Description
Test_Id	integer(4)	Primary Key	Unique test id of each test
Test_amount	integer(6)	Not Null	Amount of each test
Test_name	varchar(20)	UNIQUE	Unique name of each test
Test_desc	varchar(100)	Not Null	Description of each test

**Interface Design:**User Interface:

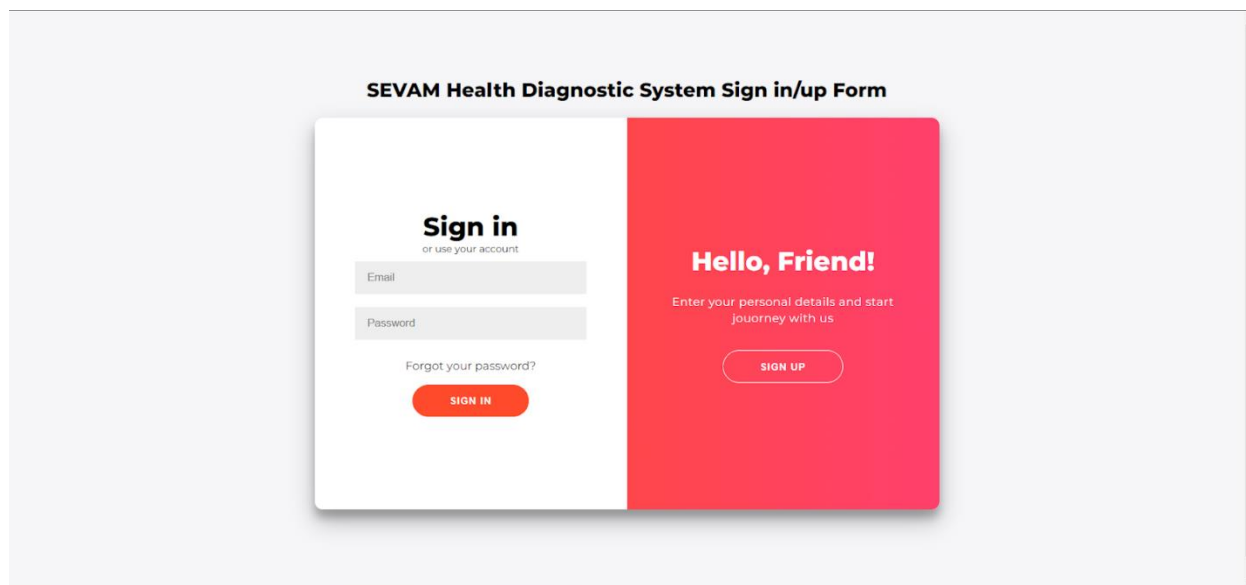


Common Login Page:



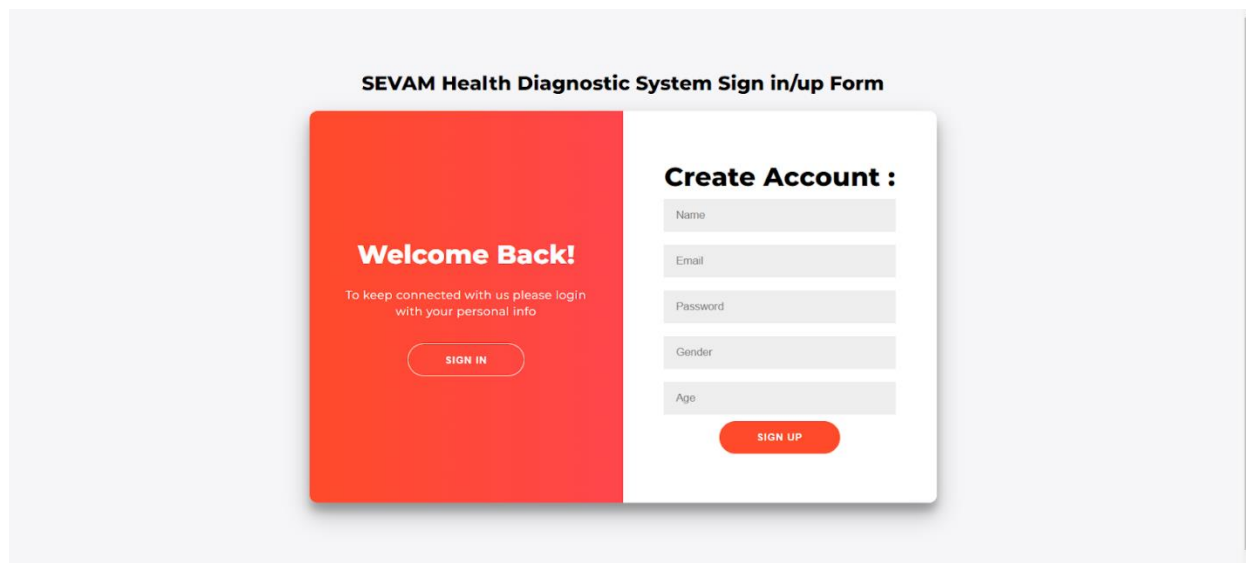


User Login Page:



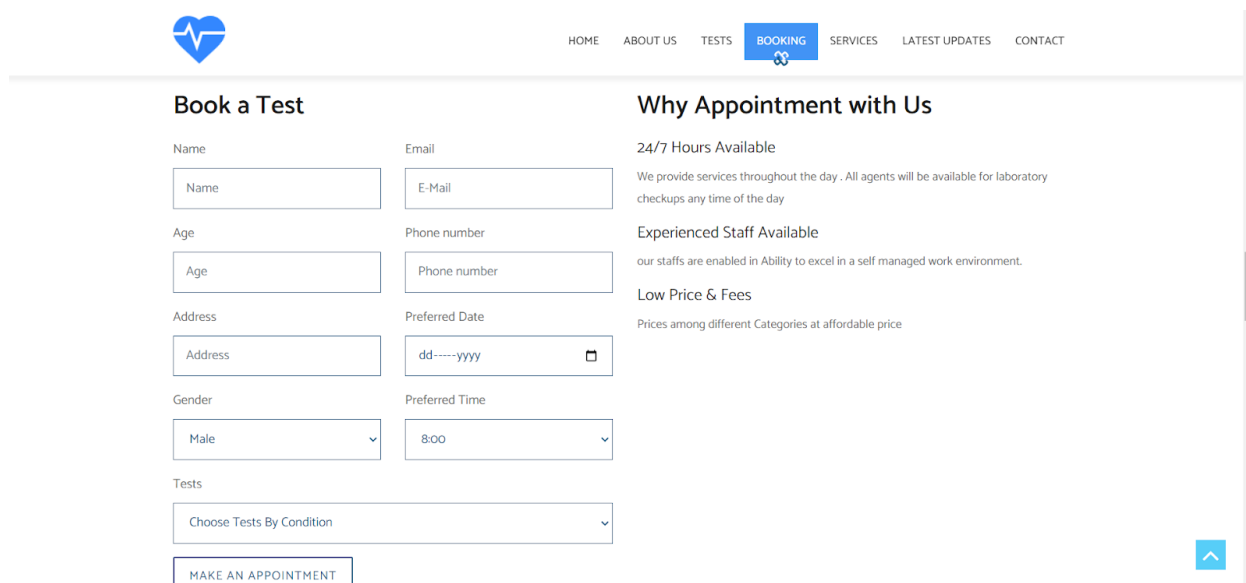
The image shows a web form titled "SEVAM Health Diagnostic System Sign in/up Form". It is divided into two main sections. The left section, titled "Sign in" with the subtitle "or use your account", contains input fields for "Email" and "Password", a link for "Forgot your password?", and a red "SIGN IN" button. The right section, titled "Hello, Friend!", contains the text "Enter your personal details and start jouorney with us" and a red "SIGN UP" button.

User registration Page:



The image shows a web form titled "SEVAM Health Diagnostic System Sign in/up Form". It is divided into two main sections. The left section, titled "Welcome Back!", contains the text "To keep connected with us please login with your personal info" and a red "SIGN IN" button. The right section, titled "Create Account :", contains input fields for "Name", "Email", "Password", "Gender", and "Age", and a red "SIGN UP" button.

### User Booking Page:



The screenshot shows the 'User Booking Page' of the SEVAM Health Lab Management System. The page has a blue header with a heart icon and navigation links: HOME, ABOUT US, TESTS, BOOKING (highlighted), SERVICES, LATEST UPDATES, and CONTACT. The main content is divided into two columns. The left column, titled 'Book a Test', contains a form with fields for Name, Email, Age, Phone number, Address, Preferred Date (with a calendar icon), Gender (dropdown menu), Preferred Time (dropdown menu), and Tests (dropdown menu). A 'MAKE AN APPOINTMENT' button is at the bottom. The right column, titled 'Why Appointment with Us', lists three benefits: '24/7 Hours Available', 'Experienced Staff Available', and 'Low Price & Fees', each with a brief description. A blue 'UP' arrow button is in the bottom right corner.

