

INTRODUCTION OF HEALTH CARE AND TELEMEDICINE

1. INTRODUCTION

“Health care” involves the organized provision of medical services and interventions to maintain or improve individual and community well-being. It encompasses a spectrum of practices, from preventive measures to therapeutic interventions, delivered by various healthcare professionals in diverse settings.

Telemedicine is a subset of healthcare leveraging digital communication technologies for remote medical consultations, diagnostics, and treatment. It transcends geographical constraints, offering virtual healthcare services that enhance accessibility and efficiency. Telemedicine includes virtual consultations, remote monitoring, and digital health records, providing cost-effective and convenient healthcare solutions, especially in situations where in-person visits are challenging.

1.1.ADVANTAGES:

- Telemedicine can help to improve access to care, especially for patients in rural and underserved areas.
- Telemedicine can help to improve continuity of care by providing more frequent and regular contact between patients and their care providers.
- Telemedicine can help to save on costs by reducing the need for travel and accommodation for patients and care providers.
- Telemedicine can offer more flexible appointment times and locations.
- Telemedicine can be more convenient for patients as they can receive care from the comfort of their own homes.
- Telemedicine can help to improve patient satisfaction by providing a more convenient and personalized care experience.
- Telemedicine can help to increase access to specialists, who may not be available in a patient’s local area.

1.2.OBJECTIVES:

- Enable access to healthcare services beyond geographical constraints.
- Streamline healthcare processes through digital communication technologies.
- Reduce healthcare costs by minimizing the need for physical infrastructure and In –person visits.
- Facilities easy access to medical consultations, diagnostics, and treatment.
- Promote equal access to services , overcoming barriers to traditional in – person care

1.3.GOALS:

- Improving accessibility to medical services
- Enhancing patient's outcomes.
- Reducing healthcare cost.
- Facilitating remote consultations for timely interventions.
- Ensuring data security and privacy of patient's records.

2. PHP:

PHP is a server-side scripting language designed for web development but also used as a general purpose programming language. **PHP** is now installed on more than 244 million website and 2.1 million web servers. Originally created by **Rasmus Lerdorf** in 1995, the reference implementation of **PHP** is now produced by The **PHP** Group. While **PHP** originally stood for **Personal Home Page**, it now stands for **PHP; Hypertext Preprocessor**, a recursive acronym. **PHP** code is interpreted by a web server with a **PHP** processor module, which generates the resulting web page: **PHP** commands can be embedded directly into an **HTML** source document. It has also evolved to include a command-line interface capability and can be used in standalone graphical applications. **PHP** is free software released under the **PHP** License. **PHP** can be deployed on most web servers and also as a standalone shell on almost every operating system and platform, free of charge.

2.1.Php Syntax:

```
< ? Php  
Echo 'Hello Words';  
?>
```

2.2.Why we use PHP?

You have obviously head of a number of programming language out there you may be wondering why we should want to use **PHP** as our poison for the web programming. Below are some of the compelling reasons.

- **PHP** is open source and free
- Large community document.
- It is regular updated to keep abreast with the latest technology trends.

3. HTML

HTML stands for **Hypertext Markup Language** for creating web pages.

- HTML stands for hypertext markup language.
- It describes structure of web pages.
- HTML elements are represented by tags.
- It consist series of elements.

3.1. HTML Example:

```
<html>
  <head>
    <title> page title </title>

  </head>
  <body>
    <h1> my first heading </h1>
    <p> my first paragraph </p>
  </body>
</html>
```

3.2. Advantages of HTML:

- The first advantage it is widely used.
- Every browser support HTML language.
- Easy to learn and use.
- It is by default in every window so you don't need to purchase extra software.
- We can integrate HTML with CSS, JavaScript, and Php etc.

3.3. Disadvantages of HTML:

- It can create only static and plain pages so if we need dynamic pages then **HTML**.
- Need to write a lot of codes for making simple webpage.
- Security features are not good in **HTML**.
- If we need to write long code for making a webpage then it produces some complexity.

3.4. Why HTML is used in web pages:

Web developing includes two main sections.

Backend: codes that are written by **Python, PHP, ASP.Net**, and **Go** language to name but a few by the developer.

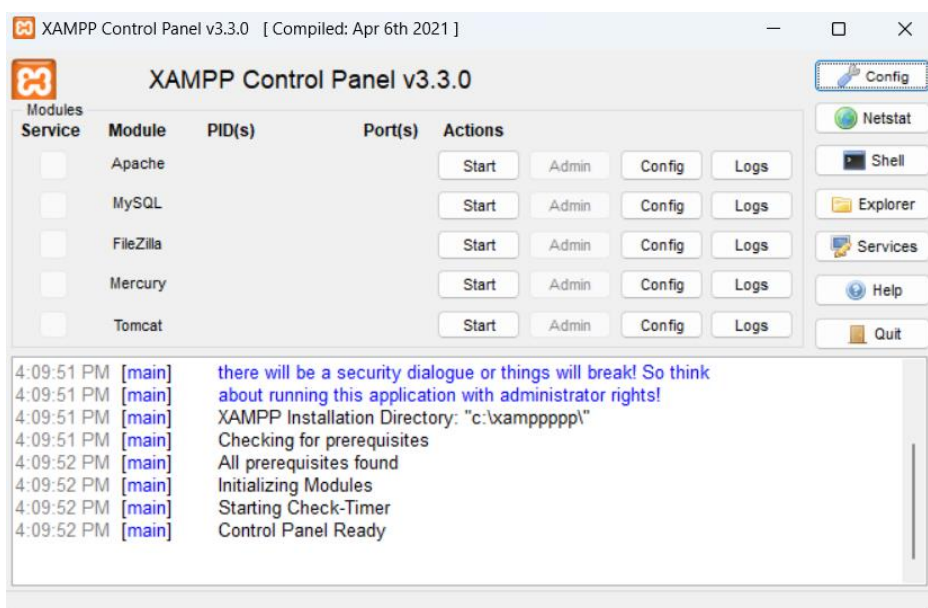
Frontend: which is makeup showed by clients or users browsers and for doing this we should use **HTML (Hypertext Markup Language)**, it just shows some elements for users and doesn't run any functions.

When we go to a specific **URL**, your request is sent to your desired server and it'll render for your **HTML** of the site in fact the server runs any server-side functions.

4. Xampp

XAMPP is a free and open-source cross-platform web server solution stack package developed by **Apache Friends**, consisting mainly of the Apache **HTTPServer**, **MariaDB** database, and interpreters for scripts written in the **PHP** and **Perl programming languages**. Since most actual web server deployments use the same components as **XAMPP**, it makes transitioning from a local test server to a live server possible.

XAMPP's ease of deployment means a **WAMP** or **LAMP** stack can be installed quickly and simply on an **operating system** by a developer, with the advantage that common add-in applications such as **Word Press** and **Joomla!** Can also be installed with similar ease using **Bitnami**.



I. Xampp

5. SYSTEM ANALYSIS:

5.1. Main Problem With Existing System:

- **Time Consuming:**

In our current system, all the processes are carried out by human so naturally it. Requires more time and, in that case, it will require more time to solve problem.

- **Difficult in Implementing:**

It is difficult to implement the solution because sometime the problem is big and cannot solve by any people. So we must have to prepare about this always to do what in this.

5.2. REQUIREMENT SPECIFICATION:

a) Software Requirements:

- Operating System: - Window 8, Window 10, Window 11, Linux etc.
- Framework:- Laravel 5.8*
- Server: - Xampp, Wamp, etc.
- Database:- MySQL/phpmyadmin)
- Text Editor: - Vs. Code, Notepad++ etc.
- Other Software: - Git, Composer etc.

b) Hardware Requirements:

- Processor:- Intel i3 or more
 - Processor Speed:- 2.30GHz or more
- Hard Disk:- 100 GB or more
- RAM:- 4GB or more
- Other: - Keyboard, Mouse, etc.

