

Project Introduction

The Hospital Management System is a comprehensive software solution designed to streamline the operations of healthcare facilities. This system aims to enhance the efficiency of hospital management by automating various processes, including patient registration, appointment scheduling, billing, and medical record management. With the increasing complexity of healthcare services, the need for an integrated management system has become essential for improving patient care and operational efficiency.

The Hospital Management System provides a user-friendly interface for healthcare professionals, administrative staff, and patients, allowing them to access relevant information and perform necessary tasks with ease. Key features include patient management, staff scheduling, inventory control, and reporting tools. By automating these processes, the system enhances communication, reduces paperwork, and ensures that healthcare providers can focus on delivering high-quality care to their patients.

Project Objectives

- To develop an intuitive interface for managing patient information and hospital operations.

- To automate appointment scheduling and patient registration for improved efficiency.

- To implement electronic medical record (EMR) management for easy access to patient history.

- To facilitate billing and insurance claim processing to streamline financial operations.

- To enable inventory management for medical supplies and equipment.

- To generate reports on patient demographics, treatment outcomes, and operational performance.

- To ensure data security and compliance with healthcare regulations and standards.

- To enhance patient engagement through features like appointment reminders and feedback forms.

Project Modules

User Management Module

User Registration/Login: Allow hospital staff, doctors, patients, and administrators to create accounts and log in securely.

Role Management: Differentiate between user roles (e.g., admin, doctor, nurse, patient) with varying permissions.

Profile Management: Enable users to manage their profiles, including personal information and contact details.

Patient Management Module

Patient Registration: Allow new patients to register and provide necessary information (e.g., medical history, contact details).

Patient Records: Maintain comprehensive electronic health records (EHR) for each patient, including medical history, allergies, medications, and treatment plans.

Appointment Scheduling: Enable patients to schedule appointments with doctors and manage their appointments.

Doctor Management Module

Doctor Profiles: Maintain detailed profiles of doctors, including specialties, qualifications, and availability.

Scheduling: Manage doctor schedules, including availability for appointments and surgeries.

Consultation Management: Track consultations and interactions between doctors and patients.

Appointment Management Module

Appointment Booking: Allow patients to book, reschedule, or cancel appointments online.

Appointment Reminders: Send automated reminders to patients about upcoming appointments via SMS or email.

Check-in Process: Facilitate the check-in process for patients upon arrival at the hospital.

Billing and Financial Management Module

Invoice Generation: Automatically generate invoices for services rendered, including consultations, tests, and treatments.

Payment Processing: Integrate with payment gateways for secure online transactions.

Insurance Management: Manage insurance claims and track payments from insurance providers.

Inventory Management Module

Medical Supplies Tracking: Monitor the inventory of medical supplies, medications, and equipment.

Stock Alerts: Set up alerts for low stock levels or expiration dates of medical supplies.

Supplier Management: Maintain records of suppliers and manage procurement processes.

Laboratory Management Module

Test Management: Manage laboratory tests, including ordering, processing, and reporting results.

Result Tracking: Track and store test results in patient records for easy access by doctors.

Sample Management: Monitor the collection, storage, and analysis of laboratory samples.

Pharmacy Management Module

Medication Management: Track medications prescribed to patients and manage inventory in the pharmacy.

Prescription Management: Allow doctors to create and manage electronic prescriptions for patients.

Drug Interaction Alerts: Provide alerts for potential drug interactions based on patient medication history.

Reporting and Analytics Module

Performance Reports: Generate reports on hospital performance, including patient admissions, revenue, and resource utilization.

Patient Analytics: Analyze patient demographics, treatment outcomes, and satisfaction levels.

Compliance Reports: Generate reports for regulatory compliance and audits.

Communication Module

Internal Messaging: Facilitate communication between hospital staff, including doctors, nurses, and administrative personnel.

Patient Communication: Enable secure messaging between patients and healthcare providers for follow-up questions and advice.

Emergency Management Module

Emergency Contact Management: Maintain emergency contact information for patients.

Emergency Room Management : Track patient flow and resource allocation in the emergency department.

Security and Access Control Module

Data Security: Ensure that sensitive patient data is stored securely and access is controlled based on user roles.

Audit Trails: Maintain logs of user activities for accountability and compliance.

Feedback and Improvement Module

Patient Feedback Collection: Allow patients to provide feedback on their experiences and services received.

Continuous Improvement: Implement mechanisms for the hospital to learn from feedback and improve services.

Project Tables Queries

```
-- Users Table
CREATE TABLE Users (
    UserId INT PRIMARY KEY IDENTITY(1,1),
    Username NVARCHAR(50) NOT NULL UNIQUE,
    PasswordHash NVARCHAR(255) NOT NULL,
    Email NVARCHAR(100) NOT NULL UNIQUE,
    Phone NVARCHAR(15),
    RoleId INT,
    CreatedAt DATETIME DEFAULT GETDATE(),
    UpdatedAt DATETIME DEFAULT GETDATE(),
    FOREIGN KEY (RoleId) REFERENCES Roles(RoleId)
);

-- Roles Table
CREATE TABLE Roles (
    RoleId INT PRIMARY KEY IDENTITY(1,1),
    RoleName NVARCHAR(50) NOT NULL UNIQUE
);

-- Patients Table
CREATE TABLE Patients (
    PatientId INT PRIMARY KEY IDENTITY(1,1),
    FirstName NVARCHAR(50) NOT NULL,
    LastName NVARCHAR(50) NOT NULL,
    DateOfBirth DATE NOT NULL,
    Gender NVARCHAR(10),
    Phone NVARCHAR(15),
    Email NVARCHAR(100) UNIQUE,
    Address NVARCHAR(255),
    CreatedAt DATETIME DEFAULT GETDATE(),
    UpdatedAt DATETIME DEFAULT GETDATE()
);

-- Doctors Table
CREATE TABLE Doctors (
    DoctorId INT PRIMARY KEY IDENTITY(1,1),
    FirstName NVARCHAR(50) NOT NULL,
    LastName NVARCHAR(50) NOT NULL,
    Specialty NVARCHAR(100),
    Phone NVARCHAR(15),
    Email NVARCHAR(100) UNIQUE,
    CreatedAt DATETIME DEFAULT GETDATE(),
    UpdatedAt DATETIME DEFAULT GETDATE()
);

-- Appointments Table
CREATE TABLE Appointments (
    AppointmentId INT PRIMARY KEY IDENTITY(1,1),
    PatientId INT,
    DoctorId INT,
    AppointmentDate DATETIME NOT NULL,
    Status NVARCHAR(20) DEFAULT 'Scheduled',
```

```
        CreatedAt DATETIME DEFAULT GETDATE(),
        UpdatedAt DATETIME DEFAULT GETDATE(),
        FOREIGN KEY (PatientId) REFERENCES Patients(PatientId),
        FOREIGN KEY (DoctorId) REFERENCES Doctors(DoctorId)
    );
-- Invoices Table
CREATE TABLE Invoices (
    InvoiceId INT PRIMARY KEY IDENTITY(1,1),
    PatientId INT,
    TotalAmount DECIMAL(10, 2) NOT NULL,
    CreatedAt DATETIME DEFAULT GETDATE(),
    UpdatedAt DATETIME DEFAULT GETDATE(),
    FOREIGN KEY (PatientId) REFERENCES Patients(PatientId)
);
-- Payments Table
CREATE TABLE Payments (
    PaymentId INT PRIMARY KEY IDENTITY(1,1),
    InvoiceId INT,
    PaymentDate DATETIME DEFAULT GETDATE(),
    Amount DECIMAL(10, 2) NOT NULL,
    PaymentMethod NVARCHAR(50),
    Status NVARCHAR(20) DEFAULT 'Pending',
    FOREIGN KEY (InvoiceId) REFERENCES Invoices(InvoiceId)
);
-- InventoryItems Table
CREATE TABLE InventoryItems (
    ItemId INT PRIMARY KEY IDENTITY(1,1),
    ItemName NVARCHAR(100) NOT NULL,
    Quantity INT NOT NULL,
    UnitPrice DECIMAL(10, 2) NOT NULL,
    CreatedAt DATETIME DEFAULT GETDATE(),
    UpdatedAt DATETIME DEFAULT GETDATE()
);
-- LabTests Table
CREATE TABLE LabTests (
    LabTestId INT PRIMARY KEY IDENTITY(1,1),
    TestName NVARCHAR(100) NOT NULL,
    Description NVARCHAR(MAX),
    Price DECIMAL(10, 2) NOT NULL,
    CreatedAt DATETIME DEFAULT GETDATE(),
    UpdatedAt DATETIME DEFAULT GETDATE()
);
-- Prescriptions Table
CREATE TABLE Prescriptions (
    PrescriptionId INT PRIMARY KEY IDENTITY(1,1),
    PatientId INT,
    DoctorId INT,
    PrescriptionDate DATETIME DEFAULT GETDATE(),
    CreatedAt DATETIME DEFAULT GETDATE(),
    UpdatedAt DATETIME DEFAULT GETDATE(),
    FOREIGN KEY (PatientId) REFERENCES Patients(PatientId),
    FOREIGN KEY (DoctorId) REFERENCES Doctors(DoctorId)
```

```
);  
-- Reports Table  
CREATE TABLE Reports (  
    ReportId INT PRIMARY KEY IDENTITY(1,1),  
    PatientId INT,  
    ReportDate DATETIME DEFAULT GETDATE(),  
    Description NVARCHAR(MAX),  
    CreatedAt DATETIME DEFAULT GETDATE(),  
    UpdatedAt DATETIME DEFAULT GETDATE(),  
    FOREIGN KEY (PatientId) REFERENCES Patients(PatientId)  
);  
-- Messages Table  
CREATE TABLE Messages (  
    MessageId INT PRIMARY KEY IDENTITY(1,1),  
    SenderId INT,  
    ReceiverId INT,  
    MessageText NVARCHAR(MAX),  
    SentAt DATETIME DEFAULT GETDATE(),  
    FOREIGN KEY (SenderId) REFERENCES Users(UserId),  
    FOREIGN KEY (ReceiverId) REFERENCES Users(UserId)  
);  
-- EmergencyContacts Table  
CREATE TABLE EmergencyContacts (  
    EmergencyContactId INT PRIMARY KEY IDENTITY(1, 1),  
    PatientId INT,  
    ContactName NVARCHAR(100) NOT NULL,  
    Relationship NVARCHAR(50),  
    Phone NVARCHAR(15),  
    FOREIGN KEY (PatientId) REFERENCES Patients(PatientId)  
);  
-- Feedback Table  
CREATE TABLE Feedbacks (  
    FeedbackId INT PRIMARY KEY IDENTITY(1,1),  
    UserId INT,  
    Comments NVARCHAR(MAX),  
    Rating INT CHECK (Rating >= 1 AND Rating <= 5),  
    CreatedAt DATETIME DEFAULT GETDATE(),  
    FOREIGN KEY (User Id) REFERENCES Users(UserId)  
);
```

Explanation of Tables

Users: Stores user information, including their credentials and roles.

Roles: Defines different roles within the system (e.g., admin, doctor, nurse).

Patients: Contains patient details, including personal information and contact details.

Doctors: Stores information about doctors, including their specialties and contact information.

Appointments: Tracks appointments between patients and doctors, including status.

Invoices: Manages billing information for patients.

Payments: Records payment transactions related to invoices.

InventoryItems: Manages hospital inventory, including items and their quantities.

LabTests: Contains information about lab tests available in the hospital.

Prescriptions: Stores prescriptions issued by doctors to patients.

Reports: Manages medical reports associated with patients.

Messages: Facilitates communication between users within the system.

EmergencyContacts: Stores emergency contact information for patients.

Feedback: Collects feedback from users regarding their experiences.

To create the models and migrations for the provided SQL schema in Laravel 11, you can follow these steps.

Below, I will provide the migration files and the corresponding Eloquent models for each table.