**Book a Test**

Name

Email

Age

Phone number

Address

Preferred Date

Gender

Preferred Time

Tests

**MAKE AN APPOINTMENT**

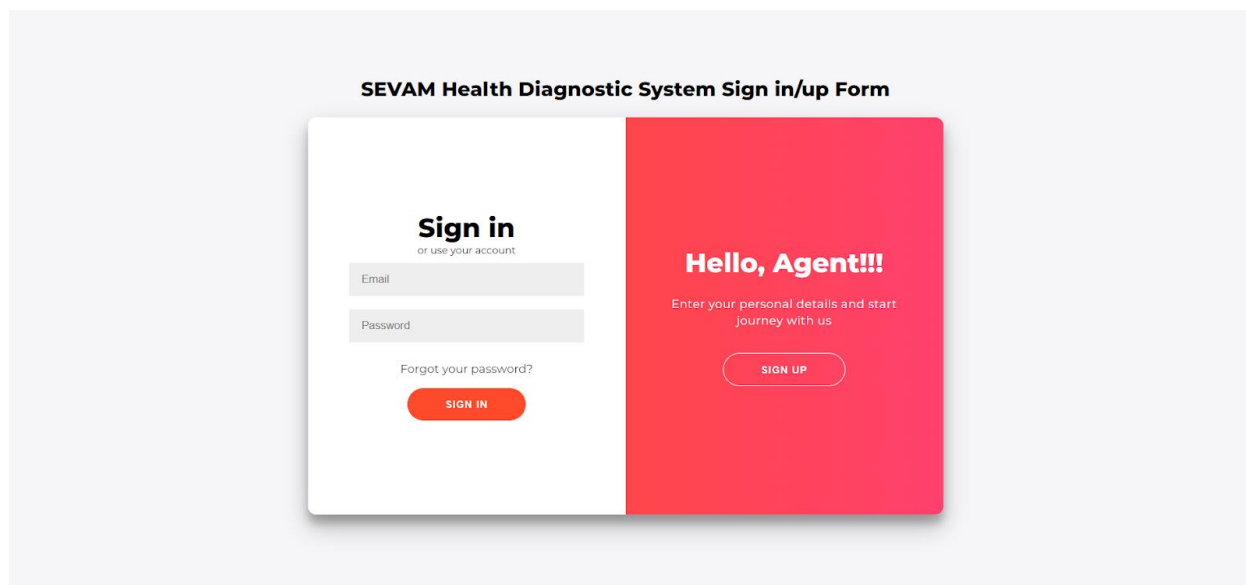
**Why Appointment with Us**

**24/7 Hours Available**  
We provide services throughout the day . All agents will be available for laboratory checkups any time of the day

**Experienced Staff Available**  
our staffs are enabled in Ability to excel in a self managed work environment.

**Low Price & Fees**  
Prices among different Categories at affordable price

### Agent Sign in Sign Up page:



The screenshot shows the 'SEVAM Health Diagnostic System Sign in/up Form'. The form is split into two sections: 'Sign in' (white background) and 'Hello, Agent!!!' (red background). The 'Sign in' section has fields for Email and Password, a 'Forgot your password?' link, and a 'SIGN IN' button. The 'Hello, Agent!!!' section has a 'SIGN UP' button.

**SEVAM Health Diagnostic System Sign in/up Form**

**Sign in**  
or use your account

Email

Password

Forgot your password?

**SIGN IN**

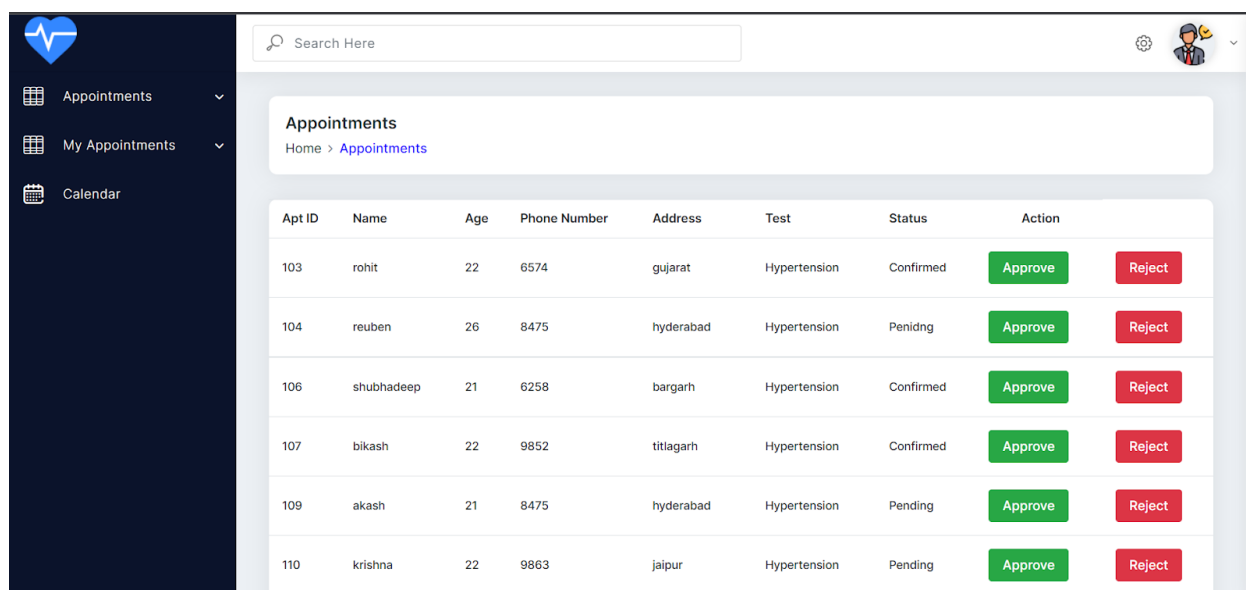
**Hello, Agent!!!**

Enter your personal details and start journey with us

**SIGN UP**

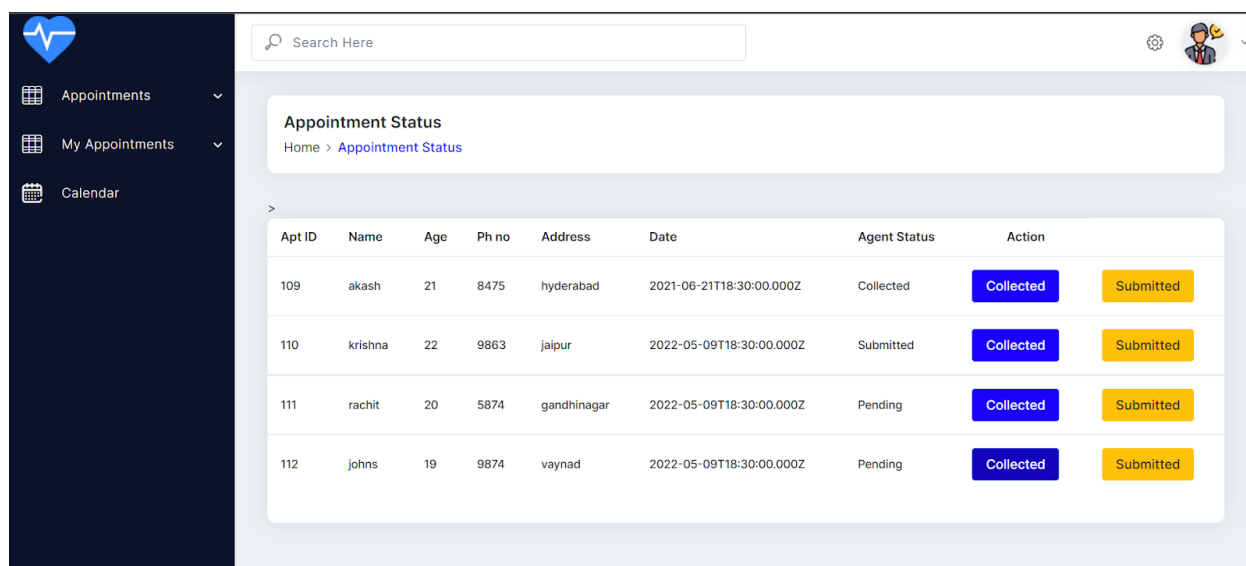
## Agent Interface:

### Appointments:



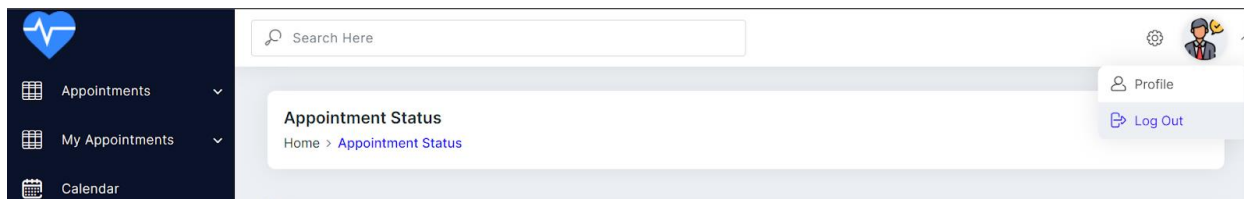
Apt ID	Name	Age	Phone Number	Address	Test	Status	Action
103	rohit	22	6574	gujarat	Hypertension	Confirmed	<button>Approve</button> <button>Reject</button>
104	reuben	26	8475	hyderabad	Hypertension	Peniding	<button>Approve</button> <button>Reject</button>
106	shubhadeep	21	6258	bargarh	Hypertension	Confirmed	<button>Approve</button> <button>Reject</button>
107	bikash	22	9852	titlagarh	Hypertension	Confirmed	<button>Approve</button> <button>Reject</button>
109	akash	21	8475	hyderabad	Hypertension	Pending	<button>Approve</button> <button>Reject</button>
110	krishna	22	9863	jaipur	Hypertension	Pending	<button>Approve</button> <button>Reject</button>

### Booking Status:

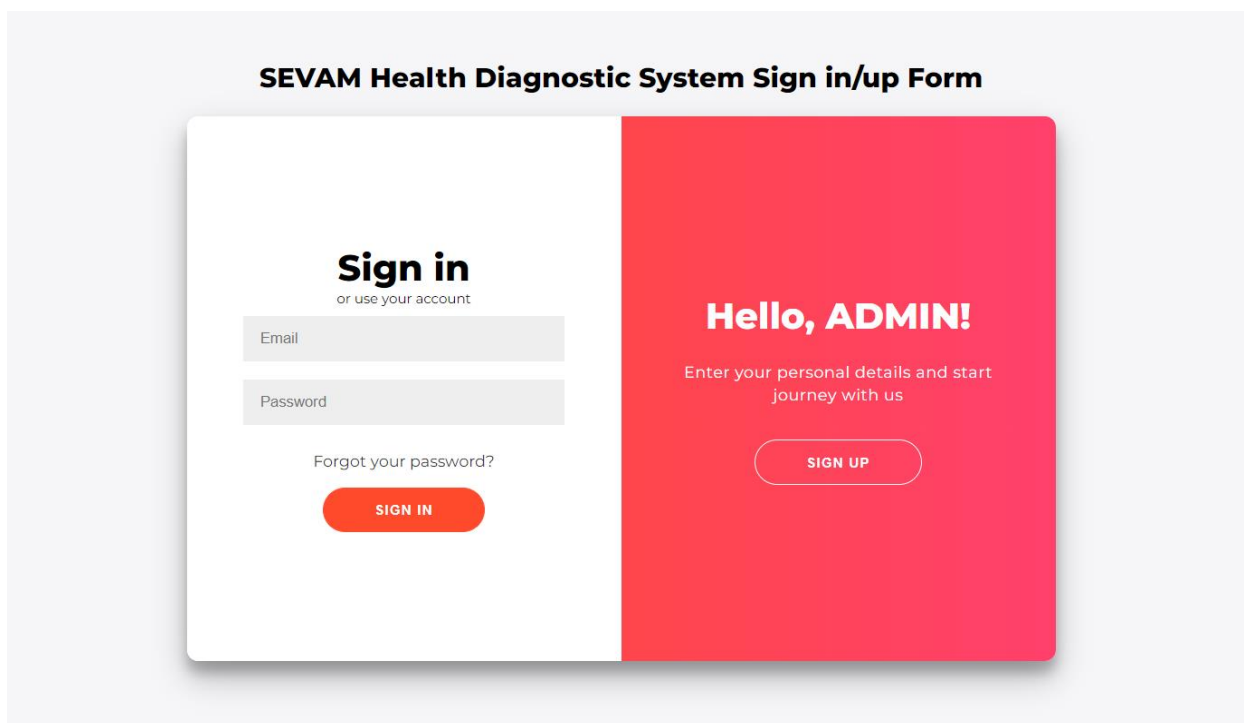


Apt ID	Name	Age	Ph no	Address	Date	Agent Status	Action
109	akash	21	8475	hyderabad	2021-06-21T18:30:00.000Z	Collected	<button>Collected</button> <button>Submitted</button>
110	krishna	22	9863	jaipur	2022-05-09T18:30:00.000Z	Submitted	<button>Collected</button> <button>Submitted</button>
111	rachit	20	5874	gandhinagar	2022-05-09T18:30:00.000Z	Pending	<button>Collected</button> <button>Submitted</button>
112	johns	19	9874	vaynad	2022-05-09T18:30:00.000Z	Pending	<button>Collected</button> <button>Submitted</button>

Logout:



Admin Sign in Sign up page:



Admin Interface:

Add Test:

Home

Tests

Appointments

Patients

Agents

Reports

Search Here

Tests

Home > Tests

Add Tests

Show 10 entries

Search: Search

ID	Name	Amount	Action
301	diabetes	3200	
302	full_body_checkup	6500	
303	Thyroid	4200	
304	Anaemia	3100	
305	Hormone	2300	

Home

Tests

Appointments

Patients

Agents

Reports

Search Here

Tests

Home > Tests

Add Tests

Show 10 entries

Search: Search

ID	Name	Amount	Action
301	diabetes	3200	
302	full_body_checkup	6500	
303	Thyroid	4200	
304	Anaemia	3100	
305	Hormone	2300	
306	Cancer_Screening	3400	

Add Tests Detail

ID

Name


Description

Price


Save

Close


Delete Test:




Home




Tests




Appointments



Patients





Agents



Reports

Search Here



Tests

Home > Tests

Add Tests

Show 10 entries

Search: Search

ID	Name	Amount	Action
301	diabetes	3200	<div><div>View</div><div>Edit</div><div>Delete</div></div>
302	full_body_checkup	6500	
303	Thyroid	4200	
304	Anaemia	3100	
305	Hormone	2300	

Delete Patient Entry:

Home

Tests

Appointments

Patients

Agents

Reports

Search Here

Appointments

Home > Appointments

Show 10 entries

Search: Search

ID	Name	Address	Date	Time	Status	Agent_status	Agent	Action
103	rohit	gujarat	2019-05-06T18:30:00.000Z	15:00:00	Confirmed	Submitted	gyan	
104	reuben	hyderabad	2022-01-14T18:30:00.000Z	09:00:00	Penidng	Pending		
106	shubhadeep	bargarh	2021-08-31T18:30:00.000Z	14:00:00	Confirmed	Submitted	gyan	
107	bikash	titlagarh	2021-03-30T18:30:00.000Z	12:00:00	Confirmed	Submitted		
109	akash	hyderabad	2021-06-21T18:30:00.000Z	18:00:00	Confirmed	Collected	yash	
110	krishna	jaipur	2022-05-09T18:30:00.000Z	16:00:00	Confirmed	Submitted	yash	

Add Agent:

Home

Tests

Appointments

Patients

Agents

Reports

Search Here

Add Agent

Show 10 entries

Search: Search

Name	Phone Number	Experience	Email	Action
akarshi	882825	5	aksrshi@gmail.com	
gauri	8825	5	gauri@gmail.com	
gyan	8825	0	gyan@gmail.com	
john	8825	5	john@gmail.com	
maglin	88258	2	maglin@gmail.com	
yash	87459	5	yash@gmail.com	
yuvraj	8825	0	yuvraj@gmail.com	

Add Agent Details:

Home

Tests

Appointments

Patients

Agents

Reports

Search Here

Add Agents Detail

Name

Email

Password

Gender

Experience

Age

Phone number

Show 10 entries

Name	Email	Action
akarshi	aksrshi@gmail.com	...
gauri	gauri@gmail.com	...
gyan	gyan@gmail.com	...
john	john@gmail.com	...
maglin	maglin@gmail.com	...
yash	yash@gmail.com	...
yuvraj	yuvraj@gmail.com	...

Upload Report:

Home

Tests

Appointments

Patients

Agents

Reports

Search Here

Upload Reports

Home > Upload Report

Upload

Drop files here to upload

Upload



## **Software and Hardware Environments:**

### **Software Environment:**

mySQL, Express JS, Angular JS, Node JS, Cookie-parser, is used for the full-stack development.

mySQL is a relational database system

Express JS is a framework used to build web applications in NodeAngularJS is a JavaScript framework developed by Google

Node.js is a server-side JavaScript execution environment

cookie-parser is a middleware which parses cookies attached to the client request object.