6. SYSTEM DESIGN:

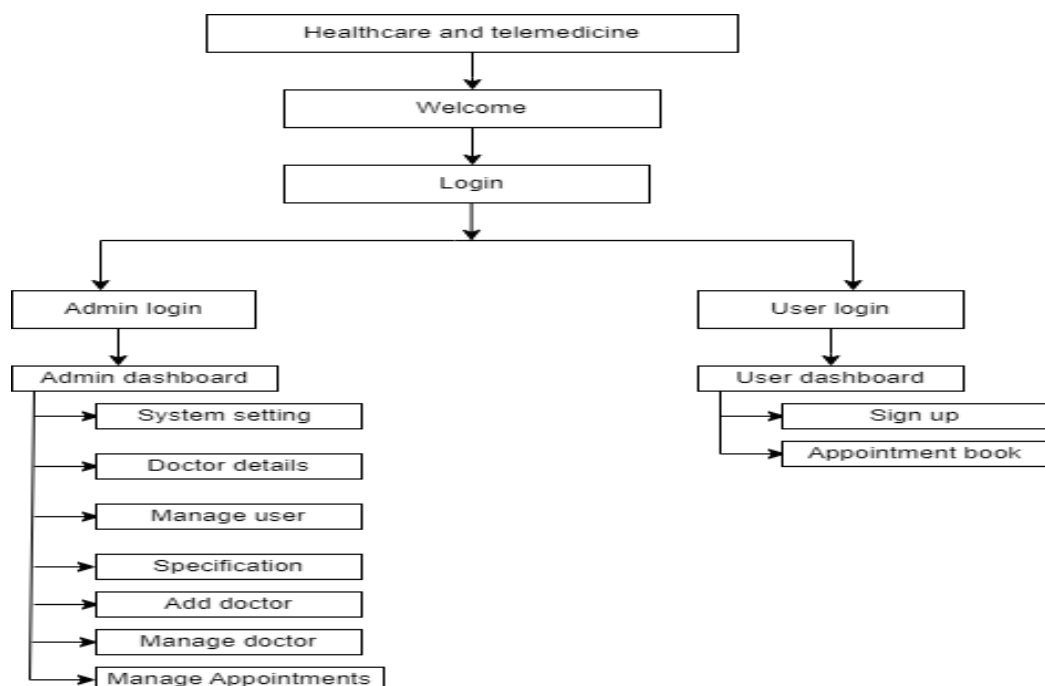
The system design for healthcare and telemedicine involves the integration of various technologies to ensure efficient and accessible healthcare services. The architecture includes secure electronic health record (EHR) systems for storing and managing patient data, interoperability standards for seamless information exchange between healthcare providers, and robust telemedicine platforms for remote consultations. The system prioritizes data security and privacy, employing encryption and authentication measures to protect sensitive health information.

Additionally, real-time communication tools enable healthcare professionals to collaborate and consult remotely, fostering timely and effective patient care. User-friendly interfaces and mobile applications enhance accessibility, allowing patients to schedule appointments, access medical records, and participate in virtual consultations. Overall, the system design aims to leverage technology to bridge gaps in healthcare delivery, providing a comprehensive and patient-centric approach to medical services.

6.1. MODULE:

Module is a diagrammatic representation of functionality within a project. It may have one or many module in software. In other words, module is an approach that subdivides a system into smaller parts called Module that independently created and then in Different Systems. Each of a set of standardized parts or independent unit can be used to construct a more complex structure.

A module is a high-level description of a functional area, consisting of a group of processes describing the functionality of the module and a group of packages implementing the functionality. Module components include portability, which allows then to be used in a variety of systems, and interoperability, which allows them to function with the components of other system.



II. Module of Healthcare and telemedicine

6.2. INFORMATION ABOUT FORM:

HOME: This page is the main page through which new site visitor can save their detail and enter into the system.

ABOUT US: This page contains information about the site owner.

CONTACT US: This is page contain administrator email id, comment box to send message to the admin.

LOGIN/REGISTRATION: Login/Registration form is the page which allow authorized person to enter into site and restrict unauthorized person to enter into this site.

(ADMIN FORM) HOMEPAGE: This page is the main page through which admin can view some attraction able things to explore more.

USER POSTING: Administrator can enter information about packages through this page and also can modify.

SITE SETTING: Administrator can fill up the frontend page details like logo, site name, Social media handles, etc.

6.3. ER DIAGRAM:

ER diagram stands for Entity Relationship Diagram. It is a High Level Data Diagram. This Diagram is used to define the data elements and relationship for a specified system. It develops a conceptual design for the database. It also develops a very simple and easy to design view of data. In ER diagram, the database structure is portrayed as a diagram called an entity relationship diagram. The components of ER diagram are explained below:-

- a) **Entity:** An entity may be any object, class, person or place. In the ER diagram, an entity can be represented as Rectangles.



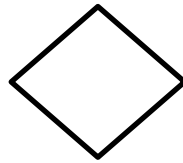
a. Fig: Rectangle

- b) **Attribute:** The attribute is used to describe the property of an entity. Eclipse is used to represent an attribute.

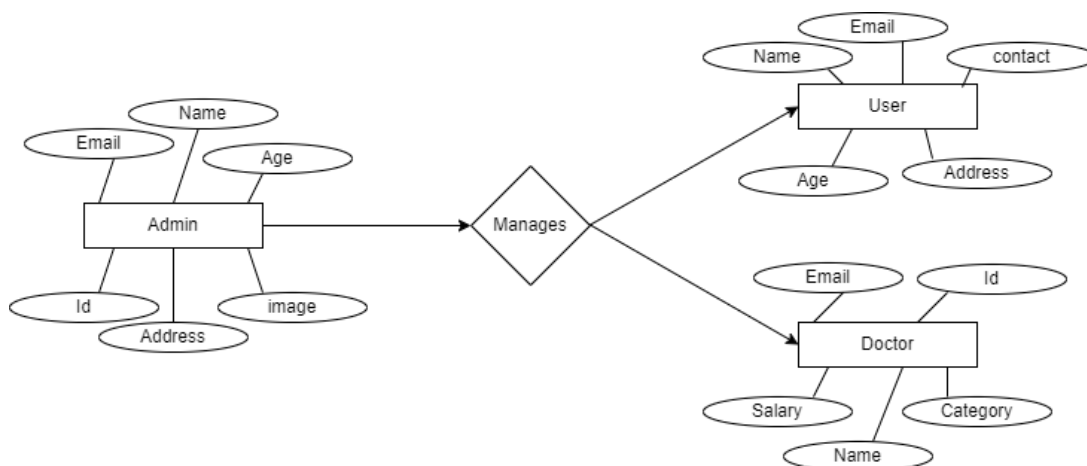


b. Fig: Eclipse

- c) **Relationship:** A Relationship is used to describe the relation between entities. Diamond or Rhombus is used to represent the relationship.



c. Fig: Diamond

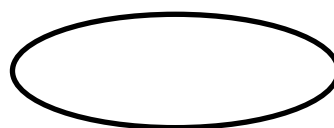


III. ER – Diagram of Admin and User ,Doctor

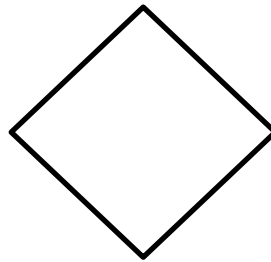
6.4. Flowchart Diagram:

A Flowchart is a visual representation of a process that makes it easy to understand the process at a glance. Flow Charts depict the nature and flow of steps in a process. Steps and decision points of a process are linked by connecting lines and directional arrows showing process flow direction. This makes it easy for anyone to rationally follow the process from beginning to end. It is important to note that each process step is represented by a different symbol showing different types of actions in a process. There are mainly four types of flowchart symbol which are given below:-

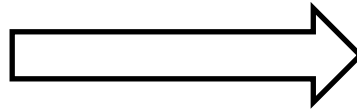
- a) **Terminator:** The Terminator symbol represents the starting or ending point of the system.



- b) **Decision:** A diamond represents a decision or branching point. Lines coming out from the diamond indicates different possible situations, leading to different sub processes.