Step 1: Create Migrations

You can create migrations using the Artisan command line tool. For each table, you will create a migration file. Here are the migration files based on your SQL schema:

1. Create Users Table Migration

```
// database/migrations/2025_02_01_000001_create_users_table.php
use Illuminate\Database\Migrations\Migration;
use Illuminate\Database\Schema\Blueprint;
use Illuminate\Support\Facades\Schema;
class CreateUsersTable extends Migration
{
    public function up()
    {
        Schema::create('users', function (Blueprint $table) {
            $table->id('user_id');
            $table->string('username', 50)->unique();
            $table->string('password_hash', 255);
            $table->string('email', 100)->unique();
            $table->string('phone', 15)->nullable();
            $table->foreignId('role_id')->nullable()->constrained('roles');
            $table->timestamps();
        });
    }
    public function down()
    {
        Schema::dropIfExists('users');
    }
}
```

2. Create Roles Table Migration

```
// database/migrations/2025_02_01_000002_create_roles_table.php
use Illuminate\Database\Migrations\Migration;
use Illuminate\Database\Schema\Blueprint;
use Illuminate\Support\Facades\Schema;
class CreateRolesTable extends Migration
{
    public function up()
    {
        Schema::create('roles', function (Blueprint $table) {
            $table->id('role_id');
            $table->string('role_name', 50)->unique();
        });
    }
    public function down()
    {
        Schema::dropIfExists('roles');
    }
}
```

3. Create Patients Table Migration


```
// database/migrations/2025_02_01_000003_create_patients_table.php
use Illuminate\Database\Migrations\Migration;
use Illuminate\Database\Schema\Blueprint;
use Illuminate\Support\Facades\Schema;
class CreatePatientsTable extends Migration
{
    public function up()
    {
        Schema::create('patients', function (Blueprint $table) {
            $table->id('patient_id');
            $table->string('first_name', 50);
            $table->string('last_name', 50);
            $table->date('date_of_birth');
            $table->string('gender', 10)->nullable();
            $table->string('phone', 15)->nullable();
            $table->string('email', 100)->unique();
            $table->string('address', 255)->nullable();
            $table->timestamps();
        });
    }
    public function down()
    {
        Schema::dropIfExists('patients');
    }
}
```

4. Create Doctors Table Migration

```
// database/migrations/2025_02_01_000004_create_doctors_table.php
use Illuminate\Database\Migrations\Migration;
use Illuminate\Database\Schema\Blueprint;
use Illuminate\Support\Facades\Schema;
class CreateDoctorsTable extends Migration
{
    public function up()
    {
        Schema::create('doctors', function (Blueprint $table) {
            $table->id('doctor_id');
            $table->string('first_name', 50);
            $table->string('last_name', 50);
            $table->string('specialty', 100)->nullable();
            $table->string('phone', 15)->nullable();
            $table->string('email', 100)->unique();
            $table->timestamps();
        });
    }
    public function down()
    {
        Schema::dropIfExists('doctors');
    }
}
```

5. Create Appointments Table Migration

```
// database/migrations/2025_02_01_000005_create_appointments_table.php
use Illuminate\Database\Migrations\Migration;
use Illuminate\Database\Schema\Blueprint;
use Illuminate\Support\Facades\Schema;
class CreateAppointmentsTable extends Migration
{
    public function up()
    {
        Schema::create('appointments', function (Blueprint $table) {
            $table->id('appointment_id');
            $table->foreignId('patient_id')->constrained('patients');
            $table->foreignId('doctor_id')->constrained('doctors');
            $table->dateTime('appointment_date');
            $table->string('status', 20)->default('Scheduled');
            $table->timestamps();
        });
    }
    public function down()
    {
        Schema::dropIfExists('appointments');
    }
}
```

6. Create Invoices Table Migration

```
// database/migrations/2025_02_01_000006_create_invoices_table.php
use Illuminate\Database\Migrations\Migration;
use Illuminate\Database\Schema\Blueprint;
use Illuminate\Support\Facades\Schema;
class CreateInvoicesTable extends Migration
{
    public function up()
    {
        Schema::create('invoices', function (Blueprint $table) {
            $table->id('invoice_id');
            $table->foreignId('patient_id')->constrained('patients');
            $table->decimal('total_amount', 10, 2);
            $table->timestamps();
        });
    }
    public function down()
    {
        Schema::dropIfExists('invoices');
    }
}
```

7. Create Payments Table Migration

```
// database/migrations/2025_02_01_000007_create_payments_table.php
use Illuminate\Database\Migrations\Migration;
use Illuminate\Database\Schema\Blueprint;
use Illuminate\Support\Facades\Schema;
class CreatePaymentsTable extends Migration
{
    public function up()
    {
        Schema::create('payments', function (Blueprint $table) {
            $table->id('payment_id');
            $table->foreignId('invoice_id')->constrained('invoices');
            $table->dateTime('payment_date')->default(now());
            $table->decimal('amount', 10, 2);
            $table->string('payment_method', 50)->nullable();
            $table->string('status', 20)->default('Pending');
        });
    }
    public function down()
    {
        Schema::dropIfExists('payments');
    }
}
```

8. Create InventoryItems Table Migration

```
// database/migrations/2025_02_01_000008_create_inventory_items_table.php
use Illuminate\Database\Migrations\Migration;
use Illuminate\Database\Schema\Blueprint;
use Illuminate\Support\Facades\Schema;
class CreateInventoryItemsTable extends Migration
{
    public function up()
    {
        Schema::create('inventory_items', function (Blueprint $table) {
            $table->id('item_id');
            $table->string('item_name', 100);
            $table->integer('quantity');
            $table->decimal('unit_price', 10, 2);
            $table->timestamps();
        });
    }
    public function down()
    {
        Schema::dropIfExists('inventory_items');
    }
}
```

9. Create LabTests Table Migration

```
// database/migrations/2025_02_01_000009_create_lab_tests_table.php
use Illuminate\Database\Migrations\Migration;
use Illuminate\Database\Schema\Blueprint;
use Illuminate\Support\Facades\Schema;
class CreateLabTestsTable extends Migration
{
    public function up()
    {
        Schema::create('lab_tests', function (Blueprint $table) {
            $table->id('lab_test_id');
            $table->string('test_name', 100);
            $table->text('description')->nullable();
            $table->decimal('price', 10, 2);
            $table->timestamps();
        });
    }
    public function down()
    {
        Schema::dropIfExists('lab_tests');
    }
}
```

10. Create Prescriptions Table Migration

```
// database/migrations/2025_02_01_000010_create_prescriptions_table.php
use Illuminate\Database\Migrations\Migration;
use Illuminate\Database\Schema\Blueprint;
use Illuminate\Support\Facades\Schema;
class CreatePrescriptionsTable extends Migration
{
    public function up()
    {
        Schema::create('prescriptions', function (Blueprint $table) {
            $table->id('prescription_id');
            $table->foreignId('patient_id')->constrained('patients');
            $table->foreignId('doctor_id')->constrained('doctors');
            $table->dateTime('prescription_date')->default(now());
            $table->timestamps();
        });
    }
    public function down()
    {
        Schema::dropIfExists('prescriptions');
    }
}
```

11. Create Reports Table Migration

```
// database/migrations/2025_02_01_000011_create_reports_table.php
use Illuminate\Database\Migrations\Migration;
use Illuminate\Database\Schema\Blueprint;
use Illuminate\Support\Facades\Schema;
class CreateReportsTable extends Migration
{
    public function up()
    {
        Schema::create('reports', function (Blueprint $table) {
            $table->id('report_id');
            $table->foreignId('patient_id')->constrained('patients');
            $table->dateTime('report_date')->default(now());
            $table->text('description')->nullable();
            $table->timestamps();
        });
    }
    public function down()
    {
        Schema::dropIfExists('reports');
    }
}
```

12. Create Messages Table Migration

```
// database/migrations/2025_02_01_000012_create_messages_table.php
use Illuminate\Database\Migrations\Migration;
use Illuminate\Database\Schema\Blueprint;
use Illuminate\Support\Facades\Schema;
class CreateMessagesTable extends Migration
{
    public function up()
    {
        Schema::create('messages', function (Blueprint $table) {
            $table->id('message_id');
            $table->foreignId('sender_id')->constrained('users');
            $table->foreignId('receiver_id')->constrained('users');
            $table->text('message_text');
            $table->dateTime('sent_at')->default(now());
        });
    }
    public function down()
    {
        Schema::dropIfExists('messages');
    }
}
```

13. Create EmergencyContacts Table Migration

```
// database/migrations/2025_02_01_000013_create_emergency_contacts_table.php
use Illuminate\Database\Migrations\Migration;
use Illuminate\Database\Schema\Blueprint;
use Illuminate\Support\Facades\Schema;
class CreateEmergencyContactsTable extends Migration
{
    public function up()
    {
        Schema::create('emergency_contacts', function (Blueprint $table) {
            $table->id('emergency_contact_id');
            $table->foreignId('patient_id')->constrained('patients');
            $table->string('contact_name', 100);
            $table->string('relationship', 50)->nullable();
            $table->string('phone', 15)->nullable();
        });
    }
    public function down()
    {
        Schema::dropIfExists('emergency_contacts');
    }
}
```

14. Create Feedback Table Migration

```
// database/migrations/2025_02_01_000014_create_feedbacks_table.php
use Illuminate\Database\Migrations\Migration;
use Illuminate\Database\Schema\Blueprint;
use Illuminate\Support\Facades\Schema;
class CreateFeedbacksTable extends Migration
{
    public function up()
    {
        Schema::create('feedbacks', function (Blueprint $table) {
            $table->id('feedback_id');
            $table->foreignId('user_id')->constrained('users');
            $table->text('comments')->nullable();
            $table->integer('rating')->check('rating >= 1 AND rating <= 5');
            $table->timestamps();
        });
    }
    public function down()
    {
        Schema::dropIfExists('feedbacks');
    }
}
```

Step 2: Create Eloquent Models

For each table, you will also create a corresponding Eloquent model. Here are the models for the tables created above:

1. User Model

```
// app/Models/User.php
namespace App\Models;
use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;
class User extends Model
{
    use HasFactory;
    protected $table = 'users';
    protected $primaryKey = 'user_id';
    protected $fillable = ['username', 'password_hash', 'email', 'phone', 'role_id'];
}
```

2. Role Model

```
// app/Models/Role.php
namespace App\Models;
use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;
class Role extends Model
{
    use HasFactory;
    protected $table = 'roles';
    protected $primaryKey = 'role_id';
    protected $fillable = ['role_name'];
}
```

3. Patient Model

```
// app/Models/Patient.php
namespace App\Models;
use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;
class Patient extends Model
{
    use HasFactory;
    protected $table = 'patients';
    protected $primaryKey = 'patient_id';
    protected $fillable = ['first_name', 'last_name', 'date_of_birth', 'gender', 'phone',
}
```


4. Doctor Model

```
// app/Models/Doctor.php
namespace App\Models;
use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;
class Doctor extends Model
{
    use HasFactory;
    protected $table = 'doctors';
    protected $primaryKey = 'doctor_id';
    protected $fillable = ['first_name', 'last_name', 'specialty', 'phone', 'email'];
}
```

5. Appointment Model

```
// app/Models/Appointment.php
namespace App\Models;
use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;
class Appointment extends Model
{
    use HasFactory;
    protected $table = 'appointments';
    protected $primaryKey = 'appointment_id';
    protected $fillable = ['patient_id', 'doctor_id', 'appointment_date', 'status'];
}
```

6. Invoice Model

```
// app/Models/Invoice.php
namespace App\Models;
use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;
class Invoice extends Model
{
    use HasFactory;
    protected $table = 'invoices';
    protected $primaryKey = 'invoice_id';
    protected $fillable = ['patient_id', 'total_amount'];
}
```

7. Payment Model

```
// app/Models/Payment.php
namespace App\Models;
use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;
class Payment extends Model
{
    use HasFactory;
    protected $table = 'payments';
    protected $primaryKey = 'payment_id';
    protected $fillable = ['invoice_id', 'payment_date', 'amount', 'payment_method', 'stat'];
}
```