**MySQL** is often regarded as the safest and most dependable database management technology for popular online applications. It has unrivaled scalability, allowing it to manage deeply embedded apps with a lower footprint, even in enormous data warehouses with terabytes of data. MySQL has its own storage-engine structure, which makes it easier for system administrators to set up the MySQL database server for optimal performance.

**Express JS** develops Node.js web applications quickly and easily.

Configuration and customization are simple. It allows you to define application routes using HTTP methods and URLs. MySQL databases are simple to connect to with express JS.

**Angular JS** is easy to learn for people with knowledge of HTML, JavaScript and CSS. It has a two way binding feature. The view and the model can be synchronized immediately with AngularJS.

**Node JS** offers easy scalability and it is easy to learn as well. It is used as a Single Programming Language for writing server-side applications as well as front-end in JavaScript using a runtime environment.

**Cookie Parser** Cookies are simple, small files/data that are sent to client with a server request and stored on the client side. Every time the user loads the website back, this cookie is sent with the request. This helps in keep track of the user's actions.

### **Hardware Environment:**

<b>OS name</b>	Microsoft windows 11 Single Language
<b>Version</b>	11.0.19043
<b>RAM</b>	8GB
<b>Disk Storage</b>	1 TB HDD and 256 SSD
<b>System Type</b>	X64 Based PC
<b>Processor</b>	i5 8 <sup>th</sup> Gen

## **Testing**

### **Test Cases:**

<b>Test ID</b>	<b>Test Name</b>	<b>Description</b>	<b>Req ID</b>	<b>Procedure</b>	<b>Expected Output</b>
1	To verify whether the site logged in.	Check the website script is for localhost.	1	1. Login to the machine 2. Login into the website	1. login should be successful 2. Should be able to see the landing page

- User Registration**

<b>Test ID</b>	<b>Test Name</b>	<b>Description</b>	<b>Req ID</b>	<b>Procedure</b>	<b>Expected Output</b>
2.1	To register successfully.	Customers successfully register.	2	1) Customer loads sevam. 2) Customers fill in all the details in the sign up form and click the submit button.	1) Customers are successfully registered.
2.2	Unsuccessful register.	Customer fails to register.	2	1) Customer loads sevam. 2) Customers don't fill in all the details and click the submit button.	1) Error can be seen to fill all the details. 2) Customers don't get registered.

- Login**

<b>Test ID</b>	<b>Test Name</b>	<b>Description</b>	<b>Req ID</b>	<b>Procedure</b>	<b>Expected Output</b>
3.1	Check the response when a valid username,email and password is entered.	To check the response when a user enters valid user-details(username,email,password) for login.	3	1. Open user login page. 2. Enter valid username,email and password.	Login successful. Users should be able to see the front page.

3.2	Check the response when a invalid username,email or password is entered.	To check the response when a user enters invalid user-details(username,email,password) for login.	3	<ol style="list-style-type: none"> <li>1. Open user login page.</li> <li>2. Enter invalid username,email and password.</li> </ol>	The user will not be able to login.
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- Forgot Password**

Test ID	Test Name	Description	Req ID	Procedure	Expected Output
4.1	Check the “Forgot Password” functionality.	To check if the “Forgot password” link redirects the user to the user verification page.	4	<ol style="list-style-type: none"> <li>1. Open user login page.</li> <li>2. Click on the “Forgot Password” link.</li> </ol>	The user will be redirected to the user verification page before the user can reset the password.
4.2	Verify the email entered is registered or not.	To check only registered users updates password	4	<ol style="list-style-type: none"> <li>1. Enters wrong email</li> </ol>	The user will not be directed to the next page.
4.3	Check the response of the user verification page if the user enters a registered email and phone number.	Check the response of the user verification page if the user enters a registered email and phone number.	4	<ol style="list-style-type: none"> <li>1. Click on the “Forgot Password” link.</li> <li>2. Enter valid email and phone number.</li> </ol>	A message will be displayed if the user authentication is successful and the user will receive a mail which contains a link to login and a link to reset the password.
4.4	Check the response of the user verification page if the user enters an unregistered email or phone number.	Check the response of the user verification page if the user enters an unregistered email or phone number.	4	<ol style="list-style-type: none"> <li>1. Click on the “Forgot Password” link.</li> <li>2. Enter invalid email and phone number.</li> </ol>	An error message will be displayed if the user authentication wasn't successful and it'll ask the user to enter a valid email or phone number.

- Reset Password**

Test ID	Test Name	Description	Req ID	Procedure	Expected Output
5.1	Check the functionality of password reset link.	To check the functionality of the link to reset the password.	5	1. Click on the link provided in the email.	The user will be redirected to a “Reset Password” page.
5.2	Check the response if the user has entered a valid password and provided the same for the confirm password field to reset password.	To check the response if the user has entered a valid password following all the conditions provided for a password to be valid and provided the same for confirming password.	5	1. Enter valid password. 2. Fill the confirm password field with the same.	Users will be notified if the password reset was successful.
5.3	Check the response if the user has entered an invalid password and provided the same for the confirm password field to reset password.	To check the response if the user has entered a valid password following all the conditions provided for a password to be valid and provided the same for confirming password.	5	1. Enter invalid password. 2. Fill the confirm password field with the same.	All the conditions for a valid password will be displayed to the user.
5.4	Check the response if the passwords in the reset password field and confirm password field don't match.	To check the response if the passwords in the reset password field and confirm password field don't match.	5	1. Enter valid password. 2. Fill the confirm password field with a different password.	An error message “Passwords do not match” will be displayed below the “Confirm Password” field.

- Bookings**

Test ID	Test Name	Description	Req ID	Procedure	Expected Output
6.1	To verify that the user is able to book a test.	User books an appointment successfully.	6	1) User logs in. 2)User finds a test. 3)User selects the date and time and books the appointment.	1) User successfully books an appointment. 2) User successfully pays the amount.
6.2	To verify that the user was unable to book a test.	User couldn't book an appointment.	6	1) User logs in. 2)User finds a test. 3)User selects dates and time and proceeds further. 4) While paying, the transaction fails.	1) Message will be visible that payment was unsuccessful. 2) User wasn't able to book the appointment.
6.3	To verify that the user was unable to book a test.	User couldn't book an appointment.	6	1) User logs in. 2)User finds a product. 3)User doesn't select dates and time and clicks next.	1) Error will be visible to select date and time. 2)User couldn't book the appointment.

- Logout**

Test ID	Test Name	Description	Req ID	Procedure	Expected Output
7.1	To verify that the user successfully logs out.	User was successfully logged out.	7	1) User logs in. 2)User clicks the logout button .	1)User was successfully logged out from the site.
7.2	To verify that the user was unable to log out.	User wasn't successfully logged out.	7	1)User doesn't login in.	1.User was not able to logout.

7.3	To verify that the user was unable to log out.	User wasn't successfully logged out.	7	1)User logs in. 2)User doesn't click the logout button.	1.User was not able to logout.
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- Admin**

Test ID	Test Name	Description	Req ID	Procedure	Expected Output
8.1	Check if the Admin is able to add tests	Admin adds test in admin dashboard	8	1)Admin logs in 2)Admin Clicks add test	1.Admin successfully Adds test .
8.1.1	Check if the Admin is unable to add tests	Admin cannot add test in admin dashboard	8	1)Admin logs in 2)Admin Clicks add test	1.Admin cannot Add test .
8.2	Check if Admin is able to add test details	Admin adds test details in dashboard	8	1) Admin logs in 2)Admin clicks add test 3)Admin Adds Test Details	1.test details get added and are reflected in the admin dashboard.
8.2.1	Check if Admin is unable to add test details	Admin cannot add test details in dashboard	8	1) Admin logs in 2)Admin clicks add test 3)Admin Adds Test Details	1.test details do not get added and are not reflected in the admin dashboard.
8.3	Check if Admin is able to delete test	Admin deletes test details in dashboard	8	1) Admin logs in 2)Admin deletes test .	1.Admin successfully deletes test .
8.3.1	Check if Admin is unable to delete test	Admin deletes test details in dashboard	8	1) Admin logs in 2)Admin deletes test .	1.Admin cannot delete test .
8.4	Check if Admin is able to delete patient data	Admin Deletes patient data	8	1) Admin logs in 2)Admin deletes patient data by clicking the delete button.	Admin Successfully deletes patient data.
8.4.1	Check if Admin is unable to delete patient data	Admin Deletes patient data	8	1) Admin logs in 2)Admin deletes patient data by clicking the delete button.	Admin cannot delete patient data.
8.5	Check if Admin is able to add agent	Admin adds agent	8	1)Admin logs in	Admin Successfully adds an agent.