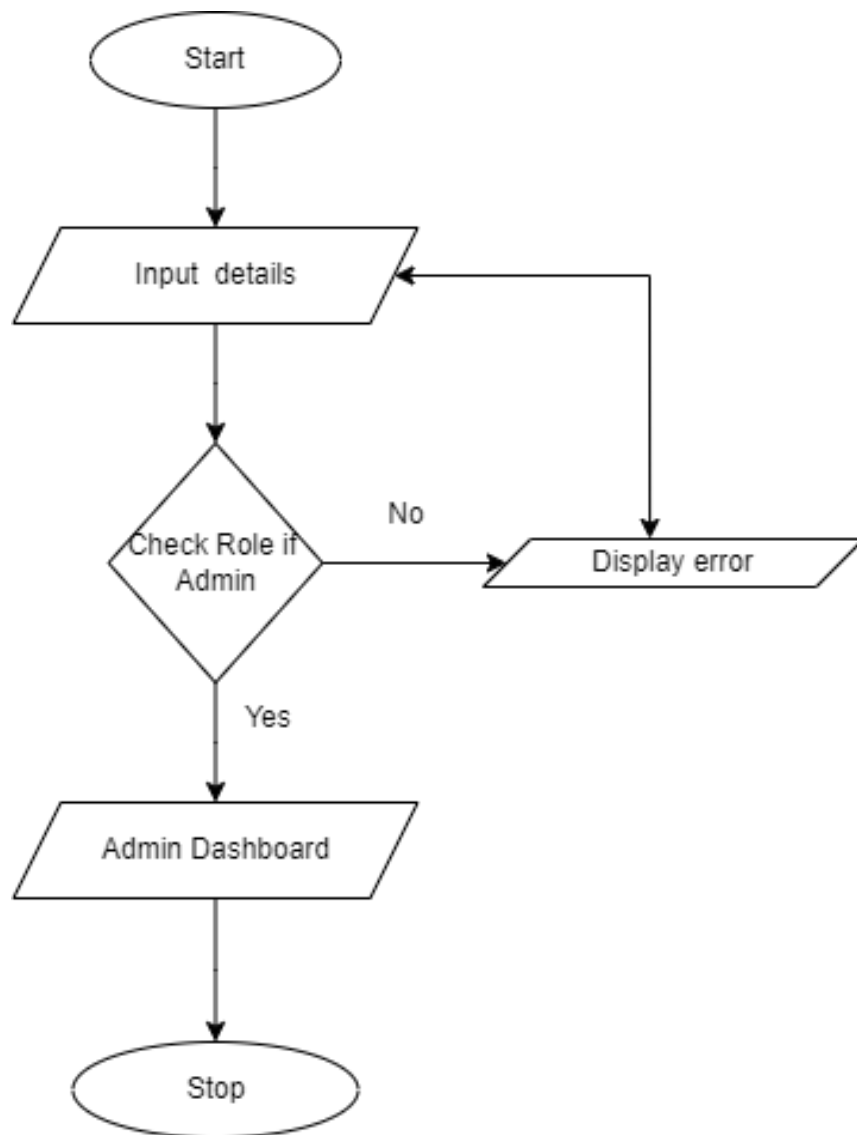
- c) **Flow:** Lines represent the flow of the sequence and direction of a process.



- d) **Data:** It represents information entering or leaving the system. An input might be an order form the customer. Output can be a product to be delivered

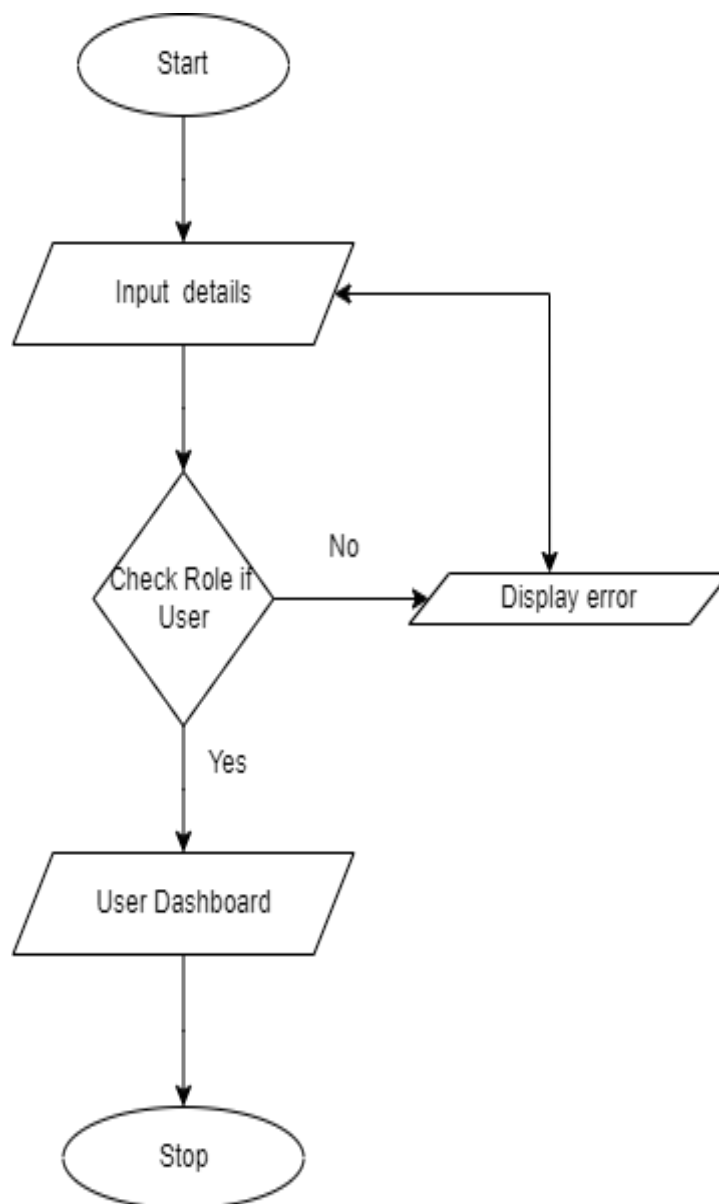


6.5. ADMIN LOGIN FLOW CHART:



IV. Fig: Admin Login Flow chart Diagram

6.6. USER LOGIN FLOWCHART :



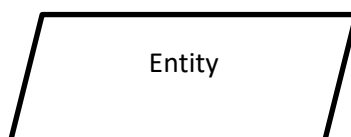
V. Fig: User Login Flowchart Diagram

7. DATAFLOW DIAGRAM:

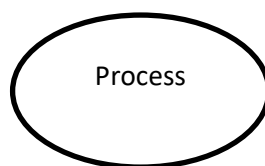
Dataflow Diagram is a graphical representation of flow of data in an information system. It is capable of depicting incoming data flow, outgoing data flow and stored data.

The DFD does not mention anything about how data flows through the system. There is a prominent difference between the DFD and Flowchart. The Flowchart depicts flow of control in program modules. DFD depict flow of data in the system at various levels. DFD does not contain any control or branch elements. The different component of Dataflow Diagram is explained below:-

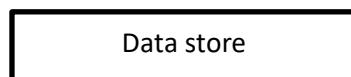
- a) **Entities:** Entities are source and destination of information data. Entities are represented by a rectangles with their respective names.



- b) **Process:** Activities action taken on and the data are represented by Circle or oval Shapes.



- c) **Data Storage :** There are two variants of data storage- It can either be represented as a rectangle with absence of both smaller sides or as an open sided rectangle with only one side missing.



- d) **Data Flow:** Movement of data is shown by pointed arrows. Data movement is shown from the base of arrow as its source towards head of the arrow as destination.