8. InventoryItem Model

```
// app/Models/InventoryItem.php
namespace App\Models;
use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;
class InventoryItem extends Model
{
    use HasFactory;
    protected $table = 'inventory_items';
    protected $primaryKey = 'item_id';
    protected $fillable = ['item_name', 'quantity', 'unit_price'];
}
```

9. LabTest Model

```
// app/Models/LabTest.php
namespace App\Models;
use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;
class LabTest extends Model
{
    use HasFactory;
    protected $table = 'lab_tests';
    protected $primaryKey = 'lab_test_id';
    protected $fillable = ['test_name', 'description', 'price'];
}
```

10. Prescription Model

```
// app/Models/Prescription.php
namespace App\Models;
use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;
class Prescription extends Model
{
    use HasFactory;
    protected $table = 'prescriptions';
    protected $primaryKey = 'prescription_id';
    protected $fillable = ['patient_id', 'doctor_id', 'prescription_date'];
}
```

11. Report Model

```
// app/Models/Report.php
namespace App\Models;
use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;
class Report extends Model
{
    use HasFactory;
    protected $table = 'reports';
    protected $primaryKey = 'report_id';
    protected $fillable = ['patient_id', 'report_date', 'description'];
}
```

12. Message Model

```
// app/Models/Message.php
namespace App\Models;
use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;
class Message extends Model
{
    use HasFactory;
    protected $table = 'messages';
    protected $primaryKey = 'message_id';
    protected $fillable = ['sender_id', 'receiver_id', 'message_text', 'sent_at'];
}
```

13. EmergencyContact Model

```
// app/Models/EmergencyContact.php
namespace App\Models;
use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;
class EmergencyContact extends Model
{
    use HasFactory;
    protected $table = 'emergency_contacts';
    protected $primaryKey = 'emergency_contact_id';
    protected $fillable = ['patient_id', 'contact_name', 'relationship', 'phone'];
}
```

14. Feedback Model

```
// app/Models/Feedback.php
namespace App\Models;
use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;
class Feedback extends Model
{
    use HasFactory;
    protected $table = 'feedbacks';
    protected $primaryKey = 'feedback_id';
    protected $fillable = ['user_id', 'comments', 'rating'];
}
```

Step 3: Run Migrations

After creating the migration files and models, you can run the migrations using the following command:

```
php artisan migrate
```

This will create the tables in your database according to the defined schema. You can now use the Eloquent models to interact with the database in your Laravel application.

To create controllers for each model with complete CRUD operations in Laravel, you can use the Artisan command line tool to generate the controllers. Below, I will provide the code for each controller, including methods for creating, reading, updating, and deleting records.

Step 1: Generate Controllers

You can generate a controller for each model using the following command:

```
php artisan make:controller ModelNameController --resource
```

For example, to create a controller for the User model, you would run:

```
php artisan make:controller UserController --resource
```

Repeat this for each model. Below are the controllers for each model with complete CRUD operations.

Step 2: Create Controllers

Step 3: Create Controllers

You will need to create controllers for each model. Here are the controllers:

1. UserController

```
// app/Http/Controllers/UserController.php
namespace App\Http\Controllers;
use App\Models\User;
use Illuminate\Http\Request;
class UserController extends Controller
{
    public function index()
    {
        $users = User::all();
        return view('users.index', compact('users'));
    }
    public function create()
    {
        return view('users.create');
    }
    public function store(Request $request)
    {
        $request->validate([
            'username' => 'required|unique:users|max:50',
            'password_hash' => 'required',
            'email' => 'required|email|unique:users|max:100',
            'phone' => 'nullable|max:15',
            'role_id' => 'nullable|exists:roles,role_id',
        ]);
        User::create($request->all());
        return redirect()->route('users.index')->with('success', 'User created successful');
    }
    public function show(User $user)
    {
        return view('users.show', compact('user'));
    }
    public function edit(User $user)
    {
        return view('users.edit', compact('user'));
    }
    public function update(Request $request, User $user)
    {
        $request->validate([
            'username' => 'required|max:50|unique:users,username,' . $user->user_id,
            'password_hash' => 'required',
            'email' => 'required|email|max:100|unique:users,email,' . $user->user_id,
            'phone' => 'nullable|max:15',
            'role_id' => 'nullable|exists:roles,role_id',
        ]);
        $user->update($request->all());
        return redirect()->route('users.index')->with('success', 'User updated successful');
    }
    public function destroy(User $user)
    {
        $user->delete();
    }
}
```

```
        return redirect()->route('users.index')->with('success', 'User deleted successful');
    }
}
```

2. RoleController

```
// app/Http/Controllers/RoleController.php
namespace App\Http\Controllers;
use App\Models\Role;
use Illuminate\Http\Request;
class RoleController extends Controller
{
    public function index()
    {
        $roles = Role::all();
        return view('roles.index', compact('roles'));
    }
    public function create()
    {
        return view('roles.create');
    }
    public function store(Request $request)
    {
        $request->validate([
            'role_name' => 'required|unique:roles|max:50',
        ]);
        Role::create($request->all());
        return redirect()->route('roles.index')->with('success', 'Role created successfull');
    }
    public function show(Role $role)
    {
        return view('roles.show', compact('role'));
    }
    public function edit(Role $role)
    {
        return view('roles.edit', compact('role'));
    }
    public function update(Request $request, Role $role)
    {
        $request->validate([
            'role_name' => 'required|max:50|unique:roles,role_name,' . $role->role_id,
        ]);
        $role->update($request->all());
        return redirect()->route('roles.index')->with('success', 'Role updated successfull');
    }
    public function destroy(Role $role)
    {
        $role->delete();
        return redirect()->route('roles.index')->with('success', 'Role deleted successfull');
    }
}
```

3. PatientController

```
// app/Http/Controllers/PatientController.php
namespace App\Http\Controllers;
use App\Models\Patient;
use Illuminate\Http\Request;
class PatientController extends Controller
{
    public function index()
    {
        $patients = Patient::all();
        return view('patients.index', compact('patients'));
    }
    public function create()
    {
        return view('patients.create');
    }
    public function store(Request $request)
    {
        $request->validate([
            'first_name' => 'required|max:50',
            'last_name' => 'required|max:50',
            'date_of_birth' => 'required|date',
            'gender' => 'nullable|max:10',
            'phone' => 'nullable|max:15',
            'email' => 'required|email|unique:patients|max:100',
            'address' => 'nullable|max:255',
        ]);
        Patient::create($request->all());
        return redirect()->route('patients.index')->with('success', 'Patient created succe
    }
    public function show(Patient $patient)
    {
        return view('patients.show', compact('patient'));
    }
    public function edit(Patient $patient)
    {
        return view('patients.edit', compact('patient'));
    }
    public function update(Request $request, Patient $patient)
    {
        $request->validate([
            'first_name' => 'required|max:50',
            'last_name' => 'required|max:50',
            'date_of_birth' => 'required|date',
            'gender' => 'nullable|max:10',
            'phone' => 'nullable|max:15',
            'email' => 'required|email|unique:patients,email,' . $patient->patient_id,
            'address' => 'nullable|max:255',
        ]);
        $patient->update($request->all());
        return redirect()->route('patients.index')->with('success', 'Patient updated succe
```



```
    }  
    public function destroy(Patient $patient)  
    {  
        $patient->delete();  
        return redirect()->route('patients.index')->with('success', 'Patient deleted succe  
    }  
}
```

4. DoctorController

```
// app/Http/Controllers/DoctorController.php
namespace App\Http\Controllers;
use App\Models\Doctor;
use Illuminate\Http\Request;
class DoctorController extends Controller
{
    public function index()
    {
        $doctors = Doctor::all();
        return view('doctors.index', compact('doctors'));
    }
    public function create()
    {
        return view('doctors.create');
    }
    public function store(Request $request)
    {
        $request->validate([
            'first_name' => 'required|max:50',
            'last_name' => 'required|max:50',
            'specialty' => 'nullable|max:100',
            'phone' => 'nullable|max:15',
            'email' => 'required |email|unique:doctors|max:100',
        ]);
        Doctor::create($request->all());
        return redirect()->route('doctors.index')->with('success', 'Doctor created success');
    }
    public function show(Doctor $doctor)
    {
        return view('doctors.show', compact('doctor'));
    }
    public function edit(Doctor $doctor)
    {
        return view('doctors.edit', compact('doctor'));
    }
    public function update(Request $request, Doctor $doctor)
    {
        $request->validate([
            'first_name' => 'required|max:50',
            'last_name' => 'required|max:50',
            'specialty' => 'nullable|max:100',
            'phone' => 'nullable|max:15',
            'email' => 'required|email|unique:doctors,email,' . $doctor->doctor_id,
        ]);
        $doctor->update($request->all());
        return redirect()->route('doctors.index')->with('success', 'Doctor updated success');
    }
    public function destroy(Doctor $doctor)
    {
        $doctor->delete();
    }
}
```

```
        return redirect()->route('doctors.index')->with('success', 'Doctor deleted success  
    }  
}
```

5. AppointmentController

```
// app/Http/Controllers/AppointmentController.php
namespace App\Http\Controllers;
use App\Models\Appointment;
use Illuminate\Http\Request;
class AppointmentController extends Controller
{
    public function index()
    {
        $appointments = Appointment::all();
        return view('appointments.index', compact('appointments'));
    }
    public function create()
    {
        return view('appointments.create');
    }
    public function store(Request $request)
    {
        $request->validate([
            'patient_id' => 'required|exists:patients,patient_id',
            'doctor_id' => 'required|exists:doctors,doctor_id',
            'appointment_date' => 'required|date',
            'status' => 'nullable|max:20',
        ]);
        Appointment::create($request->all());
        return redirect()->route('appointments.index')->with('success', 'Appointment creat
    }
    public function show(Appointment $appointment)
    {
        return view('appointments.show', compact('appointment'));
    }
    public function edit(Appointment $appointment)
    {
        return view('appointments.edit', compact('appointment'));
    }
    public function update(Request $request, Appointment $appointment)
    {
        $request->validate([
            'patient_id' => 'required|exists:patients,patient_id',
            'doctor_id' => 'required|exists:doctors,doctor_id',
            'appointment_date' => 'required|date',
            'status' => 'nullable|max:20',
        ]);
        $appointment->update($request->all());
        return redirect()->route('appointments.index')->with('success', 'Appointment updat
    }
    public function destroy(Appointment $appointment)
    {
        $appointment->delete();
        return redirect()->route('appointments.index')->with('success', 'Appointment delet
```

```
        }  
    }  
}
```

6. InvoiceController

```
// app/Http/Controllers/InvoiceController.php
namespace App\Http\Controllers;
use App\Models\Invoice;
use Illuminate\Http\Request;
class InvoiceController extends Controller
{
    public function index()
    {
        $invoices = Invoice::all();
        return view('invoices.index', compact('invoices'));
    }
    public function create()
    {
        return view('invoices.create');
    }
    public function store(Request $request)
    {
        $request->validate([
            'patient_id' => 'required|exists:patients,patient_id',
            'total_amount' => 'required|numeric',
        ]);
        Invoice::create($request->all());
        return redirect()->route('invoices.index')->with('success', 'Invoice created succe
    }
    public function show(Invoice $invoice)
    {
        return view('invoices.show', compact('invoice'));
    }
    public function edit(Invoice $invoice)
    {
        return view('invoices.edit', compact('invoice'));
    }
    public function update(Request $request, Invoice $invoice)
    {
        $request->validate([
            'patient_id' => 'required|exists:patients,patient_id',
            'total_amount' => 'required|numeric',
        ]);
        $invoice->update($request->all());
        return redirect()->route('invoices.index')->with('success', 'Invoice updated succe
    }
    public function destroy(Invoice $invoice)
    {
        $invoice->delete();
        return redirect()->route('invoices.index')->with('success', 'Invoice deleted succe
    }
}
```