				2)Admin Adds agent through dashboard	
8.5.1	Check if Admin is unable to add agent	Admin adds agent	8	1)Admin logs in 2)Admin Adds agent through dashboard	Admin cannot add an agent.
8.6	Check if Admin is able to delete agent data	Admin deletes agent data	8	1) Admin logs in 2)Admin deletes data by clicking the delete button.	Admin Successfully deletes an agent data.
8.6.1	Check if Admin is unable to delete agent data	Admin deletes agent data	8	1) Admin logs in 2)Admin deletes data by clicking the delete button.	Admin cannot delete an agent data.
8.7	Check if admin is able to upload report	Admin uploads report	8	1)Admin logs in 2)Admin clicks upload button, selects files.	Admin Adds report via upload
8.7.1	Check if admin is unable to upload report	Admin uploads report	8	1)Admin logs in 2)Admin clicks upload button, selects files.	Admin Fails to add report via upload

- Agent**

<b>Test ID</b>	<b>Test Name</b>	<b>Description</b>	<b>Req ID</b>	<b>Procedure</b>	<b>Expected Output</b>
9	To check if agent can login	Agent logs in	9	1)Agent enters credentials 2)Agent clicks login	Agent logs in successfully
9.1	To check if agent cant login	Agent cannot login	9	1)Agent enters credentials 2)Agent clicks login	Agent cannot login
9.2	To check if agent can logout	Agent can logout	9	Agent clicks logout	Agent log outs successfully
9.2.1	To check if agent cannot logout	Agent cannot log out	9	Agent doesn't log out	Agent doesn't logout.
9.3	To Verify if agent can check appointments	Agents checks appointments	9	1)Agent logs in 2)Agent checks appointments in	Agent sees appointment list.

				dashboard	
9.3.1	To Verify if agent cannot check appointments	Agents checks appointments	9	1)Agent logs in 2)Agent checks appointments in dashboard	Agent cannot see appointment list.
9.4	To verify if agent can access Booking status	Agent access booking status.	9	1)Agent logs in 2)Agents checks Booking status	Agent updates status
9.4.1	To verify if agent cannot access Booking status	Agent access booking status.	9	1)Agent logs in 2)Agents checks Booking status	Agent updates status

## Module Testing and Integration:

The different modules in this project were developed separately and later integrated into the main project. We used the Git Version Control System to track the changes in the source code. Each module was developed as parallel branches which were later merged with the main branch. While integrating some of the existing features of the module did not show the expected results, which were later resolved.

## Test Execution

### a. Cycle 1

Test Case ID	Test Case Name	Test Case Description	Requirement ID	Execution Steps	Expected Output	Result
3.1	User Authentication	Checks whether the user is valid.	3	1.Check the validity of the user id and password.	Successful login and redirection to home page.	Success
7.1	User Logout	This should destroy the session cookie while logging out.	7	1.Clicking on the logout button	Successfully logout the user and destroys all the session cookies.	Failure



**b. Cycle 2**

Test Case ID	Test Case Name	Test Case Description	Requirement ID	Execution Steps	Expected Output	Result
7.1	User Logout	This should destroy the session cookie while logging out.	7	1. Clicking on the logout button	Successfully logs out the user.	Success

**Defects:**

Some of the defects of this project are as follows:

- Payment method is not specified.
- At times, CSS gets slow loaded on Button click.

## Screenshots:

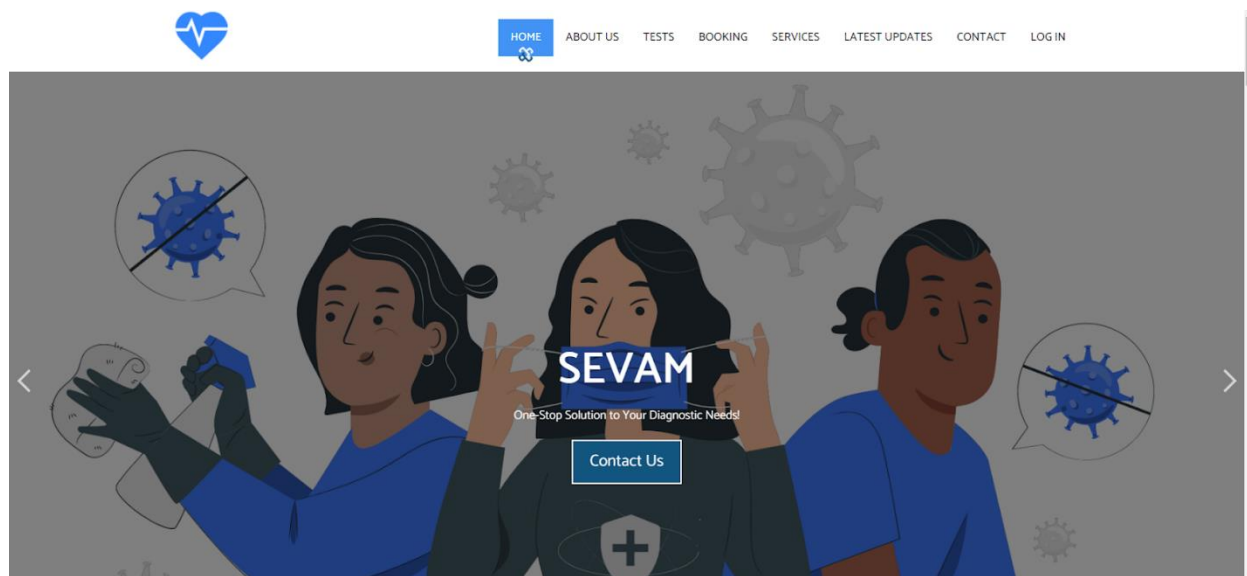
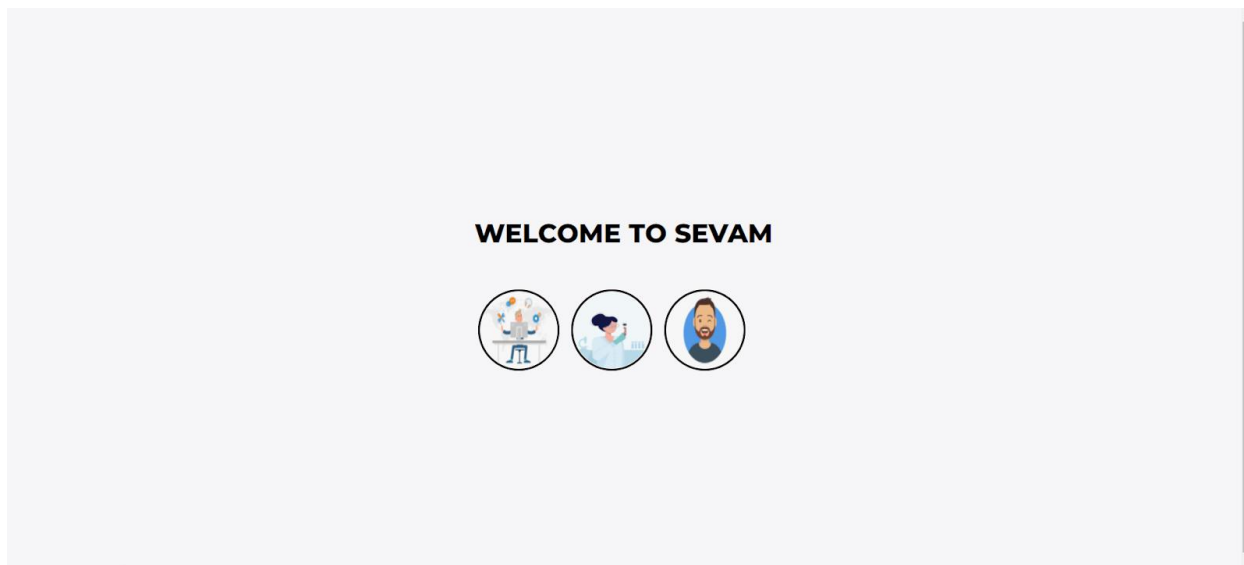
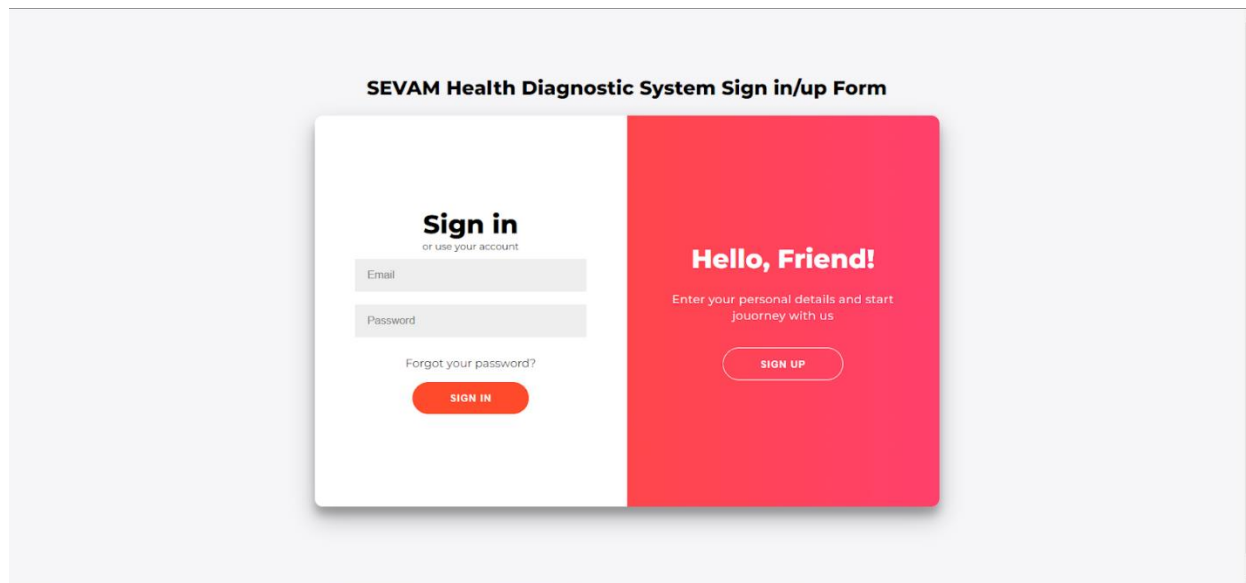