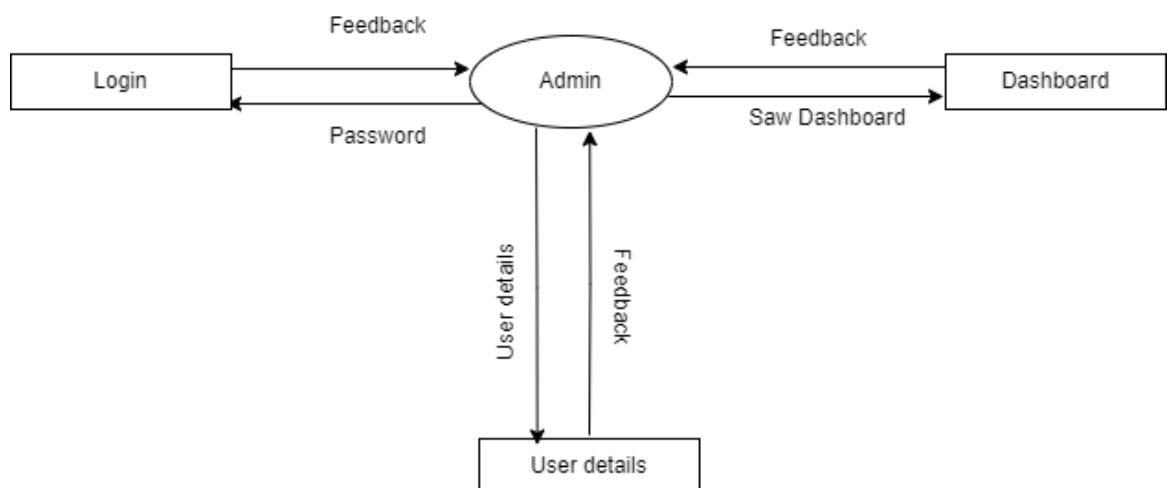


8. CONTEXT DIAGRAM:



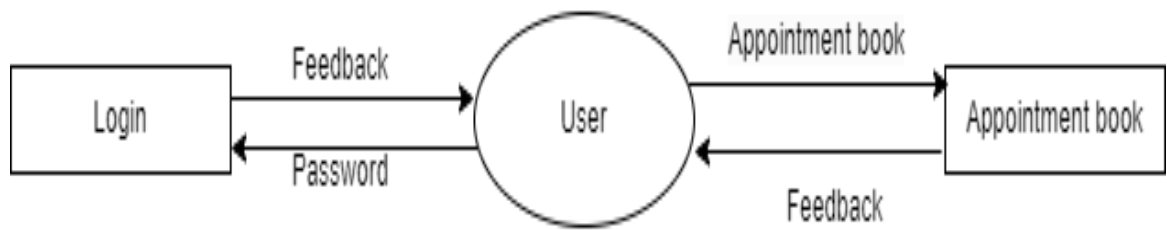
a) DFD Level 0: Context Diagram

9. Admin login System



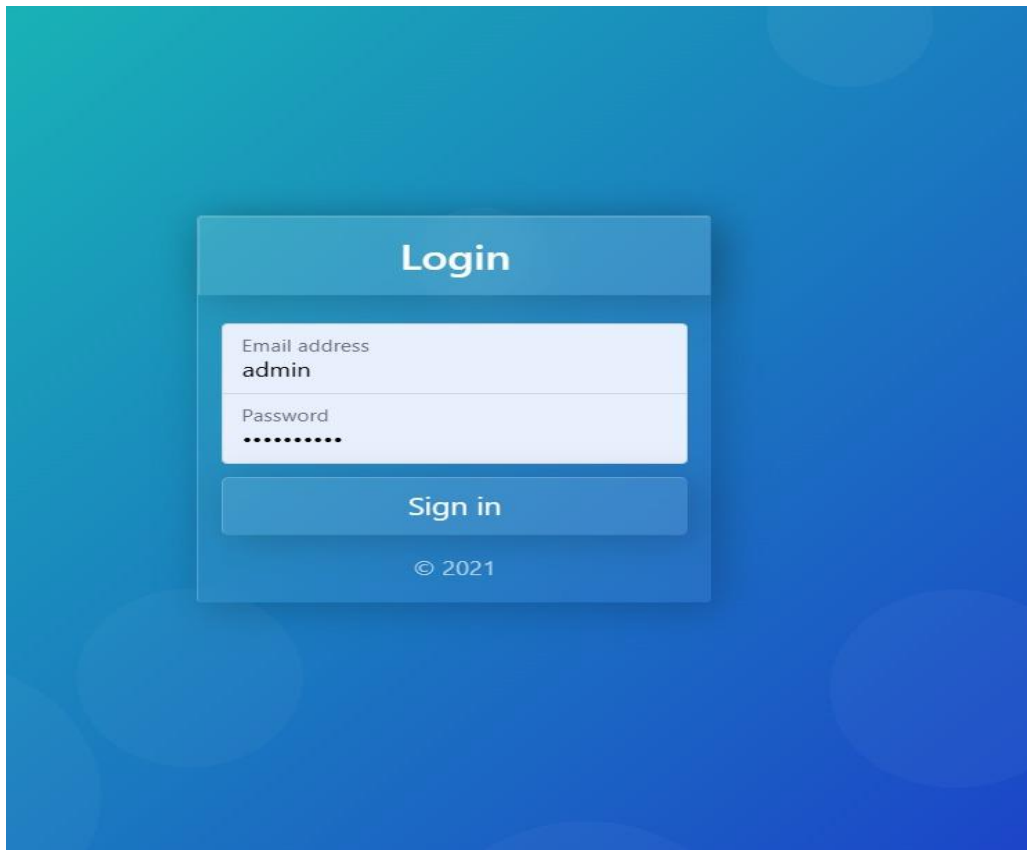
b) DFD Level 1.0: Admin Login

9.1. User login System:



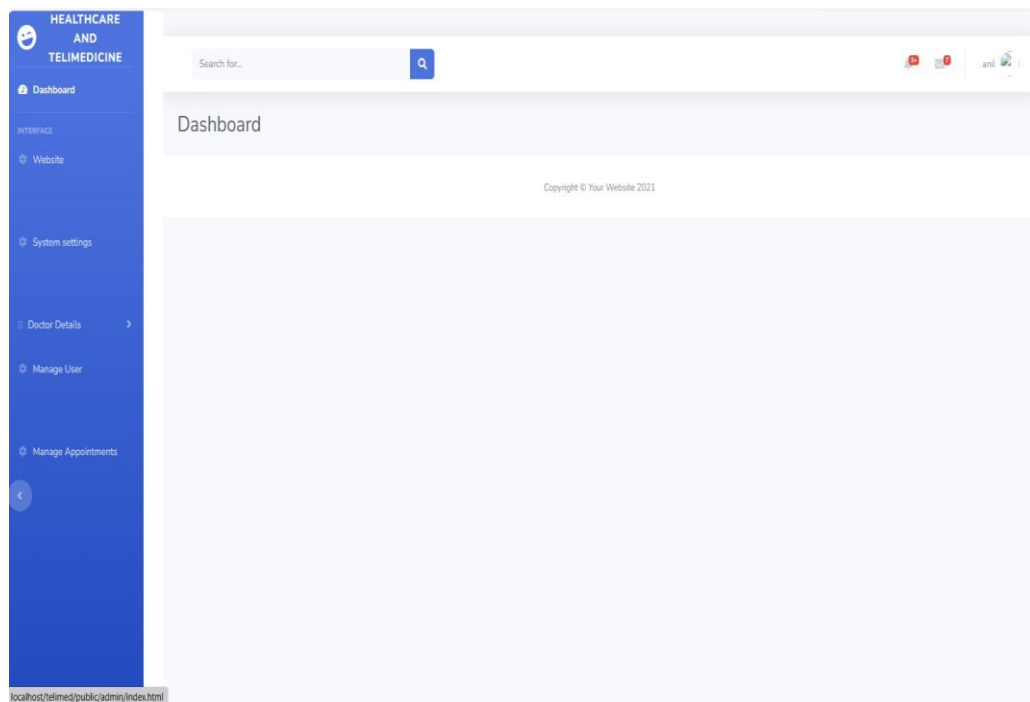
c) DFD Level 1.1: User Login System

10. LOGIN PAGE:



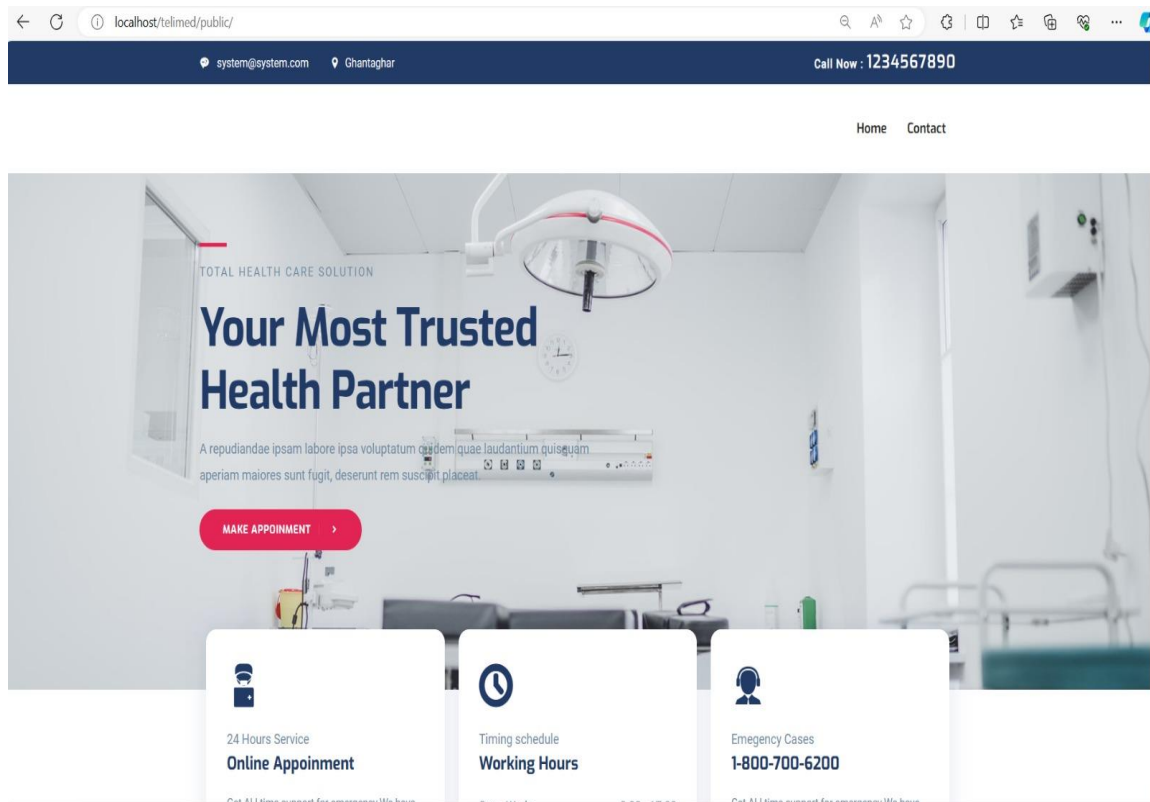
VI. Login Page

10.1. ADMIN HOME PAGE:



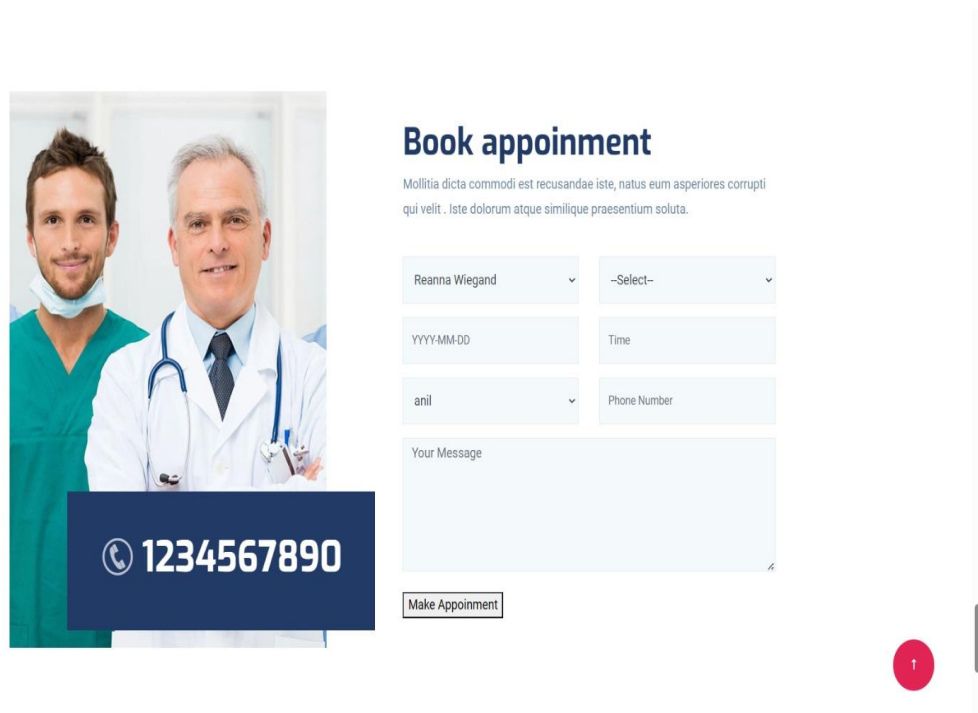
VII. Fig : Admin Home Page

10.2. USER HOME PAGE:



VIII. Fig: User Home Page

10.3. USER BOOK APPOINTMENT:



IX. Fig: User Book Appointment

10.4. SYSTEM SETTING:

HEALTHCARE AND TELEMEDICINE

Search for...

Dashboard

Website

System settings

Doctor Details

Manage User

Manage Appointments

System Settings

Name

Salogon

Phone

Email address

Address

Logo

Choose File No file chosen

Submit

X. Fig: System Setting

10.5. USER SPECIFICATION TABLES:

ID	Name	Role	Status
1	Emilia Wilson	I	Active
2	Emilia Wilson	I	Active
3	Emilia Wilson	I	Active
4	Emilia Wilson	I	Active
5	Emilia Wilson	I	Active
6	Emilia Wilson	I	Active
7	Emilia Wilson	I	Active
8	Emilia Wilson	I	Active
9	Emilia Wilson	I	Active
10	Emilia Wilson	I	Active