7. PaymentController

```
// app/Http/Controllers/PaymentController.php
namespace App\Http\Controllers;
use App\Models\Payment;
use Illuminate\Http\Request;
class PaymentController extends Controller
{
    public function index()
    {
        $payments = Payment::all();
        return view('payments.index', compact('payments'));
    }
    public function create()
    {
        return view('payments.create');
    }
    public function store(Request $request)
    {
        $request->validate([
            'invoice_id' => 'required|exists:invoices,invoice_id',
            'payment_date' => 'nullable|date',
            'amount' => 'required|numeric',
            'payment_method' => 'nullable|max:50',
            'status' => 'nullable|max:20',
        ]);
        Payment::create($request->all());
        return redirect()->route('payments.index')->with('success', 'Payment created succe
    }
    public function show(Payment $payment)
    {
        return view('payments.show', compact('payment'));
    }
    public function edit(Payment $payment)
    {
        return view('payments.edit', compact('payment'));
    }
    public function update(Request $request, Payment $payment)
    {
        $request->validate([
            'invoice_id' => 'required|exists:invoices,invoice_id',
            'payment_date' => 'nullable|date',
            'amount' => 'required|numeric',
            'payment_method' => 'nullable|max:50',
            'status' => 'nullable|max:20',
        ]);
        $payment->update($request->all());
        return redirect()->route('payments.index')->with('success', 'Payment updated succe
    }
    public function destroy(Payment $payment)
    {
        $payment->delete();
    }
}
```

```
        return redirect()->route('payments.index')->with('success', 'Payment deleted succe  
    }  
}
```

8. InventoryItemController


```
// app/Http/Controllers/InventoryItemController.php
namespace App\Http\Controllers;
use App\Models\InventoryItem;
use Illuminate\Http\Request;
class InventoryItemController extends Controller
{
    public function index()
    {
        $items = InventoryItem::all();
        return view('inventory_items.index', compact('items'));
    }
    public function create()
    {
        return view('inventory_items.create');
    }
    public function store(Request $request)
    {
        $request->validate([
            'item_name' => 'required|max:100',
            'quantity' => 'required|integer',
            'unit_price' => 'required|numeric',
        ]);
        InventoryItem::create($request->all());
        return redirect()->route('inventory_items.index')->with('success', 'Inventory item
    }
    public function show(InventoryItem $item)
    {
        return view('inventory_items.show', compact('item'));
    }
    public function edit(InventoryItem $item)
    {
        return view('inventory_items.edit', compact('item'));
    }
    public function update(Request $request, InventoryItem $item)
    {
        $request->validate([
            'item_name' => 'required|max:100',
            'quantity' => 'required|integer',
            'unit_price' => 'required|numeric',
        ]);
        $item->update($request->all());
        return redirect()->route('inventory_items.index')->with('success', 'Inventory item
    }
    public function destroy(InventoryItem $item)
    {
        $item->delete();
        return redirect()->route('inventory_items.index')->with('success', 'Inventory item
    }
}
```

9. LabTestController

```
// app/Http/Controllers/LabTestController.php
namespace App\Http\Controllers;
use App\Models\LabTest;
use Illuminate\Http\Request;
class LabTestController extends Controller
{
    public function index()
    {
        $tests = LabTest::all();
        return view('lab_tests.index', compact('tests'));
    }
    public function create()
    {
        return view('lab_tests.create');
    }
    public function store(Request $request)
    {
        $request->validate([
            'test_name' => 'required|max:100',
            'description' => 'nullable|max:255',
            'price' => 'required|numeric',
        ]);
        LabTest::create($request->all());
        return redirect()->route('lab_tests.index')->with('success', 'Lab test created suc
    }
    public function show(LabTest $test)
    {
        return view('lab_tests.show', compact('test'));
    }
    public function edit(LabTest $test)
    {
        return view('lab_tests.edit', compact('test'));
    }
    public function update(Request $request, LabTest $test)
    {
        $request->validate([
            'test_name' => 'required|max:100',
            'description' => 'nullable|max:255',
            'price' => 'required|numeric',
        ]);
        $test->update($request->all());
        return redirect()->route('lab_tests.index')->with ('success', 'Lab test updated su
    }
    public function destroy(LabTest $test)
    {
        $test->delete();
        return redirect()->route('lab_tests.index')->with('success', 'Lab test deleted suc
    }
}
```

10. PrescriptionController

```
// app/Http/Controllers/PrescriptionController.php
namespace App\Http\Controllers;
use App\Models\Prescription;
use Illuminate\Http\Request;
class PrescriptionController extends Controller
{
    public function index()
    {
        $prescriptions = Prescription::all();
        return view('prescriptions.index', compact('prescriptions'));
    }
    public function create()
    {
        return view('prescriptions.create');
    }
    public function store(Request $request)
    {
        $request->validate([
            'patient_id' => 'required|exists:patients,patient_id',
            'doctor_id' => 'required|exists:doctors,doctor_id',
            'prescription_date' => 'nullable|date',
        ]);
        Prescription::create($request->all());
        return redirect()->route('prescriptions.index')->with('success', 'Prescription cre
    }
    public function show(Prescription $prescription)
    {
        return view('prescriptions.show', compact('prescription'));
    }
    public function edit(Prescription $prescription)
    {
        return view('prescriptions.edit', compact('prescription'));
    }
    public function update(Request $request, Prescription $prescription)
    {
        $request->validate([
            'patient_id' => 'required|exists:patients,patient_id',
            'doctor_id' => 'required|exists:doctors,doctor_id',
            'prescription_date' => 'nullable|date',
        ]);
        $prescription->update($request->all());
        return redirect()->route('prescriptions.index')->with('success', 'Prescription upd
    }
    public function destroy(Prescription $prescription)
    {
        $prescription->delete();
        return redirect()->route('prescriptions.index')->with('success', 'Prescription del
    }
}
```

11. ReportController

```
// app/Http/Controllers/ReportController.php
namespace App\Http\Controllers;
use App\Models\Report;
use Illuminate\Http\Request;
class ReportController extends Controller
{
    public function index()
    {
        $reports = Report::all();
        return view('reports.index', compact('reports'));
    }
    public function create()
    {
        return view('reports.create');
    }
    public function store(Request $request)
    {
        $request->validate([
            'patient_id' => 'required|exists:patients,patient_id',
            'report_date' => 'nullable|date',
            'description' => 'nullable|max:255',
        ]);
        Report::create($request->all());
        return redirect()->route('reports.index')->with('success', 'Report created success');
    }
    public function show(Report $report)
    {
        return view('reports.show', compact('report'));
    }
    public function edit(Report $report)
    {
        return view('reports.edit', compact('report'));
    }
    public function update(Request $request, Report $report)
    {
        $request->validate([
            'patient_id' => 'required|exists:patients,patient_id',
            'report_date' => 'nullable|date',
            'description' => 'nullable|max:255',
        ]);
        $report->update($request->all());
        return redirect()->route('reports.index')->with('success', 'Report updated success');
    }
    public function destroy(Report $report)
    {
        $report->delete();
        return redirect()->route('reports.index')->with('success', 'Report deleted success');
    }
}
```

12. MessageController


```
// app/Http/Controllers/MessageController.php
namespace App\Http\Controllers;
use App\Models\Message;
use Illuminate\Http\Request;
class MessageController extends Controller
{
    public function index()
    {
        $messages = Message::all();
        return view('messages.index', compact('messages'));
    }
    public function create()
    {
        return view('messages.create');
    }
    public function store(Request $request)
    {
        $request->validate([
            'sender_id' => 'required|exists:users,user_id',
            'receiver_id' => 'required|exists:users,user_id',
            'message_text' => 'required',
        ]);
        Message::create($request->all());
        return redirect()->route('messages.index')->with('success', 'Message sent successf
    }
    public function show(Message $message)
    {
        return view('messages.show', compact('message'));
    }
    public function edit(Message $message)
    {
        return view('messages.edit', compact('message'));
    }
    public function update(Request $request, Message $message)
    {
        $request->validate([
            'sender_id' => 'required|exists:users,user_id',
            'receiver_id' => 'required|exists:users,user_id',
            'message_text' => 'required',
        ]);
        $message->update($request->all());
        return redirect()->route('messages.index')->with('success', 'Message updated succe
    }
    public function destroy(Message $message)
    {
        $message->delete();
        return redirect()->route('messages.index')->with('success', 'Message deleted succe
    }
}
```

13. EmergencyContactController

```
// app/Http/Controllers/EmergencyContactController.php
namespace App\Http\Controllers;
use App\Models\EmergencyContact;
use Illuminate\Http\Request;
class EmergencyContactController extends Controller
{
    public function index()
    {
        $contacts = EmergencyContact::all();
        return view('emergency_contacts.index', compact('contacts'));
    }
    public function create()
    {
        return view('emergency_contacts.create');
    }
    public function store(Request $request)
    {
        $request->validate([
            'patient_id' => 'required|exists:patients,patient_id',
            'contact_name' => 'required|max:100',
            'relationship' => 'nullable|max:50',
            'phone' => 'nullable|max:15',
        ]);
        EmergencyContact::create($request->all());
        return redirect()->route('emergency_contacts.index')->with('success', 'Emergency c
    }
    public function show(EmergencyContact $contact)
    {
        return view('emergency_contacts.show', compact('contact'));
    }

    $request->validate([
        'sender_id' => 'required|exists:users,user_id',
        'receiver_id' => 'required|exists:users,user_id',
        'message_text' => 'required',
    ]);
    $message->update($request->all());
    return redirect()->route('messages.index')->with('success', 'Message updated succe
    }
    public function destroy(Message $message)
    {
        $message->delete();
        return redirect()->route('messages.index')->with('success', 'Message deleted succe
    }
}
```

14. FeedbackController

```
// app/Http/Controllers/EmergencyContactController.php
namespace App\Http\Controllers;
use App\Models\EmergencyContact;
use Illuminate\Http\Request;
class EmergencyContactController extends Controller
{
    public function index()
    {
        $contacts = EmergencyContact::all();
        return view('emergency_contacts.index', compact('contacts'));
    }
    public function create()
    {
        return view('emergency_contacts.create');
    }
    public function edit(EmergencyContact $contact)
    {
        return view('emergency_contacts.edit', compact('contact'));
    }
    public function update(Request $request, EmergencyContact $contact)
    {
        $request->validate([
            'patient_id' => 'required|exists:patients,patient_id',
            'contact_name' => 'required|max:100',
            'relationship' => 'nullable|max:50',
            'phone' => 'nullable|max:15',
        ]);
        $contact->update($request->all());
        return redirect()->route('emergency_contacts.index')->with('success', 'Emergency c
    }
    public function destroy(EmergencyContact $contact)
    {
        $contact->delete();
        return redirect()->route('em view('emergency_contacts.create');
    }
    public function store(Request $request)
    {
        $request->validate([
            'patient_id' => 'required|exists:patients,patient_id',
            'contact_name' => 'required|max:100',
            'relationship' => 'nullable|max:50',
            'phone' => 'nullable|max:15',
        ]);
        EmergencyContact::create($request->all());
        return redirect()->route('emergency_contacts.index')->with('success', 'ergency_conta
    }
}
```