Fig: Main Page

## Common Login Page:



User Login Page:



The image shows a user login page for the SEVAM Health Diagnostic System. The page has a light gray background. At the top, the title "SEVAM Health Diagnostic System Sign in/up Form" is centered. Below the title, there are two main sections. The left section is white and contains the "Sign in" heading, a subtext "or use your account", two input fields for "Email" and "Password", a link "Forgot your password?", and a red "SIGN IN" button. The right section is pink and contains the heading "Hello, Friend!", a subtext "Enter your personal details and start journey with us", and a white "SIGN UP" button.

**SEVAM Health Diagnostic System Sign in/up Form**

**Sign in**  
or use your account

Email

Password

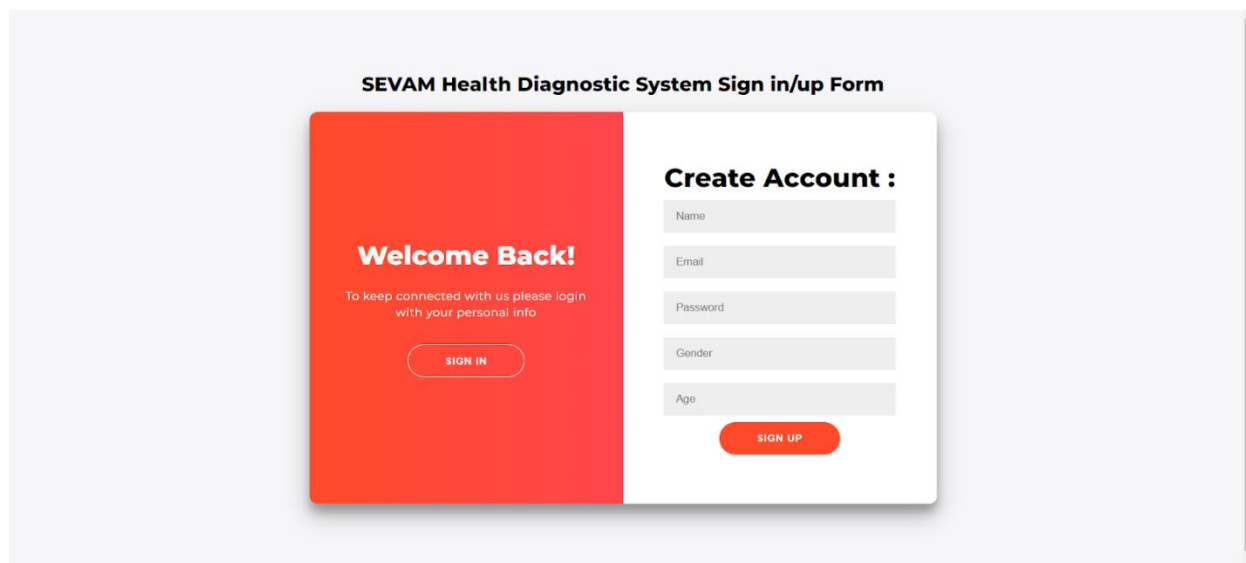
Forgot your password?

**SIGN IN**

**Hello, Friend!**  
Enter your personal details and start journey with us

**SIGN UP**

User registration Page:



The image shows a user registration page for the SEVAM Health Diagnostic System. The page has a light gray background. At the top, the title "SEVAM Health Diagnostic System Sign in/up Form" is centered. Below the title, there are two main sections. The left section is red and contains the heading "Welcome Back!", a subtext "To keep connected with us please login with your personal info", and a white "SIGN IN" button. The right section is white and contains the heading "Create Account :", five input fields for "Name", "Email", "Password", "Gender", and "Age", and a red "SIGN UP" button.

**SEVAM Health Diagnostic System Sign in/up Form**

**Welcome Back!**  
To keep connected with us please login with your personal info

**SIGN IN**

**Create Account :**

Name

Email

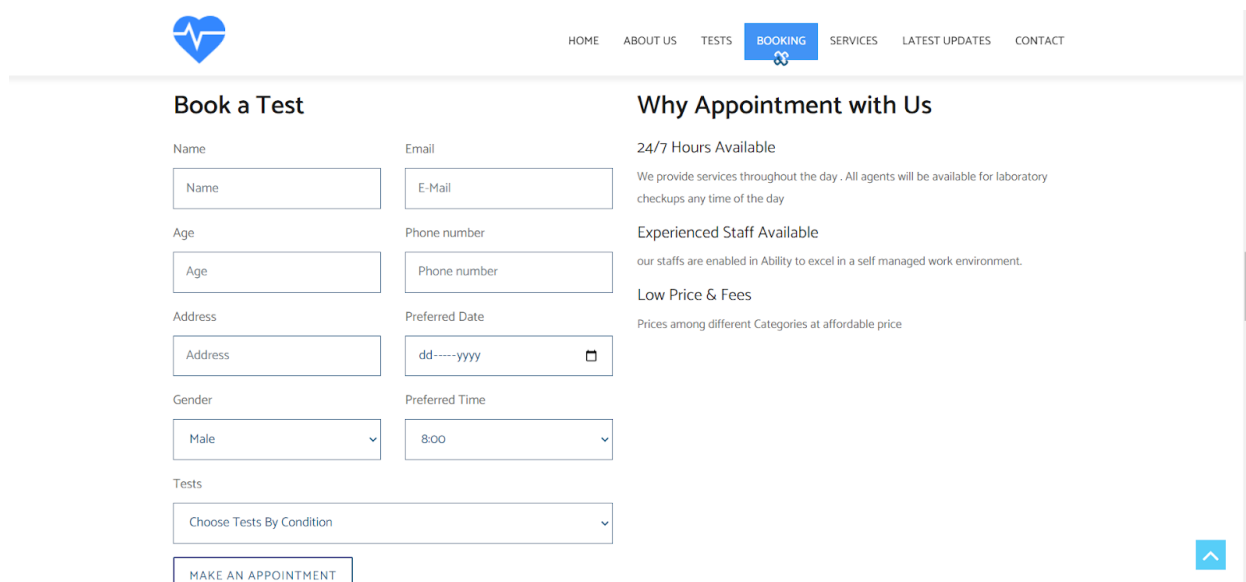
Password

Gender

Age

**SIGN UP**

## User Booking Page:



The screenshot shows the 'User Booking Page' of the SEVAM Health Lab Management System. The page features a navigation bar with links: HOME, ABOUT US, TESTS, BOOKING (highlighted), SERVICES, LATEST UPDATES, and CONTACT. A heart icon with a pulse line is on the left. The main content is divided into two columns. The left column, titled 'Book a Test', contains a form with fields for Name, Email, Age, Phone number, Address, Preferred Date, Gender, Preferred Time, and Tests. The right column, titled 'Why Appointment with Us', lists three benefits: 24/7 Hours Available, Experienced Staff Available, and Low Price & Fees. A 'MAKE AN APPOINTMENT' button is at the bottom left, and a blue arrow icon is at the bottom right.