HEALTHCARE AND TELEMEDICINE

Manage Appointments

Manage User

Doctor Details

System settings

Website

Dashboard

User Specification Tables

ID

Name

Role

Status

Active

Inactive

XI. Fig: User Specification Tables

11. DATABASE SQL TABLES:

11.1. USER LOGIN TABLES:

id	name	email	email_verified_at	password	mobile	image	remember_token	created_at	updated_at	age	address	role
1	Admin	admin@admin.com	NULL	\$2y\$10\$omATdLUASUEseXR72py emFP3yPWWiect5eB2LU...	NULL	NULL	NULL	2024-01-10 08:03:08	2024-01-10 08:03:08	NULL	NULL	admin
2	Bernardo Beer IV	cecilia.mcdemott@example.net	2024-01-10 08:03:08	\$2y\$10\$92DXUqkjOQrOC55yMl Ye4oKoEa3Rd8lCj oga7a2...	NULL	https://www.bing.com/images/search?view=detailV2&c...	rhZfJ67aor	2024-01-10 08:03:08	2024-01-10 08:03:08	NULL	NULL	user
3	Callyn Swaniawski	enos.schumm@example.com	2024-01-10 08:03:08	\$2y\$10\$92DXUqkjOQrOC55yMl Ye4oKoEa3Rd8lCj oga7a2...	NULL	NULL	CMfRagASGKv	2024-01-10 08:03:08	2024-01-10 08:03:08	NULL	NULL	user
5	Ashlynn Swaniawski	blus.grimes@example.com	2024-01-10 08:03:08	\$2y\$10\$92DXUqkjOQrOC55yMl Ye4oKoEa3Rd8lCj oga7a2...	NULL	NULL	nJQ2volIG9	2024-01-10 08:03:08	2024-01-10 08:03:08	NULL	NULL	user
6	Bernhard Mills	ondricka.rubye@example.net	2024-01-10 08:03:08	\$2y\$10\$92DXUqkjOQrOC55yMl Ye4oKoEa3Rd8lCj oga7a2...	NULL	NULL	3U1theRLaf	2024-01-10 08:03:08	2024-01-10 08:03:08	NULL	NULL	user
7	Frieda Emmenrich MD	brosenbaum@example.net	2024-01-10 08:03:08	\$2y\$10\$92DXUqkjOQrOC55yMl Ye4oKoEa3Rd8lCj oga7a2...	NULL	NULL	g9p2HvqSTx	2024-01-10 08:03:08	2024-01-10 08:03:08	NULL	NULL	user
8	Jabari Cormier MD	ondricka.cheyenne@example.com	2024-01-10 08:03:08	\$2y\$10\$92DXUqkjOQrOC55yMl Ye4oKoEa3Rd8lCj oga7a2...	NULL	NULL	#tQaSGx1	2024-01-10 08:03:08	2024-01-10 08:03:08	NULL	NULL	user
9	Natalie Schultz	waltd.towne@example.com	2024-01-10 08:03:08	\$2y\$10\$92DXUqkjOQrOC55yMl Ye4oKoEa3Rd8lCj oga7a2...	NULL	NULL	EYfweEKVO	2024-01-10 08:03:08	2024-01-10 08:03:08	NULL	NULL	user
10	Noel Wisock	cbore@example.org	2024-01-10 08:03:08	\$2y\$10\$92DXUqkjOQrOC55yMl Ye4oKoEa3Rd8lCj oga7a2...	NULL	NULL	tu7d73YkC	2024-01-10 08:03:08	2024-01-10 08:03:08	NULL	NULL	user
12	Roslyn Frame	zreichel@example.com	2024-01-10 08:03:08	\$2y\$10\$92DXUqkjOQrOC55yMl Ye4oKoEa3Rd8lCj oga7a2...	NULL	NULL	02B1TyXm60	2024-01-10 08:03:08	2024-01-10 08:03:08	NULL	NULL	user

XIII. User Login Tables

11.2. SYSTEM SETTING TABLES:

id	name	slogan	phone	email	address	logo	created_at	updated_at
1	Telimed	Nice Slogan sir	1234567890	system@system.com	Ghantaghar	logo.jpeg	NULL	NULL

XIV. System Setting Tables.

11.3. USER MAIL TABLES:

Server: 127.0.0.1 » Database: telmed » Table: usermails

Showing rows 0 - 3 (4 total, Query took 0.0005 seconds)

SELECT * FROM 'usermails'

Number of rows: 25 Filter rows: Search this table Sort by key: None

	id	doctor_id	user_id	Appointment_no	created_at	updated_at
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	57	1	5828032124207	2024-01-12 01:57:26	2024-01-12 01:57:26
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	2	57	1	161086442402	2024-01-12 01:58:57	2024-01-12 01:58:57
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	3	57	1	4450591743754	2024-01-12 02:08:26	2024-01-12 02:08:26
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	4	57	1	6945107685465	2024-01-12 02:09:04	2024-01-12 02:09:04

Query results operations: Print, Copy to clipboard, Export, Display chart, Create view

XV. User Mail Tables

11.4. DOCTOR SPECIFICATION TABLES:

Server: 127.0.0.1 » Database: telmed » Table: specifications

Showing rows 0 - 24 (100 total, Query took 0.0005 seconds)

SELECT * FROM 'specifications'

Number of rows: 25 Filter rows: Search this table Sort by key: None

	id	specification	status	created_at	updated_at
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	Reanna Wiegand	1	2024-01-10 08:03:08	2024-01-10 08:03:08
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	2	Everett O'Kon	1	2024-01-10 08:03:08	2024-01-10 08:03:08
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	3	Rae Crooks	1	2024-01-10 08:03:08	2024-01-10 08:03:08
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	4	Miss Marianne Crist	1	2024-01-10 08:03:08	2024-01-10 08:03:08
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	5	Elyse Bashirian	1	2024-01-10 08:03:08	2024-01-10 08:03:08
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	6	Kobe Schuppe	1	2024-01-10 08:03:08	2024-01-10 08:03:08
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	7	Darius Orn	1	2024-01-10 08:03:08	2024-01-10 08:03:08
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	8	Faustino Nikolaus	1	2024-01-10 08:03:08	2024-01-10 08:03:08
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	9	Emelia Wunsch	1	2024-01-10 08:03:08	2024-01-10 08:03:08
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	10	Andre Padberg DVM	1	2024-01-10 08:03:08	2024-01-10 08:03:08
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	11	Ms. Nova Hill III	1	2024-01-10 08:03:08	2024-01-10 08:03:08
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	12	Raina Dare	1	2024-01-10 08:03:08	2024-01-10 08:03:08
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	13	Dr. Donavon Hand III	1	2024-01-10 08:03:08	2024-01-10 08:03:08
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	14	Jena Cartwright	1	2024-01-10 08:03:08	2024-01-10 08:03:08
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	15	Gennaro Prosacco DVM	1	2024-01-10 08:03:08	2024-01-10 08:03:08
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	16	Evalyn Gutmann	1	2024-01-10 08:03:08	2024-01-10 08:03:08
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	17	Cathryn Hills	1	2024-01-10 08:03:08	2024-01-10 08:03:08

XVI. Doctor Specification Tables

11.5. DOCTOR TABLES:

Server: 127.0.0.1 » Database: telmed » Table: doctors

24 (99 total, Query took 0.0022 seconds)

Doctors

[[Edit]] [[Explain SQL]] [[Create PHP code]] [[Refresh]]

Show all Number of rows: 25 Filter rows Search this table Sort by key: None

		id	specification_id	name	phone	email	image	fee	password	status	description	created_at	update
y	Delete	1	4	Prof. Alena Homenick DVM	(460) 665-1000 x5686	tilman.isabelle@example.com	https://th.bing.com/th/vid/OIP/Nw85ngfYUowRp4Etlh...	541	\$2y\$10\$7JUH6TVChvWUkKqutLxORC4ZEOG9WgCpqsFntc3...	1	Perferendis totam sapiente iusto voluptatem. Debit...	2024-01-10 08:03:17	2024-01-10 08:03:17
y	Delete	3	4	Eduardo Stokes	(821) 800-8129 x014	anika21@example.org	NULL	776	\$2y\$10\$6TwjP7sY3db6JufvqStek4N0SIF2k5T7YwySYER...	1	Quaerat amet et ut dolores aliquid asperiores. Est...	2024-01-10 08:03:17	2024-01-10 08:03:17
y	Delete	4	4	Hoyt Schneider	402.615.0073 x97267	daugherty.cristian@example.net	NULL	658	\$2y\$10\$6jcuBHV0spVh8egL3f5aOiwOuwaFySRK6RYESW0u...	1	Qui sint hic qui eius. Enim omnis maiores eligendi...	2024-01-10 08:03:17	2024-01-10 08:03:17
y	Delete	5	41	Mina Wiza	991.650.1005 x91970	mandy.dooley@example.com	NULL	939	\$2y\$10\$WVYJTKL6GX9KfmaHY3eEaVh.q5VdJ5urHBU7pRtL...	1	Est quas impedit porro quos iure facilis. Qui aule...	2024-01-10 08:03:17	2024-01-10 08:03:17
y	Delete	6	62	Mr. Rupert O'Connell III	1-436-849-1492	mmonahan@example.com	NULL	389	\$2y\$10\$WHKQ2kssmFfMLsahWQzcO05QyY6L2T0gIXC8Gx.C...	1	In quo et alias nobis at et rem. Dolores consequat...	2024-01-10 08:03:17	2024-01-10 08:03:17
											Repellat in	2024-01-10	2024-01-10

Console

Info 871 164 0403

XVII. Doctor Tables.

12. CODE:

12.1. Footer:

```
<!-- Footer -->
<footer class="sticky-footer bg-white">
  <div class="container my-auto">
    <div class="copyright text-center my-auto">
      <span>Copyright &copy; Your Website 2021</span>
    </div>
  </div>
</footer>
<!-- End of Footer -->
```