Step 4: Define Routes

You will need to define routes for each controller in your routes/web.php file. Here's an example of how to set up the routes for the User Controller:

```
// routes/web.php
use App\Http\Controllers\UserController;
use App\Http\Controllers\RoleController;
use App\Http\Controllers\PatientController;
use App\Http\Controllers\DoctorController;
use App\Http\Controllers\AppointmentController;
use App\Http\Controllers\InvoiceController;
use App\Http\Controllers\PaymentController;
use Controllers/FeedbackController.php
namespace App\Http\Controllers;
use App\Models\Feedback;
use Illuminate\Http\Request;
class FeedbackController extends Controller
{
    public function index()
    {
        $feedbacks = Feedback::all();
        return view('feedbacks.index', compact('feedbacks'));
    }
    public function create()
    {
        return view('feedbacks.create');
    }
    public function store(Request $request)
    {
        $request->validate([
            'user_id' => 'required|exists:users,user_id',
            'comments' => 'nullable',
            'rating' => 'required|integer|min:1|max:5',
        ]);
        Feedback::create($request-> App\Http\Controllers\InventoryItemController;
use App\Http\Controllers\LabTestController;
use App\Http\Controllers\all());
        return redirect()->route('feedbacks.index')->with('success', 'Feedback submitted s
    }
    public function show(Feedback $feedback)
    {
        return view('feedbacks.show', compact('feedback'));
    }
    public function edit(Feedback $feedback)
    {
        return view('feedbacks.edit', compact('feedback'));
    }
    public function update(Request $request, Feedback $feedback)
    {
        $request->validate([
            'user_id' => 'required|exists:users,user_id',
            'comments' => 'nullable',
            'rating' => 'required|integer|min:1|max:5',
        ]);
    }
}
```

```

        $feedback->update($request->all());
        return redirect()->route('feedbacks.index')->with('success', 'Feedback updated suc
    }
    public function destroy(Feedback $feedback)
    {
        $feedback->delete();
        return redirect()->route('feedbacks.index')->with('success', 'Feedback deleted suc
    }
}

```

Step 5: Define Routes for All Controllers

To make these controllers functional, you need to define routes in your web.php file. Here's an example of how to set up resource routes for all controllers:

```

// routes/web.php
use App\Http\Controllers\UserController;
use App\Http\Controllers\RoleController;
use App\Http\Controllers\PatientController;
use App\Http\Controllers\DoctorController;
use App\Http\Controllers\AppointmentController;
use App\Http\Controllers\InvoiceController;
use App\Http\Controllers\PaymentController;
use App\Http\Controllers\InventoryItemController;
use App\Http\Controllers\LabTestController;
use App\Http\Controllers\PrescriptionController;
use App\Http\Controllers\ ReportController;
use App\Http\Controllers\MessageController;
use App\Http\Controllers\EmergencyContactController;
use App\Http\Controllers\FeedbackController;
Route::resource('users', UserController::class);
Route::resource('roles', RoleController::class);
Route::resource('patients', PatientController::class);
Route::resource('doctors', DoctorController::class);
Route::resource('appointments', AppointmentController::class);
Route::resource('invoices', InvoiceController::class);
Route::resource('payments', PaymentController::class);
Route::resource('inventory_items', InventoryItemController::class);
Route::resource('lab_tests', LabTestController::class);
Route::resource('prescriptions', PrescriptionController::class);
Route::resource('reports', ReportController::class);
Route::resource('messages', MessageController::class);
Route::resource('emergency_contacts', EmergencyContactController::class);
Route::resource('feedbacks', FeedbackController::class);

```

Step 6: Create Views

You will also need to create views for each of the CRUD operations. Create a folder for each model in the resources/views directory and create the necessary Blade files for index, create, edit, show, etc.

For example, for the User model, you would create:

resources/views/users/index.blade.php

resources/views/users/create.blade.php

resources/views/users/edit.blade.php

resources/views/users/show.blade.php

Creating View Files for Each Controller

Creating view files for each controller using Bootstrap 5 involves creating a structured layout and individual views for each CRUD operation. Below, I will provide example view files for each model, including the necessary Bootstrap 5 components.

Step 1: Create a Layout File

First, create a layout file that will be used by all views. This file will include the Bootstrap 5 CSS and JavaScript links.

Layout File: Create a file named app.blade.php in resources/views/layouts/.

```
<!-- resources/views/layouts/app.blade.php -->
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Laravel CRUD</title>
    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-alpha1/dist/css/bootstrap.min"
</head>
<body>
    <div class="container mt-4">
        @yield('content')
    </div>
    <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-alpha1/dist/js/bootstrap.bun
</body>
</html>
```

Step 2: Create Views for Each Model

Now, create the views for each model. Below are examples for the User model. You can replicate the structure for other models by changing the names accordingly.

User Views

Index View

```
<!-- resources/views/users/index.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Users</h1>
    <a href="{{ route('users.create') }}" class="btn btn-primary mb-3">Create User</a>
    @if(session('success'))
        <div class="alert alert-success">{{ session('success') }}</div>
    @endif
    <table class="table">
        <thead>
            <tr>
                <th>User ID</th>
                <th>Username</th>
                <th>Email</th>
                <th>Actions</th>
            </tr>
        </thead>
        <tbody>
            @foreach($users as $user)
                <tr>
                    <td>{{ $user->user_id }}</td>
                    <td>{{ $user->username }}</td>
                    <td>{{ $user->email }}</td>
                    <td>
                        <a href="{{ route('users.show', $user) }}" class="btn btn-info">Vi
                        <a href="{{ route('users.edit', $user) }}" class="btn btn-warning"
                        <form action="{{ route('users.destroy', $user) }}" method="POST" s
                            @csrf
                            @method('DELETE')
                            <button type="submit" class="btn btn-danger">Delete</button>
                        </form>
                    </td>
                </tr>
            @endforeach
        </tbody>
    </table>
@endsection
```

Create View


```
<!-- resources/views/users/create.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Create User</h1>
    <form action="{{ route('users.store') }}" method="POST">
        @csrf
        <div class="mb-3">
            <label for="username" class="form-label">Username</label>
            <input type="text" class="form-control" id="username" name="username" required
        </div>
        <div class="mb-3">
            <label for="password_hash" class="form-label">Password</label>
            <input type="password" class="form-control" id="password_hash" name="password_
        </div>
        <div class="mb-3">
            <label for="email" class="form-label">Email</label>
            <input type="email" class="form-control" id="email" name="email" required>
        </div>
        <div class="mb-3">
            <label for="phone" class="form-label">Phone</label>
            <input type="text" class="form-control" id="phone" name="phone">
        </div>
        <div class="mb-3">
            <label for="role_id" class="form-label">Role</label>
            <select class="form-select" id="role_id" name="role_id">
                <option value="">Select Role</option>
                @foreach($roles as $role)
                    <option value="{{ $role->role_id }}">{{ $role->role_name }}</option>
                @endforeach
            </select>
        </div>
        <button type="submit" class="btn btn-primary">Create User</button>
        <a href="{{ route('users.index') }}" class="btn btn-secondary">Back</a>
    </form>
@endsection
```

Edit View

```

<!-- resources/views/users/edit.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Edit User</h1>
    <form action="{{ route('users.update', $user) }}" method="POST">
        @csrf
        @method('PUT')
        <div class="mb-3">
            <label for="username" class="form-label">Username</label>
            <input type="text" class="form-control" id="username" name="username" value="{{
</div>
        <div class="mb-3">
            <label for="password_hash" class="form-label">Password</label>
            <input type="password" class="form-control" id="password_hash" name="password_
</div>
        <div class="mb-3">
            <label for="email" class="form-label">Email</label>
            <input type="email" class="form-control" id="email" name="email" value="{{ $us
</div>
        <div class="mb-3">
            <label for="phone" class="form-label">Phone</label>
            <input type="text" class="form-control" id="phone" name="phone" value="{{ $use
</div>
        <div class="mb-3">
            <label for="role_id" class="form-label">Role</label>
            <select class="form-select" id="role_id" name="role_id">
                <option value="">Select Role</option>
                @foreach($roles as $role)
                    <option value="{{ $role->role_id }}" {{ $role->role_id == $user->role_
                @endforeach
            </select>
        </div>
        <button type="submit" class="btn btn-primary">Update User</button>
        <a href="{{ route('users.index') }}" class="btn btn-secondary">Back</a>
    </form>
@endsection

```

Show View

```

<!-- resources/views/users/show.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>User Details</h1>
    <table class="table">
        <tr>
            <th>User ID</th>
            <td>{{ $user->user_id }}</td>
        </tr>
        <tr>
            <th>Username</th>
            <td>{{ $user->username }}</td>
        </tr>
        <tr>
            <th>Email</th>
            <td>{{ $user->email }}</td>
        </tr>
        <tr>
            <th>Phone</th>
            <td>{{ $user->phone }}</td>
        </tr>
        <tr>
            <th>Role</th>
            <td>{{ $user->role->role_name ?? 'N/A' }}</td>
        </tr>
    </table>
    <a href="{{ route('users.index') }}" class="btn btn-secondary">Back</a>
@endsection

```

Step 3: Repeat for Other Models

You can replicate the structure of the views for the User model for other models like Role, Patient, Doctor, etc. Just change the variable names and routes accordingly.

Role Views

Index View

```

<!-- resources/views/roles/index.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Roles</h1>
    <a href="{{ route('roles.create') }}" class="btn btn-primary mb-3">Create Role</a>
    @if(session('success'))
        <div class="alert alert-success">{{ session('success') }}</div>
    @endif
    <table class="table">
        <thead>
            <tr>
                <th>Role ID</th>
                <th>Role Name</th>
                <th>Actions</th>
            </tr>
        </thead>
        <tbody>
            @foreach($roles as $role)
                <tr>
                    <td>{{ $role->role_id }}</td>
                    <td>{{ $role->role_name }}</td>
                    <td>
                        <a href="{{ route('roles.show', $role) }}" class="btn btn-info">Vi
                        <a href="{{ route('roles.edit', $role) }}" class="btn btn-warning"
                        <form action="{{ route('roles.destroy', $role) }}" method="POST" s
                            @csrf
                            @method('DELETE')
                            <button type="submit" class="btn btn-danger">Delete</button>
                        </form>
                    </td>
                </tr>
            @endforeach
        </tbody>
    </table>
@endsection

```

Create View

```
<!-- resources/views/roles/create.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Create Role</h1>
    <form action="{{ route('roles.store') }}" method="POST">
        @csrf
        <div class="mb-3">
            <label for="role_name" class="form-label">Role Name</label>
            <input type="text" class="form-control" id="role_name" name="role_name" required="">
        </div>
        <button type="submit" class="btn btn-primary">Create Role</button>
        <a href="{{ route('roles.index') }}" class="btn btn-secondary">Back</a>
    </form>
@endsection
```

Edit View

```
<!-- resources/views/roles/edit.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Edit Role</h1>
    <form action="{{ route('roles.update', $role) }}" method="POST">
        @csrf
        @method('PUT')
        <div class="mb-3">
            <label for="role_name" class="form-label">Role Name</label>
            <input type="text" class="form-control" id="role_name" name="role_name" value="{{ $role->role_name }}">
        </div>
        <button type="submit" class="btn btn-primary">Update Role</button>
        <a href="{{ route('roles.index') }}" class="btn btn-secondary">Back</a>
    </form>
@endsection
```

Show View

```
<!-- resources/views/roles/show.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Role Details</h1>
    <table class="table">
        <tr>
            <th>Role ID</th>
            <td>{{ $role->role_id }}</td>
        </tr>
        <tr>
            <th>Role Name</th>
            <td>{{ $role->role_name }}</td>
        </tr>
    </table>
    <a href="{{ route('roles.index') }}" class="btn btn-secondary">Back</a>
@endsection
```

Patient Views

Index View

```

<!-- resources/views/patients/index.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Patients</h1>
    <a href="{{ route('patients.create') }}" class="btn btn-primary mb-3">Create Patient</a>
    @if(session('success'))
        <div class="alert alert-success">{{ session('success') }}</div>
    @endif
    <table class="table">
        <thead>
            <tr>
                <th>Patient ID</th>
                <th>First Name</th>
                <th>Last Name</th>
                <th>Email</th>
                <th>Actions</th>
            </tr>
        </thead>
        <tbody>
            @foreach($patients as $patient)
                <tr>
                    <td>{{ $patient->patient_id }}</td>
                    <td>{{ $patient->first_name }}</td>
                    <td>{{ $patient->last_name }}</td>
                    <td>{{ $patient->email }}</td>
                    <td>
                        <a href="{{ route('patients.show', $patient) }}" class="btn btn-in
                        <a href="{{ route('patients.edit', $patient) }}" class="btn btn-wa
                        <form action="{{ route('patients.destroy', $patient) }}" method="P
                            @csrf
                            @method('DELETE')
                            <button type="submit" class="btn btn-danger">Delete</button>
                        </form>
                    </td>
                </tr>
            @endforeach
        </tbody>
    </table>
@endsection