**Book a Test**

Name:

Email:

Age:

Phone number:

Address:

Preferred Date:

Gender:

Preferred Time:

Tests:

**Why Appointment with Us**

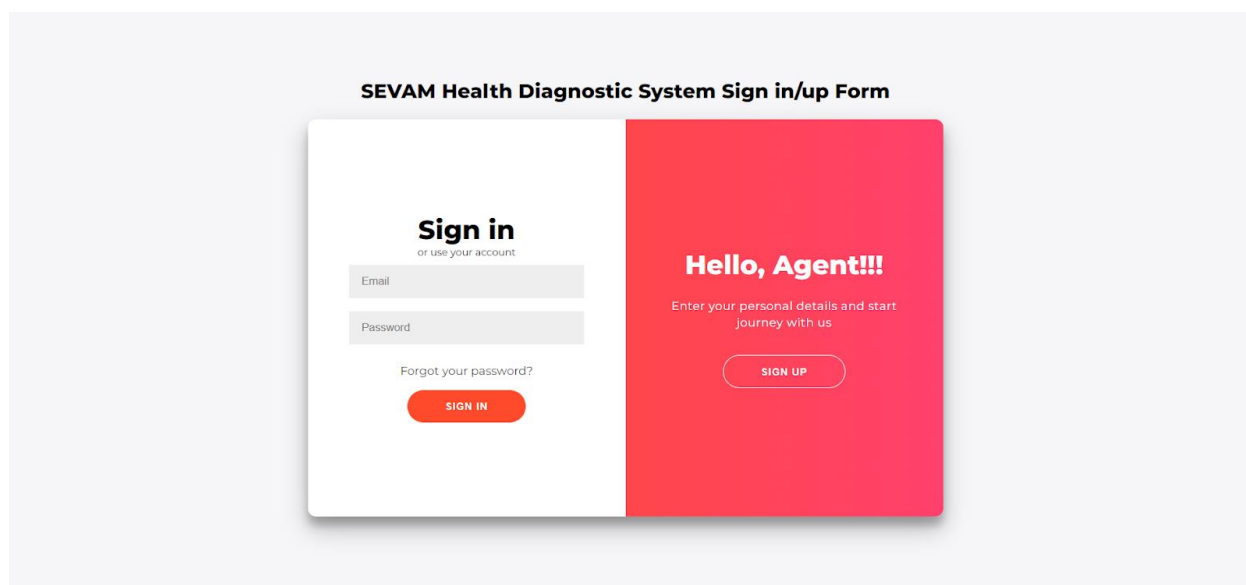
**24/7 Hours Available**  
We provide services throughout the day . All agents will be available for laboratory checkups any time of the day

**Experienced Staff Available**  
our staffs are enabled in Ability to excel in a self managed work environment.

**Low Price & Fees**  
Prices among different Categories at affordable price

**MAKE AN APPOINTMENT**

## Agent Sign in Sign Up page:



The screenshot shows the 'Agent Sign in Sign Up page' of the SEVAM Health Diagnostic System. The page has a light gray background. The title 'SEVAM Health Diagnostic System Sign in/up Form' is at the top. The main content is divided into two columns. The left column, titled 'Sign in', contains a form with fields for Email and Password, a 'Forgot your password?' link, and a 'SIGN IN' button. The right column, titled 'Hello, Agent!!!', contains a 'SIGN UP' button.

**SEVAM Health Diagnostic System Sign in/up Form**

**Sign in**  
or use your account

Email:

Password:

Forgot your password?

**SIGN IN**


**Hello, Agent!!!**


Enter your personal details and start journey with us


**SIGN UP**


Agent Interface:

Appointments:



 Appointments

 My Appointments

 Calendar

Search Here

Appointments

Home > Appointments

Apt ID	Name	Age	Phone Number	Address	Test	Status	Action
103	rohit	22	6574	gujarat	Hypertension	Confirmed	<div>Approve</div> <div>Reject</div>
104	reuben	26	8475	hyderabad	Hypertension	Penidng	<div>Approve</div> <div>Reject</div>
106	shubhadeep	21	6258	bargarh	Hypertension	Confirmed	<div>Approve</div> <div>Reject</div>
107	bikash	22	9852	titlagarh	Hypertension	Confirmed	<div>Approve</div> <div>Reject</div>
109	akash	21	8475	hyderabad	Hypertension	Pending	<div>Approve</div> <div>Reject</div>
110	krishna	22	9863	jaipur	Hypertension	Pending	<div>Approve</div> <div>Reject</div>

Booking Status:

The screenshot shows the 'Appointment Status' page in the SEVAM Health Lab Management System. The left sidebar contains navigation links: 'Appointments', 'My Appointments', and 'Calendar'. The main content area has a search bar at the top. Below it, the 'Appointment Status' section shows a breadcrumb 'Home > Appointment Status'. A table lists appointments with columns: Apt ID, Name, Age, Ph no, Address, Date, Agent Status, and Action. The table contains four rows of data. Each row has two buttons in the 'Action' column: 'Collected' (blue) and 'Submitted' (yellow).

Apt ID	Name	Age	Ph no	Address	Date	Agent Status	Action
109	akash	21	8475	hyderabad	2021-06-21T18:30:00.000Z	Collected	<button>Collected</button> <button>Submitted</button>
110	krishna	22	9863	jaipur	2022-05-09T18:30:00.000Z	Submitted	<button>Collected</button> <button>Submitted</button>
111	rachit	20	5874	gandhinagar	2022-05-09T18:30:00.000Z	Pending	<button>Collected</button> <button>Submitted</button>
112	johns	19	9874	vaynad	2022-05-09T18:30:00.000Z	Pending	<button>Collected</button> <button>Submitted</button>

### Logout:

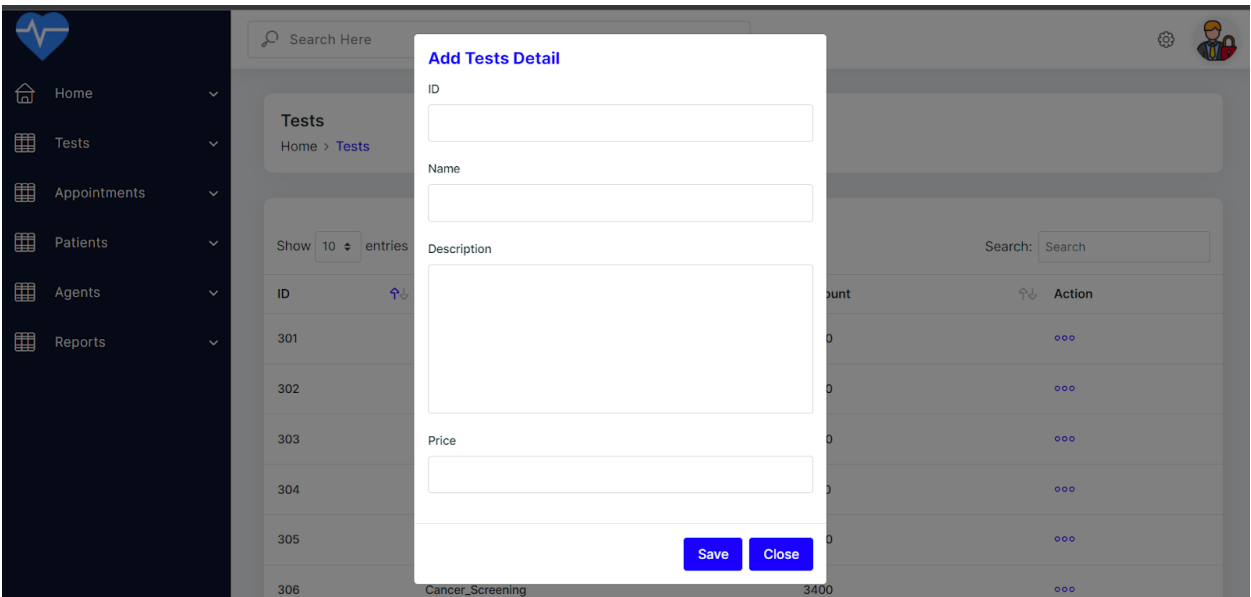
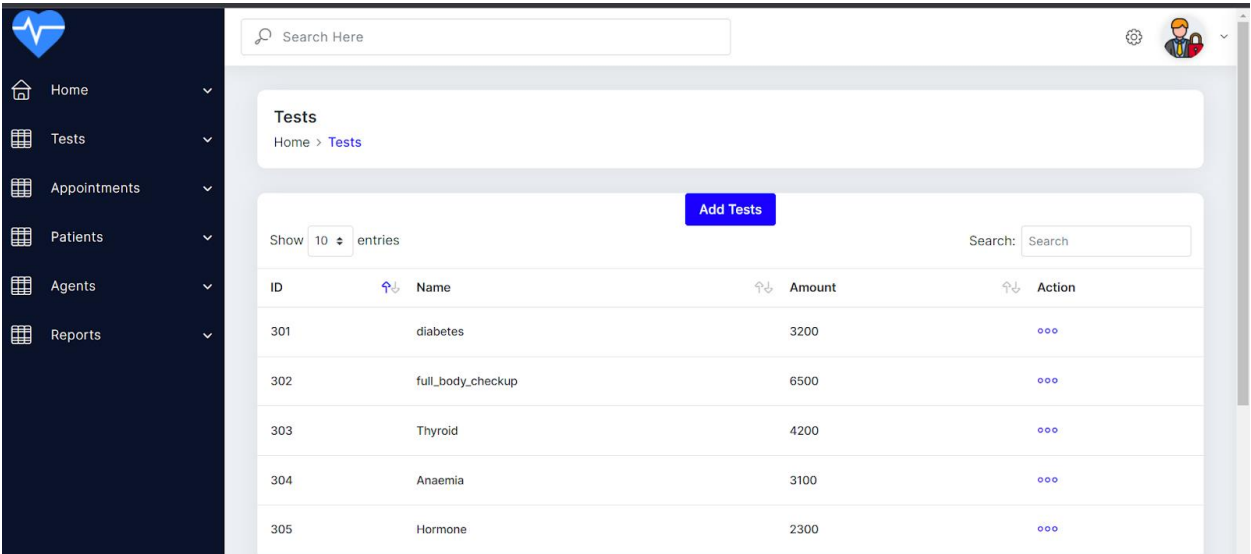
This screenshot shows the same 'Appointment Status' page as above, but with a user profile dropdown menu open in the top right corner. The menu contains two options: 'Profile' (with a user icon) and 'Log Out' (with a logout icon).