12.2. Header:

```
<!-- Topbar -->
<nav class="navbar navbar-expand navbar-light bg-white topbar mb-4 static-top shadow">

<!-- Sidebar Toggle (Topbar) -->
<button id="sidebarToggleTop" class="btn btn-link d-md-none rounded-circle mr-3">
  <i class="fa fa-bars"></i>
</button>

<!-- Topbar Search -->
<form
  class="d-none d-sm-inline-block form-inline mr-auto ml-md-3 my-2 my-md-0 mw-100 navbar-search">
  <div class="input-group">
    <input type="text" class="form-control bg-light border-0 small" placeholder="Search for..."
      aria-label="Search" aria-describedby="basic-addon2">
    <div class="input-group-append">
      <button class="btn btn-primary" type="button">
        <i class="fas fa-search fa-sm"></i>
      </button>
    </div>
  </div>
</form>
```

```
<!-- Topbar Navbar -->
<ul class="navbar-nav ml-auto">

  <!-- Nav Item - Search Dropdown (Visible Only XS) -->
  <li class="nav-item dropdown no-arrow d-sm-none">
    <a class="nav-link dropdown-toggle" href="#" id="searchDropdown" role="button"
      data-toggle="dropdown" aria-haspopup="true" aria-expanded="false">
      <i class="fas fa-search fa-fw"></i>
    </a>
    <!-- Dropdown - Messages -->
    <div class="dropdown-menu dropdown-menu-right p-3 shadow animated--grow-in"
      aria-labelledby="searchDropdown">
      <form class="form-inline mr-auto w-100 navbar-search">
        <div class="input-group">
          <input type="text" class="form-control bg-light border-0 small"
            placeholder="Search for..." aria-label="Search"
            aria-describedby="basic-addon2">
          <div class="input-group-append">
            <button class="btn btn-primary" type="button">
              <i class="fas fa-search fa-sm"></i>
            </button>
          </div>
        </div>
      </form>
    </div>
  </li>
```



```
<!-- Nav Item - Alerts -->
<li class="nav-item dropdown no-arrow mx-1">
  <a class="nav-link dropdown-toggle" href="#" id="alertsDropdown" role="button"
    data-toggle="dropdown" aria-haspopup="true" aria-expanded="false">
    <i class="fas fa-bell fa-fw"></i>
    <!-- Counter - Alerts -->
    <span class="badge badge-danger badge-counter">3</span>
  </a>
  <!-- Dropdown - Alerts -->
  <div class="dropdown-list dropdown-menu dropdown-menu-right shadow animated--grow-in"
    aria-labelledby="alertsDropdown">
    <h6 class="dropdown-header">
      Alerts Center
    </h6>
    <a class="dropdown-item d-flex align-items-center" href="#">
      <div class="mr-3">
        <div class="icon-circle bg-primary">
          <i class="fas fa-file-alt text-white"></i>
        </div>
      </div>
      <div>
        <div class="small text-gray-500">December 12, 2019</div>
        <span class="font-weight-bold">A new monthly report is ready to download!</span>
      </div>
    </a>
    <a class="dropdown-item d-flex align-items-center" href="#">
      <div class="mr-3">
        <div class="icon-circle bg-success">
          <i class="fas fa-donate text-white"></i>
        </div>
      </div>
      <div>
        <div class="small text-gray-500">December 7, 2019</div>
        <span>$290.29 has been deposited into your account!</span>
      </div>
    </a>
    <a class="dropdown-item d-flex align-items-center" href="#">
      <div class="mr-3">
        <div class="icon-circle bg-warning">
          <i class="fas fa-exclamation-triangle text-white"></i>
        </div>
      </div>
      <div>
        <div class="small text-gray-500">December 2, 2019</div>
        <span>Spending Alert: We've noticed unusually high spending for your account.</span>
      </div>
    </a>
    <a class="dropdown-item text-center small text-gray-500" href="#">Show All Alerts</a>
  </div>
</li>
```



```
<!-- Nav Item - Messages -->
<li class="nav-item dropdown no-arrow mx-1">
  <a class="nav-link dropdown-toggle" href="#" id="messagesDropdown" role="button"
    data-toggle="dropdown" aria-haspopup="true" aria-expanded="false">
    <i class="fas fa-envelope fa-fw"></i>
    <!-- Counter - Messages -->
    <span class="badge badge-danger badge-counter">7</span>
  </a>
  <!-- Dropdown - Messages -->
  <div class="dropdown-list dropdown-menu dropdown-menu-right shadow animated--grow-in"
    aria-labelledby="messagesDropdown">
    <h6 class="dropdown-header">
      Message Center
    </h6>
    <a class="dropdown-item d-flex align-items-center" href="#">
      <div class="dropdown-list-image mr-3">
        
        <div class="status-indicator bg-success"></div>
      </div>
      <div class="font-weight-bold">
        <div class="text-truncate">Hi there! I am wondering if you can help me with a
          problem I've been having.</div>
        <div class="small text-gray-500">Emily Fowler · 58m</div>
      </div>
    </a>
    <a class="dropdown-item d-flex align-items-center" href="#">
      <div class="dropdown-list-image mr-3">
        
        <div class="status-indicator"></div>
      </div>
      <div>
        <div class="text-truncate">I have the photos that you ordered last month, how
          would you like them sent to you?</div>
        <div class="small text-gray-500">Jae Chun · 1d</div>
      </div>
    </a>
    <a class="dropdown-item d-flex align-items-center" href="#">
      <div class="dropdown-list-image mr-3">
        
        <div class="status-indicator bg-warning"></div>
      </div>
      <div>
        <div class="text-truncate">Last month's report looks great, I am very happy with
          the progress so far, keep up the good work!</div>
        <div class="small text-gray-500">Morgan Alvarez · 2d</div>
      </div>
    </a>
    <a class="dropdown-item d-flex align-items-center" href="#">
      <div class="dropdown-list-image mr-3">
        
        <div class="status-indicator bg-success"></div>
      </div>
      <div>
        <div class="text-truncate">Am I a good boy? The reason I ask is because someone
          told me that people say this to all dogs, even if they aren't good...</div>
        <div class="small text-gray-500">Chicken the Dog · 2w</div>
      </div>
    </a>
    <a class="dropdown-item text-center small text-gray-500" href="#">Read More Messages</a>
  </div>
</li>

<div class="topbar-divider d-none d-sm-block"></div>
```

```
<!-- Nav Item - User Information -->
<li class="nav-item dropdown no-arrow">
  <a class="nav-link dropdown-toggle" href="#" id="userDropdown" role="button"
    data-toggle="dropdown" aria-haspopup="true" aria-expanded="false">
    <span class="mr-2 d-none d-lg-inline text-gray-600 small">{{ auth()->check() ? auth()-
>user()->name : '' }}</span>
    
  </a>
  <!-- Dropdown - User Information -->
  <div class="dropdown-menu dropdown-menu-right shadow animated--grow-in"
    aria-labelledby="userDropdown">
    <a class="dropdown-item" href="#">
      <i class="fas fa-user fa-sm fa-fw mr-2 text-gray-400"></i>
      Profile
    </a>
    <a class="dropdown-item" href="#">
      <i class="fas fa-cogs fa-sm fa-fw mr-2 text-gray-400"></i>
      Settings
    </a>
    <a class="dropdown-item" href="#">
      <i class="fas fa-list fa-sm fa-fw mr-2 text-gray-400"></i>
      Activity Log
    </a>
    <div class="dropdown-divider"></div>
    <a class="nav-link" href="{{route('admin.login.logout')}}">
      <i class="fas fa-sign-out-alt fa-sm fa-fw mr-2 text-gray-400"></i>
      Logout
    </a>
  </div>
</li>
</ul>
</nav>
<!-- End of Topbar -->
```