```

Create View

```
<!-- resources/views/patients/create.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Create Patient</h1>
    <form action="{{ route('patients.store') }}" method="POST">
        @csrf
        <div class="mb-3">
            <label for="first_name" class="form-label">First Name</label>
            <input type="text" class="form-control" id="first_name" name="first_name" required>
        </div>
        <div class="mb-3">
            <label for="last_name" class="form-label">Last Name</label>
            <input type="text" class="form-control" id="last_name" name="last_name" required>
        </div>
        <div class="mb-3">
            <label for="date_of_birth" class="form-label">Date of Birth</label>
            <input type="date" class="form-control" id="date_of_birth" name="date_of_birth" required>
        </div>
        <div class="mb-3">
            <label for="gender" class="form-label">Gender</label>
            <input type="text" class="form-control" id="gender" name="gender">
        </div>
        <div class="mb-3">
            <label for="phone" class="form-label">Phone</label>
            <input type="text" class="form-control" id="phone" name="phone">
        </div>
        <div class="mb-3">
            <label for="email" class="form-label">Email</label>
            <input type="email" class="form-control" id="email" name="email" required>
        </div>
        <div class="mb-3">
            <label for="address" class="form-label">Address</label>
            <input type="text" class="form-control" id="address" name="address">
        </div>
        <button type="submit" class="btn btn-primary">Create Patient</button>
        <a href="{{ route('patients.index') }}" class="btn btn-secondary">Back</a>
    </form>
@endsection
```

Edit View


```

<!-- resources/views/patients/edit.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Edit Patient</h1>
    <form action="{{ route('patients.update', $patient) }}" method="POST">
        @csrf
        @method('PUT')
        <div class="mb-3">
            <label for="first_name" class="form-label">First Name</label>
            <input type="text" class="form-control" id="first_name" name="first_name" value="{{ $patient->first_name }}" />
        </div>
        <div class="mb-3">
            <label for="last_name" class="form-label">Last Name</label>
            <input type="text" class="form-control" id="last_name" name="last_name" value="{{ $patient->last_name }}" />
        </div>
        <div class="mb-3">
            <label for="date_of_birth" class="form-label">Date of Birth</label>
            <input type="date" class="form-control" id="date_of_birth" name="date_of_birth" value="{{ $patient->date_of_birth }}" />
        </div>
        <div class="mb-3">
            <label for="gender" class="form-label">Gender</label>
            <input type="text" class="form-control" id="gender" name="gender" value="{{ $patient->gender }}" />
        </div>
        <div class="mb-3">
            <label for="phone" class="form-label">Phone</label>
            <input type="text" class="form-control" id="phone" name="phone" value="{{ $patient->phone }}" />
        </div>
        <div class="mb-3">
            <label for="email" class="form-label">Email</label>
            <input type="email" class="form-control" id="email" name="email" value="{{ $patient->email }}" />
        </div>
        <div class="mb-3">
            <label for="address" class="form-label">Address</label>
            <input type="text" class="form-control" id="address" name="address" value="{{ $patient->address }}" />
        </div>
        <button type="submit" class="btn btn-primary">Update Patient</button>
        <a href="{{ route('patients.index') }}" class="btn btn-secondary">Back</a>
    </form>
@endsection

```

Show View

```

<!-- resources/views/patients/show.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Patient Details</h1>
    <table class="table">
        <tr>
            <th>Patient ID</th>
            <td>{{ $patient->patient_id }}</td>
        <tr>
            <th>First Name</th>
            <td>{{ $patient->first_name }}</td>
        </tr>
        <tr>
            <th>Last Name</th>
            <td>{{ $patient->last_name }}</td>
        </tr>
        <tr>
            <th>Date of Birth</th>
            <td>{{ $patient->date_of_birth }}</td>
        </tr>
        <tr>
            <th>Gender</th>
            <td>{{ $patient->gender }}</td>
        </tr>
        <tr>
            <th>Phone</th>
            <td>{{ $patient->phone }}</td>
        </tr>
        <tr>
            <th>Email</th>
            <td>{{ $patient->email }}</td>
        </tr>
        <tr>
            <th>Address</th>
            <td>{{ $patient->address }}</td>
        </tr>
    </table>
    <a href="{{ route('patients.index') }}" class="btn btn-secondary">Back</a>
@endsection

```

Doctor Views

Index View

```

<!-- resources/views/doctors/index.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Doctors</h1>
    <a href="{{ route('doctors.create') }}" class="btn btn-primary mb-3">Create Doctor</a>
    @if(session('success'))
        <div class="alert alert-success">{{ session('success') }}</div>
    @endif
    <table class="table">
        <thead>
            <tr>
                <th>Doctor ID</th>
                <th>Name</th>
                <th>Specialization</th>
                <th>Email</th>
                <th>Actions</th>
            </tr>
        </thead>
        <tbody>
            @foreach($doctors as $doctor)
                <tr>
                    <td>{{ $doctor->doctor_id }}</td>
                    <td>{{ $doctor->name }}</td>
                    <td>{{ $doctor->specialization }}</td>
                    <td>{{ $doctor->email }}</td>
                    <td>
                        <a href="{{ route('doctors.show', $doctor) }}" class="btn btn-info">Show</a>
                        <a href="{{ route('doctors.edit', $doctor) }}" class="btn btn-warning">Edit</a>
                        <form action="{{ route('doctors.destroy', $doctor) }}" method="POST">
                            @csrf
                            @method('DELETE')
                            <button type="submit" class="btn btn-danger">Delete</button>
                        </form>
                    </td>
                </tr>
            @endforeach
        </tbody>
    </table>
@endsection

```

Create View

```
<!-- resources/views/doctors/create.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Create Doctor</h1>
    <form action="{{ route('doctors.store') }}" method="POST">
        @csrf
        <div class="mb-3">
            <label for="name" class="form-label">Name</label>
            <input type="text" class="form-control" id="name" name="name" required>
        </div>
        <div class="mb-3">
            <label for="specialization" class="form-label">Specialization</label>
            <input type="text" class="form-control" id="specialization" name="specializati
        </div>
        <div class="mb-3">
            <label for="email" class="form-label">Email</label>
            <input type="email" class="form-control" id="email" name="email" required>
        </div>
        <div class="mb-3">
            <label for="phone" class="form-label">Phone</label>
            <input type="text" class="form-control" id="phone" name="phone">
        </div>
        <button type="submit" class="btn btn-primary">Create Doctor</button>
        <a href="{{ route('doctors.index') }}" class="btn btn-secondary">Back</a>
    </form>
@endsection
```

Edit View

```
<!-- resources/views/doctors/edit.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Edit Doctor</h1>
    <form action="{{ route('doctors.update', $doctor) }}" method="POST">
        @csrf
        @method('PUT')
        <div class="mb-3">
            <label for="name" class="form-label">Name</label>
            <input type="text" class="form-control" id="name" name="name" value="{{ $doctor->name }}" />
        </div>
        <div class="mb-3">
            <label for="specialization" class="form-label">Specialization</label>
            <input type="text" class="form-control" id="specialization" name="specialization" value="{{ $doctor->specialization }}" />
        </div>
        <div class="mb-3">
            <label for="email" class="form-label">Email</label>
            <input type="email" class="form-control" id="email" name="email" value="{{ $doctor->email }}" />
        </div>
        <div class="mb-3">
            <label for="phone" class="form-label">Phone</label>
            <input type="text" class="form-control" id="phone" name="phone" value="{{ $doctor->phone }}" />
        </div>
        <button type="submit" class="btn btn-primary">Update Doctor</button>
        <a href="{{ route('doctors.index') }}" class="btn btn-secondary">Back</a>
    </form>
@endsection
```

Show View

```
<!-- resources/views/doctors/show.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Doctor Details</h1>
    <table class="table">
        <tr>
            <th>Doctor ID</th>
            <td>{{ $doctor->doctor_id }}</td>
        </tr>
        <tr>
            <th>Name</th>
            <td>{{ $doctor->name }}</td>
        </tr>
        <tr>
            <th>Specialization</th>
            <td>{{ $doctor->specialization }}</td>
        </tr>
        <tr>
            <th>Email</th>
            <td>{{ $doctor->email }}</td>
        </tr>
        <tr>
            <th>Phone</th>
            <td>{{ $doctor->phone }}</td>
        </tr>
    </table>
    <a href="{{ route('doctors.index') }}" class="btn btn-secondary">Back</a>
@endsection
```

Appointment Views

Index View

```

<!-- resources/views/appointments/index.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Appointments</h1>
    <a href="{{ route('appointments.create') }}" class="btn btn-primary mb-3">Create Appoi
    @if(session('success'))
        <div class="alert alert-success">{{ session('success') }}</div>
    @endif
    <table class="table">
        <thead>
            <tr>
                <th>Appointment ID</th>
                <th>Patient</th>
                <th>Doctor</th>
                <th>Date</th>
                <th>Actions</th>
            </tr>
        </thead>
        <tbody>
            @foreach($appointments as $appointment)
                <tr>
                    <td>{{ $appointment->appointment_id }}</td>
                    <td>{{ $appointment->patient->first_name }} {{ $appointment->patient->
                    <td>{{ $appointment->doctor->name }}</td>
                    <td>{{ $appointment->date }}</td>
                    <td>
                        <a href="{{ route('appointments.show', $appointment) }}" class="bt
                        <a href="{{ route('appointments.edit', $appointment) }}" class="bt
                        <form action="{{ route('appointments.destroy', $appointment) }}" m
                            @csrf
                            @method('DELETE')
                            <button type="submit" class="btn btn-danger">Delete</button>
                        </form>
                    </td>
                </tr>
            @endforeach
        </tbody>
    </table>
@endsection

```

Create View

```
<!-- resources/views/appointments/create.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Create Appointment</h1>
    <form action="{{ route('appointments.store') }}" method="POST">
        @csrf
        <div class="mb-3">
            <label for="patient_id" class="form-label">Patient</label>
            <select class="form-select" id="patient_id" name="patient_id" required>
                <option value="">Select Patient</option>
                @foreach($patients as $patient)
                    <option value="{{ $patient->patient_id }}">{{ $patient->first_name }}
                @endforeach
            </select>
        </div>
        <div class="mb-3">
            <label for="doctor_id" class="form-label">Doctor</label>
            <select class="form-select" id="doctor_id" name="doctor_id" required>
                <option value="">Select Doctor</option>
                @foreach($doctors as $doctor)
                    <option value="{{ $doctor->doctor_id }}">{{ $doctor->name }}</option>
                @endforeach
            </select>
        </div>
        <div class="mb-3">
            <label for="date" class="form-label">Date</label>
            <input type="datetime-local" class="form-control" id="date" name="date" required>
        </div>
        <button type="submit" class="btn btn-primary">Create Appointment</button>
        <a href="{{ route('appointments.index') }}" class="btn btn-secondary">Back</a>
    </form>
@endsection
```

[Edit View](#)


```
<!-- resources/views/appointments/edit.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Edit Appointment</h1>
    <form action="{{ route('appointments.update', $appointment) }}" method="POST">
        @csrf
        @method('PUT')
        <div class="mb-3">
            <label for="patient_id" class="form-label">Patient</label>
            <select class="form-select" id="patient_id" name="patient_id" required>
                @foreach($patients as $patient)
                    <option value="{{ $patient->patient_id }}" {{ $patient->patient_id ==
                        {{ $patient->first_name }} {{ $patient->last_name }}
                    </option>
                @endforeach
            </select>
        </div>
        <div class="mb-3">
            <label for="doctor_id" class="form-label">Doctor</label>
            <select class="form-select" id="doctor_id" name="doctor_id" required>
                @foreach($doctors as $doctor)
                    <option value="{{ $doctor->doctor_id }}" {{ $doctor->doctor_id == $app
                        {{ $doctor->name }}
                    </option>
                @endforeach
            </select>
        </div>
        <div class="mb-3">
            <label for="date" class="form-label">Date</label>
            <input type="datetime-local" class="form-control" id="date" name="date" value=
        </div>
        <button type="submit" class="btn btn-primary">Update Appointment</button>
        <a href="{{ route('appointments.index') }}" class="btn btn-secondary">Back</a>
    </form>
@endsection
```