### Admin Sign in Sign up page:

The screenshot displays the 'SEVAM Health Diagnostic System Sign in/up Form'. The form is split into two panels. The left panel, titled 'Sign in or use your account', contains input fields for 'Email' and 'Password', a link for 'Forgot your password?', and a red 'SIGN IN' button. The right panel, titled 'Hello, ADMIN!', contains the text 'Enter your personal details and start journey with us' and a white 'SIGN UP' button on a red background.

Admin Interface:

Add Test:



Delete Test:

Home

Tests

Appointments

Patients

Agents

Reports

Search Here

Tests

Home > Tests

Add Tests

Show 10 entries

Search: Search

ID	Name	Amount	Action
301	diabetes	3200	<div><div>View</div><div>Edit</div><div>Delete</div></div>
302	full_body_checkup	6500	
303	Thyroid	4200	
304	Anaemia	3100	
305	Hormone	2300	

Delete Patient Entry:

Home

Tests

Appointments

Patients

Agents

Reports

Search Here

Appointments

Home > Appointments

Show 10 entries

Search: Search

ID	Name	Address	Date	Time	Status	Agent_status	Agent	Action
103	rohit	gujarat	2019-05-06T18:30:00.000Z	15:00:00	Confirmed	Submitted	gyan	<div><div>View</div><div>Edit</div><div>Delete</div></div>
104	reuben	hyderabad	2022-01-14T18:30:00.000Z	09:00:00	Penidng	Pending		
106	shubhadeep	bargarh	2021-08-31T18:30:00.000Z	14:00:00	Confirmed	Submitted		
107	bikash	titlagarh	2021-03-30T18:30:00.000Z	12:00:00	Confirmed	Submitted	gyan	
109	akash	hyderabad	2021-06-21T18:30:00.000Z	18:00:00	Confirmed	Collected	yash	
110	krishna	jaipur	2022-05-09T18:30:00.000Z	16:00:00	Confirmed	Submitted	yash	



Add Agent:

Home

Tests

Appointments

Patients

Agents

Reports

Search Here

Add Agent

Show 10 entries

Search:

Name	Phone Number	Experience	Email	Action
akarshi	882825	5	aksrshi@gmail.com	...
gauri	8825	5	gauri@gmail.com	...
gyan	8825	0	gyan@gmail.com	...
john	8825	5	john@gmail.com	...
maglin	88258	2	maglin@gmail.com	...
yash	87459	5	yash@gmail.com	...
yuvraj	8825	0	yuvraj@gmail.com	...

Add Agent Details:

Home

Tests

Appointments

Patients

Agents

Reports

Search Here

Add Agents Detail

Search:

Name

Email

Password

Gender

Experience

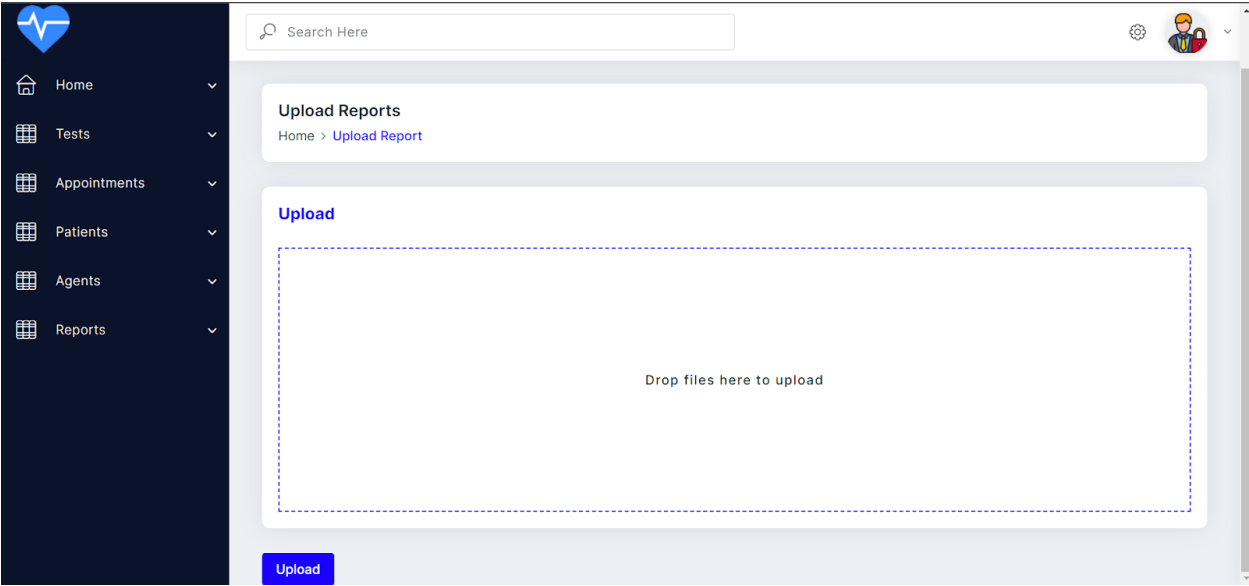
Age

Phone number

Show 10 entries

Name	Email	Action
akarshi	aksrshi@gmail.com	...
gauri	gauri@gmail.com	...
gyan	gyan@gmail.com	...
john	john@gmail.com	...
maglin	maglin@gmail.com	...
yash	yash@gmail.com	...
yuvraj	yuvraj@gmail.com	...

Upload Report:



## **Conclution And Learnings:**

Sevam Health Labs assisted in the enhancement of current online lab systems.

We could learn about the different programming languages, software tools, frameworks, and databases during the beginning stages of the project, and after a successful completion of the planning stage, we could select the best resources and platforms for our project. Following this step, we learned how to create the website's structure using ER diagrams, architectural diagrams, and use case diagrams.

After determining the framework of our website, we began coding and creating a database for the project, which assisted us in learning HTML and CSS, , MySQL, JS, Node JS , Angular JS, Express JS, Cookie-Parser.

We began testing our project after the coding phase, which was a novel notion for us because it had previously been only theoretical, but now we could work with it literally. We learned about various software and tools and how they work, and we were able to use most of them in our project. Apart from technical skills, we could work on team building and communication skills, which helped us boost our confidence in taking on any task at any time. Finally, with all of these skills, we were able to understand and learn about the timely completion of the project, and we were able to complete most of the modules in the time allotted.

## **References:**

- <https://www.geeksforgeeks.org/nodejs/>
- <https://www.geeksforgeeks.org/angularjs/>
- <https://youtu.be/i9MHigUZKEM> - **Angular JS**
- [https://www.youtube.com/watch?v=TIB\\_eWDSMt4](https://www.youtube.com/watch?v=TIB_eWDSMt4) – **Node JS**