12.3. SIDEBAR:

```

<!-- Sidebar -->
<ul class="navbar-nav bg-gradient-primary sidebar sidebar-dark accordion" id="accordionSidebar">

<!-- Sidebar - Brand -->
<a class="sidebar-brand d-flex align-items-center justify-content-center" href="index.html">
  <div class="sidebar-brand-icon rotate-n-15">
    <i class="fas fa-laugh-wink"></i>
  </div>
  <div class="sidebar-brand-text mx-3">Healthcare and Telemedicine </div>
</a>

<!-- Divider -->
<hr class="sidebar-divider my-0">

<!-- Nav Item - Dashboard -->
<li class="nav-item active">
  <a class="nav-link" href="{{route('dashboard')}}">
    <i class="fas fa-fw fa-tachometer-alt"></i>
    <span>Dashboard</span></a>
</li>

<!-- Divider -->
<hr class="sidebar-divider">

<!-- Heading -->
<div class="sidebar-heading">
  Interface
</div>

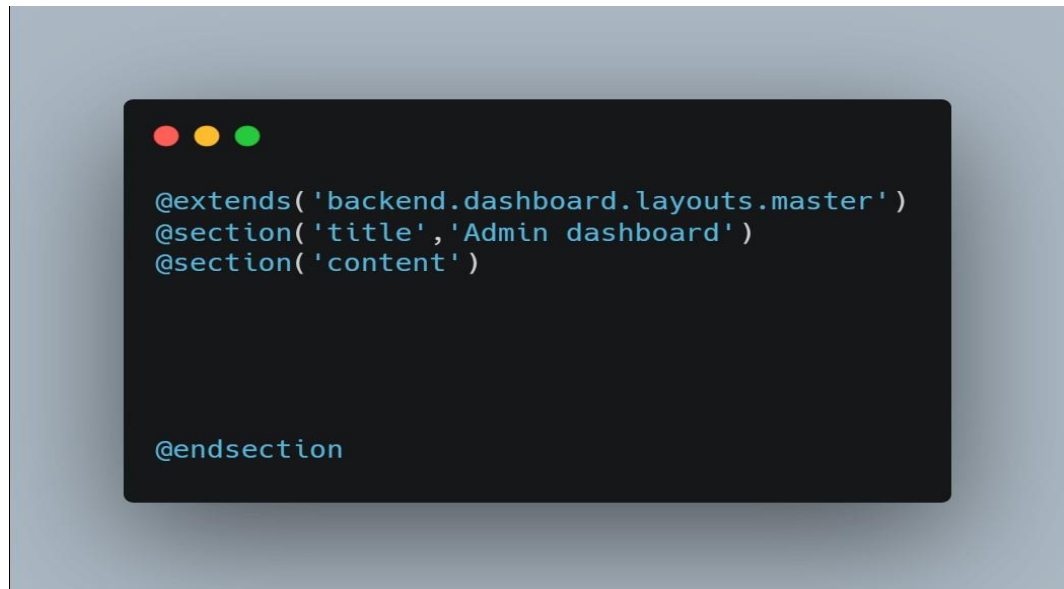
<!-- Nav Item - Pages Collapse Menu -->
<li class="nav-item">
  <a class="nav-link" href="{{url('/')}}">
    <i class="fas fa-fw fa-cog"></i>
    <span>Website</span>
  </a>
</li>
<li class="nav-item">
  <a class="nav-link" href="{{route('system-setting.form')}}">
    <i class="fas fa-fw fa-cog"></i>
    <span>System settings</span>
  </a>
</li>

<!-- Nav Item - Utilities Collapse Menu -->
<li class="nav-item">
  <a class="nav-link collapsed" href="#" data-toggle="collapse" data-
target="#collapseUtilities" aria-controls="collapseUtilities">
    <i class="fas fa-solid fa-eye"></i>
    <span>Doctor Details</span>
  </a>
  <div id="collapseUtilities" class="collapse" aria-labelledby="headingUtilities"
data-parent="#accordionSidebar">
    <div class="bg-white py-2 collapse-inner rounded">
      <h6 class="collapse-header">Doctor Details:</h6>
      <a class="collapse-item" href="{{route('specification.display')}}">Specifications</a>
      <a class="collapse-item" href="{{route('doctor.add.form')}}">Add Doctor</a>
      <a class="collapse-item" href="{{route('doctor.display')}}">Manage Doctor</a>
    </div>
  </div>
</li>
<li class="nav-item">
  <a class="nav-link" href="{{route('user.display')}}">
    <i class="fas fa-fw fa-cog"></i>
    <span>Manage User</span>
  </a>
</li>
<li class="nav-item">
  <a class="nav-link" href="{{route('appointment.display')}}">
    <i class="fas fa-fw fa-cog"></i>
    <span>Manage Appointments</span>
  </a>
</li>

<!-- Sidebar Toggler (Sidebar) -->
<div class="text-center d-none d-md-inline">
  <button class="rounded-circle border-0" id="sidebarToggle"></button>
</div>
</ul>
<!-- End of Sidebar -->

```

12.4. Admin Dashboard:



12.5. BACKEND ADMIN LOGIN:

```

<!DOCTYPE html>
<html lang="en">

<head>

  <meta charset="utf-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
  <meta name="description" content="">
  <meta name="author" content="">

  <title> @yield('title')</title>

  <!-- Custom fonts for this template-->
  <link href="{{asset('vendor/fontawesome-free/css/all.min.css')}}" rel="stylesheet" type="text/css">
  <link
    href="https://fonts.googleapis.com/css?family=Nunito:200,200i,300,300i,400,400i,600,600i,700,700i,800,800i,900,900i"
    rel="stylesheet">

  <!-- Custom styles for this template-->
  <link href="{{asset('css/sb-admin-2.min.css')}}" rel="stylesheet">

</head>

<body id="page-top">

  <!-- Page Wrapper -->
  <div id="wrapper">

    @include('backend.dashboard.common.sidebar')

    <!-- Content Wrapper -->
    <div id="content-wrapper" class="d-flex flex-column">

      <!-- Main Content -->
      <div id="content">

        @include('backend.dashboard.common.navbar')
        <!-- Begin Page Content -->
        <div class="container-fluid">

          <!-- Page Heading -->
          <div class="d-sm-flex align-items-center justify-content-between mb-4">
            <h1 class="h3 mb-0 text-gray-800">Dashboard</h1>
          </div>

          @yield('content')

        </div>
        @include('backend.dashboard.common.footer')

      </div>
      <!-- End of Content Wrapper -->

    </div>
    <!-- End of Page Wrapper -->

    <!-- Scroll to Top Button-->
    <a class="scroll-to-top rounded" href="#page-top">
      <i class="fas fa-angle-up"></i>
    </a>

    <!-- Bootstrap core JavaScript-->
    <script src="{{asset('vendor/jquery/jquery.min.js')}}"></script>
    <script src="{{asset('vendor/bootstrap/js/bootstrap.bundle.min.js')}}"></script>

    <!-- Core plugin JavaScript-->
    <script src="{{asset('vendor/jquery-easing/jquery.easing.min.js')}}"></script>

    <!-- Custom scripts for all pages-->
    <script src="{{asset('js/sb-admin-2.min.js')}}"></script>

    <!-- Page level plugins -->
    <script src="{{asset('vendor/chart.js/Chart.min.js')}}"></script>

    <!-- Page level custom scripts -->
    <script src="{{asset('js/demo/chart-area-demo.js')}}"></script>
    <script src="{{asset('js/demo/chart-pie-demo.js')}}"></script>

  </body>

</html>

```


13. CONCLUSION:

The healthcare and telemedicine project successfully leveraged technology to improve accessibility and delivery of medical services. Through virtual consultations, it addressed geographical barriers, ensuring timely healthcare access. User feedback highlighted increased convenience and reduced healthcare disparities. Ongoing advancements in telemedicine demonstrate its potential for shaping the future of healthcare delivery.

While telemedicine has demonstrated benefits, its widespread adoption requires addressing regulatory, technological, and privacy challenges. Striking a balance between in-person care and virtual solutions is crucial for optimizing healthcare delivery and improving overall patient outcomes.

14. REFERENCE:

- www.google.com
- www.javapoint.com
- www.w3school.com
- www.wikipedia.com
- www.youtube.com