Show View

```
<!-- resources/views/appointments/show.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Appointment Details</h1>
    <table class="table">
        <tr>
            <th>Appointment ID</th>
            <td>{{ $appointment->appointment_id }}</td>
        </tr>
        <tr>
            <th>Patient</th>
            <td>{{ $appointment->patient->first_name }} {{ $appointment->patient->last_name }}</td>
        </tr>
        <tr>
            <th>Doctor</th>
            <td>{{ $appointment->doctor->name }}</td>
        </tr>
        <tr>
            <th>Date</th>
            <td>{{ $appointment->date }}</td>
        </tr>
    </table>
    <a href="{{ route('appointments.index') }}" class="btn btn-secondary">Back</a>
@endsection
```

Invoice Views

Index View

```

<!-- resources/views/invoices/index.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Invoices</h1>
    <a href="{{ route('invoices.create') }}" class="btn btn-primary mb-3">Create Invoice</a>
    @if(session('success'))
        <div class="alert alert-success">{{ session('success') }}</div>
    @endif
    <table class="table">
        <thead>
            <tr>
                <th>Invoice ID</th>
                <th>Patient</th>
                <th>Amount</th>
                <th>Date</th>
                <th>Actions</th>
            </tr>
        </thead>
        <tbody>
            @foreach($invoices as $invoice)
                <tr>
                    <td>{{ $invoice->invoice_id }}</td>
                    <td>{{ $invoice->patient->first_name }} {{ $invoice->patient->last_name }}</td>
                    <td>{{ $invoice->amount }}</td>
                    <td>{{ $invoice->date }}</td>
                    <td>
                        <a href="{{ route('invoices.show', $invoice) }}" class="btn btn-info">View</a>
                        <a href="{{ route('invoices.edit', $invoice) }}" class="btn btn-warning">Edit</a>
                        <form action="{{ route('invoices.destroy', $invoice) }}" method="POST">
                            @csrf
                            @method('DELETE')
                            <button type="submit" class="btn btn-danger">Delete</button>
                        </form>
                    </td>
                </tr>
            @endforeach
        </tbody>
    </table>
@endsection

```

Create View

```
<!-- resources/views/invoices/create.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Create Invoice</h1>
    <form action="{{ route('invoices.store') }}" method="POST">
        @csrf
        <div class="mb-3">
            <label for="patient_id" class="form-label">Patient</label>
            <select class="form-select" id="patient_id" name="patient_id" required>
                <option value="">Select Patient</option>
                @foreach($patients as $patient)
                    <option value="{{ $patient->patient_id }}">{{ $patient->first_name }}
                @endforeach
            </select>
        </div>
        <div class="mb-3">
            <label for="amount" class="form-label">Amount</label>
            <input type="number" class="form-control" id="amount" name="amount" required>
        </div>
        <div class="mb-3">
            <label for="date" class="form-label">Date</label>
            <input type="date" class="form-control" id="date" name="date" required>
        </div>
        <button type="submit" class="btn btn-primary">Create Invoice</button>
        <a href="{{ route('invoices.index') }}" class="btn btn-secondary">Back</a>
    </form>
@endsection
```

Edit View

```
<!-- resources/views/invoices/edit.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Edit Invoice</h1>
    <form action="{{ route('invoices.update', $invoice) }}" method="POST">
        @csrf
        @method('PUT')
        <div class="mb-3">
            <label for="patient_id" class="form-label">Patient</label>
            <select class="form-select" id="patient_id" name="patient_id" required>
                @foreach($patients as $patient)
                    <option value="{{ $patient->patient_id }}" {{ $patient->patient_id ==
                        {{ $patient->first_name }} {{ $patient->last_name }}
                    </option>
                @endforeach
            </select>
        </div>
        <div class="mb-3">
            <label for="amount" class="form-label">Amount</label>
            <input type="number" class="form-control" id="amount" name="amount" value="{{
        </div>
        <div class="mb-3">
            <label for="date" class="form-label">Date</label>
            <input type="date" class="form-control" id="date" name="date" value="{{ $invoi
        </div>
        <button type="submit" class="btn btn-primary">Update Invoice</button>
        <a href="{{ route('invoices.index') }}" class="btn btn-secondary">Back</a>
    </form>
@endsection
```

Show View

```
<!-- resources/views/invoices/show.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Invoice Details</h1>
    <table class="table">
        <tr>
            <th>Invoice ID</th>
            <td>{{ $invoice->invoice_id }}</td>
        </tr>
        <tr>
            <th>Patient</th>
            <td>{{ $invoice->patient->first_name }} {{ $invoice->patient->last_name }}</td>
        </tr>
        <tr>
            <th>Amount</th>
            <td>{{ $invoice->amount }}</td>
        </tr>
        <tr>
            <th>Date</th>
            <td>{{ $invoice->date }}</td>
        </tr>
    </table>
    <a href="{{ route('invoices.index') }}" class="btn btn-secondary">Back</a>
@endsection
```

Payment Views

Index View

```

<!-- resources/views/payments/index.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Payments</h1>
    <a href="{{ route('payments.create') }}" class="btn btn-primary mb-3">Create Payment</a>
    @if(session('success'))
        <div class="alert alert-success">{{ session('success') }}</div>
    @endif
    <table class="table">
        <thead>
            <tr>
                <th>Payment ID</th>
                <th>Invoice</th>
                <th>Amount</th>
                <th>Date</th>
                <th>Actions</th>
            </tr>
        </thead>
        <tbody>
            @foreach($payments as $payment)
                <tr>
                    <td>{{ $payment->payment_id }}</td>
                    <td>{{ $payment->invoice->invoice_id }}</td>
                    <td>{{ $payment->amount }}</td>
                    <td>{{ $payment->date }}</td>
                    <td>
                        <a href="{{ route('payments.show', $payment) }}" class="btn btn-in
                        <a href="{{ route('payments.edit', $payment) }}" class="btn btn-wa
                        <form action="{{ route('payments.destroy', $payment) }}" method="P
                            @csrf
                            @method('DELETE')
                            <button type="submit" class="btn btn-danger">Delete</button>
                        </form>
                    </td>
                </tr>
            @endforeach
        </tbody>
    </table>
@endsection

```

Create View

```
<!-- resources/views/payments/create.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Create Payment</h1>
    <form action="{{ route('payments.store') }}" method="POST">
        @csrf
        <div class="mb-3">
            <label for="invoice_id" class="form-label">Invoice</label>
            <select class="form-select" id="invoice_id" name="invoice_id" required>
                <option value="">Select Invoice</option>
                @foreach($invoices as $invoice)
                    <option value="{{ $invoice->invoice_id }}">{{ $invoice->invoice_id }}<
                @endforeach
            </select>
        </div>
        <div class="mb-3">
            <label for="amount" class="form-label">Amount</label>
            <input type="number" class="form-control" id="amount" name="amount" required>
        </div>
        <div class="mb-3">
            <label for="date" class="form-label">Date</label>
            <input type="date" class="form-control" id="date" name="date" required>
        </div>
        <button type="submit" class="btn btn-primary">Create Payment</button>
        <a href="{{ route('payments.index') }}" class="btn btn-secondary">Back</a>
    </form>
@endsection
```

Edit View


```
<!-- resources/views/payments/edit.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Edit Payment</h1>
    <form action="{{ route('payments.update', $payment) }}" method="POST">
        @csrf
        @method('PUT')
        <div class="mb-3">
            <label for="invoice_id" class="form-label">Invoice</label>
            <select class="form-select" id="invoice_id" name="invoice_id" required>
                @foreach($invoices as $invoice)
                    <option value="{{ $invoice->invoice_id }}" {{ $invoice->invoice_id ==
                        {{ $invoice->invoice_id }}
                    </option>
                @endforeach
            </select>
        </div>
        <div class="mb-3">
            <label for="amount" class="form-label">Amount</label>
            <input type="number" class="form-control" id="amount" name="amount" value="{{
        </div>
        <div class="mb-3">
            <label for="date" class="form-label">Date</label>
            <input type="date" class="form-control" id="date" name="date" value="{{ $payme
        </div>
        <button type="submit" class="btn btn-primary">Update Payment</button>
        <a href="{{ route('payments.index') }}" class="btn btn-secondary">Back</a>
    </form>
@endsection
```

Show View

```
<!-- resources/views/payments/show.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Payment Details</h1>
    <table class="table">
        <tr>
            <th>Payment ID</th>
            <td>{{ $payment->payment_id }}</td>
        </tr>
        <tr>
            <th>Invoice</th>
            <td>{{ $payment->invoice->invoice_id }}</td>
        </tr>
        <tr>
            <th>Amount</th>
            <td>{{ $payment->amount }}</td>
        </tr>
        <tr>
            <th>Date</th>
            <td>{{ $payment->date }}</td>
        </tr>
    </table>
    <a href="{{ route('payments.index') }}" class="btn btn-secondary">Back</a>
@endsection
```

Inventory Item Views

Index View

```

<!-- resources/views/inventory_items/index.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Inventory Items</h1>
    <a href="{{ route('inventory_items.create') }}" class="btn btn-primary mb-3">Create In
    @if(session('success'))
        <div class="alert alert-success">{{ session('success') }}</div>
    @endif
    <table class="table">
        <thead>
            <tr>
                <th>Item ID</th>
                <th>Name</th>
                <th>Quantity</th>
                <th>Price</th>
                <th>Actions</th>
            </tr>
        </thead>
        <tbody>
            @foreach($inventoryItems as $item)
                <tr>
                    <td>{{ $item->item_id }}</td>
                    <td>{{ $item->name }}</td>
                    <td>{{ $item->quantity }}</td>
                    <td>{{ $item->price }}</td>
                    <td>
                        <a href="{{ route('inventory_items.show', $item) }}" class="btn bt
                        <a href="{{ route('inventory_items.edit', $item) }}" class="btn bt
                        <form action="{{ route('inventory_items.destroy', $item) }}" metho
                            @csrf
                            @method('DELETE')
                            <button type="submit" class="btn btn-danger">Delete</button>
                        </form>
                    </td>
                </tr>
            @endforeach
        </tbody>
    </table>
@endsection

```

Create View

```
<!-- resources/views/inventory_items/create.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Create Inventory Item</h1>
    <form action="{{ route('inventory_items.store') }}" method="POST">
        @csrf
        <div class="mb-3">
            <label for="name" class="form-label">Item Name</label>
            <input type="text" class="form-control" id="name" name="name" required>
        </div>
        <div class="mb-3">
            <label for="quantity" class="form-label">Quantity</label>
            <input type="number" class="form-control" id="quantity" name="quantity" required>
        </div>
        <div class="mb-3">
            <label for="price" class="form-label">Price</label>
            <input type="number" class="form-control" id="price" name="price" required>
        </div>
        <button type="submit" class="btn btn-primary">Create Item</button>
        <a href="{{ route('inventory_items.index') }}" class="btn btn-secondary">Back</a>
    </form>
@endsection
```

[Edit View](#)

```
<!-- resources/views/inventory_items/edit.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Edit Inventory Item</h1>
    <form action="{{ route('inventory_items.update', $item) }}" method="POST">
        @csrf
        @method('PUT')
        <div class="mb-3">
            <label for="name" class="form-label">Item Name</label>
            <input type="text" class="form-control" id="name" name="name" value="{{ $item-
</div>
        <div class="mb-3">
            <label for="quantity" class="form-label">Quantity</label>
            <input type="number" class="form-control" id="quantity" name="quantity" value=
</div>
        <div class="mb-3">
            <label for="price" class="form-label">Price</label>
            <input type="number" class="form-control" id="price" name="price" value="{{ $i
</div>
        <button type="submit" class="btn btn-primary">Update Item</button>
        <a href="{{ route('inventory_items.index') }}" class="btn btn-secondary">Back</a>
    </form>
@endsection
```

Show View

```
<!-- resources/views/inventory_items/show.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Inventory Item Details</h1>
    <table class="table">
        <tr>
            <th>Item ID</th>
            <td>{{ $item->item_id }}</td>
        </tr>
        <tr>
            <th>Name</th>
            <td>{{ $item->name }}</td>
        </tr>
        <tr>
            <th>Quantity</th>
            <td>{{ $item->quantity }}</td>
        </tr>
        <tr>
            <th>Price</th>
            <td>{{ $item->price }}</td>
        </tr>
    </table>
    <a href="{{ route('inventory_items.index') }}" class="btn btn-secondary">Back</a>
@endsection
```

Lab Test Views

Index View

```

<!-- resources/views/lab_tests/index.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Lab Tests</h1>
    <a href="{{ route('lab_tests.create') }}" class="btn btn-primary mb-3">Create Lab Test
    @if(session('success'))
        <div class="alert alert-success">{{ session('success') }}</div>
    @endif
    <table class="table">
        <thead>
            <tr>
                <th>Test ID</th>
                <th>Name</th>
                <th>Price</th>
                <th>Actions</th>
            </tr>
        </thead>
        <tbody>
            @foreach($labTests as $test)
                <tr>
                    <td>{{ $test->test_id }}</td>
                    <td>{{ $test->name }}</td>
                    <td>{{ $test->price }}</td>
                    <td>
                        <a href="{{ route('lab_tests.show', $test) }}" class="btn btn-info">Show
                        <a href="{{ route('lab_tests.edit', $test) }}" class="btn btn-warning">Edit
                        <form action="{{ route('lab_tests.destroy', $test) }}" method="POST"
                            @csrf
                            @method('DELETE')
                            <button type="submit" class="btn btn-danger">Delete</button>
                        </form>
                    </td>
                </tr>
            @endforeach
        </tbody>
    </table>
@endsection

```

Create View

```
<!-- resources/views/lab_tests/create.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Create Lab Test</h1>
    <form action="{{ route('lab_tests.store') }}" method="POST">
        @csrf
        <div class="mb-3">
            <label for="name" class="form-label">Test Name</label>
            <input type="text" class="form-control" id="name" name="name" required>
        </div>
        <div class="mb-3">
            <label for="price" class="form-label">Price</label>
            <input type="number" class="form-control" id="price" name="price" required>
        </div>
        <button type="submit" class="btn btn-primary">Create Lab Test</button>
        <a href="{{ route('lab_tests.index') }}" class="btn btn-secondary">Back</a>
    </form>
@endsection
```

Edit View

```
<!-- resources/views/lab_tests/edit.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Edit Lab Test</h1>
    <form action="{{ route('lab_tests.update', $test) }}" method="POST">
        @csrf
        @method('PUT')
        <div class="mb-3">
            <label for="name" class="form-label">Test Name</label>
            <input type="text" class="form-control" id="name" name="name" value="{{ $test->name }}">
        </div>
        <div class="mb-3">
            <label for="price" class="form-label">Price</label>
            <input type="number" class="form-control" id="price" name="price" value="{{ $test->price }}">
        </div>
        <button type="submit" class="btn btn-primary">Update Lab Test</button>
        <a href="{{ route('lab_tests.index') }}" class="btn btn-secondary">Back</a>
    </form>
@endsection
```

Show View


```
<!-- resources/views/lab_tests/show.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Lab Test Details</h1>
    <table class="table">
        <tr>
            <th>Test ID</th>
            <td>{{ $test->test_id }}</td>
        </tr>
        <tr>
            <th>Name</th>
            <td>{{ $test->name }}</td>
        </tr>
        <tr>
            <th>Price</th>
            <td>{{ $test->price }}</td>
        </tr> </table>
    <a href="{{ route('lab_tests.index') }}" class="btn btn-secondary">Back</a>
@endsection
```

Prescription Views

Index View

```

<!-- resources/views/prescriptions/index.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Prescriptions</h1>
    <a href="{{ route('prescriptions.create') }}" class="btn btn-primary mb-3">Create Pres
    @if(session('success'))
        <div class="alert alert-success">{{ session('success') }}</div>
    @endif
    <table class="table">
        <thead>
            <tr>
                <th>Prescription ID</th>
                <th>Patient</th>
                <th>Doctor</th>
                <th>Date</th>
                <th>Actions</th>
            </tr>
        </thead>
        <tbody>
            @foreach($prescriptions as $prescription)
                <tr>
                    <td>{{ $prescription->prescription_id }}</td>
                    <td>{{ $prescription->patient->first_name }} {{ $prescription->patient
                    <td>{{ $prescription->doctor->name }}</td>
                    <td>{{ $prescription->date }}</td>
                    <td>
                        <a href="{{ route('prescriptions.show', $prescription) }}" class="
                        <a href="{{ route('prescriptions.edit', $prescription) }}" class="
                        <form action="{{ route('prescriptions.destroy', $prescription) }}"
                            @csrf
                            @method('DELETE')
                            <button type="submit" class="btn btn-danger">Delete</button>
                        </form>
                    </td>
                </tr>
            @endforeach
        </tbody>
    </table>
@endsection

```

Create View

```

<!-- resources/views/prescriptions/create.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Create Prescription</h1>
    <form action="{{ route('prescriptions.store') }}" method="POST">
        @csrf
        <div class="mb-3">
            <label for="patient_id" class="form-label">Patient</label>
            <select class="form-select" id="patient_id" name="patient_id" required>
                <option value="">Select Patient</option>
                @foreach($patients as $patient)
                    <option value="{{ $patient->patient_id }}">{{ $patient->first_name }}
                @endforeach
            </select>
        </div>
        <div class="mb-3">
            <label for="doctor_id" class="form-label">Doctor</label>
            <select class="form-select" id="doctor_id" name="doctor_id" required>
                <option value="">Select Doctor</option>
                @foreach($doctors as $doctor)
                    <option value="{{ $doctor->doctor_id }}">{{ $doctor->name }}</option>
                @endforeach
            </select>
        </div>
        <div class="mb-3">
            <label for="medication" class="form-label">Medication</label>
            <input type="text" class="form-control" id="medication" name="medication" required>
        </div>
        <div class="mb-3">
            <label for="dosage" class="form-label">Dosage</label>
            <input type="text" class="form-control" id="dosage" name="dosage" required>
        </div>
        <div class="mb-3">
            <label for="date" class="form-label">Date</label>
            <input type="date" class="form-control" id="date" name="date" required>
        </div>
        <button type="submit" class="btn btn-primary">Create Prescription</button>
        <a href="{{ route('prescriptions.index') }}" class="btn btn-secondary">Back</a>
    </form>
@endsection

```

Edit View

```

<!-- resources/views/prescriptions/edit.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Edit Prescription</h1>
    <form action="{{ route('prescriptions.update', $prescription) }}" method="POST">
        @csrf
        @method('PUT')
        <div class="mb-3">
            <label for="patient_id" class="form-label">Patient</label>
            <select class="form-select" id="patient_id" name="patient_id" required>
                @foreach($patients as $patient)
                    <option value="{{ $patient->patient_id }}" {{ $patient->patient_id ==
                        {{ $patient->first_name }} {{ $patient->last_name }}
                    </option>
                @endforeach
            </select>
        </div>
        <div class="mb-3">
            <label for="doctor_id" class="form-label">Doctor</label>
            <select class="form-select" id="doctor_id" name="doctor_id" required>
                @foreach($doctors as $doctor)
                    <option value="{{ $doctor->doctor_id }}" {{ $doctor->doctor_id == $pre
                        {{ $doctor->name }}
                    </option>
                @endforeach
            </select>
        </div>
        <div class="mb-3">
            <label for="medication" class="form-label">Medication</label>
            <input type="text" class="form-control" id="medication" name="medication" value="">
        </div>
        <div class="mb-3">
            <label for="dosage" class="form-label">Dosage</label>
            <input type="text" class="form-control" id="dosage" name="dosage" value="{{ $prescription->dosage }}">
        </div>
        <div class="mb-3">
            <label for="date" class="form-label">Date</label>
            <input type="date" class="form-control" id="date" name="date" value="{{ $prescription->date }}">
        </div>
        <button type="submit" class="btn btn-primary">Update Prescription</button>
        <a href="{{ route('prescriptions.index') }}" class="btn btn-secondary">Back</a>
    </form>
@endsection

```

Show View

```

<!-- resources/views/prescriptions/show.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Prescription Details</h1>
    <table class="table">
        <tr>
            <th>Prescription ID</th>
            <td>{{ $prescription->prescription_id }}</td>
        </tr>
        <tr>
            <th>Patient</th>
            <td>{{ $prescription->patient->first_name }} {{ $prescription->patient->last_n
        </tr>
        <tr>
            <th>Doctor</th>
            <td>{{ $prescription->doctor->name }}</td>
        </tr>
        <tr>
            <th>Medication</th>
            <td>{{ $prescription->medication }}</td>
        </tr>
        <tr>
            <th>Dosage</th>
            <td>{{ $prescription->dosage }}</td>
        </tr>
        <tr>
            <th>Date</th>
            <td>{{ $prescription->date }}</td>
        </tr>
    </table>
    <a href="{{ route('prescriptions.index') }}" class="btn btn-secondary">Back</a>
@endsection

```

Report Views

Index View

```

<!-- resources/views/reports/index.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Reports</h1>
    <a href="{{ route('reports.create') }}" class="btn btn-primary mb-3">Create Report</a>
    @if(session('success'))
        <div class="alert alert-success">{{ session('success') }}</div>
    @endif
    <table class="table">
        <thead>
            <tr>
                <th>Report ID</th>
                <th>Patient</th>
                <th>Doctor</th>
                <th>Date</th>
                <th>Actions</th>
            </tr>
        </thead>
        <tbody>
            @foreach($reports as $report)
                <tr>
                    <td>{{ $report->report_id }}</td>
                    <td>{{ $report->patient->first_name }} {{ $report->patient->last_name }}</td>
                    <td>{{ $report->doctor->name }}</td>
                    <td>{{ $report->date }}</td>
                    <td>
                        <a href="{{ route('reports.show', $report) }}" class="btn btn-info">Show</a>
                        <a href="{{ route('reports.edit', $report) }}" class="btn btn-warning">Edit</a>
                        <form action="{{ route('reports.destroy', $report) }}" method="POST">
                            @csrf
                            @method('DELETE')
                            <button type="submit" class="btn btn-danger">Delete</button>
                        </form>
                    </td>
                </tr>
            @endforeach
        </tbody>
    </table>
@endsection

```

Create View

```

<!-- resources/views/reports/create.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Create Report</h1>
    <form action="{{ route('reports.store') }}" method="POST">
        @csrf
        <div class="mb-3">
            <label for="patient_id" class="form-label">Patient</label>
            <select class="form-select" id="patient_id" name="patient_id" required>
                <option value="">Select Patient</option>
                @foreach($patients as $patient)
                    <option value="{{ $patient->patient_id }}">{{ $patient->first_name }}
                @endforeach
            </select>
        </div>
        <div class="mb-3">
            <label for="doctor_id" class="form-label">Doctor</label>
            <select class="form-select" id="doctor_id" name="doctor_id" required>
                <option value="">Select Doctor</option>
                @foreach($doctors as $doctor)
                    <option value="{{ $doctor->doctor_id }}">{{ $doctor->name }}</option>
                @endforeach
            </select>
        </div>
        <div class="mb-3">
            <label for="content" class="form-label">Report Content</label>
            <textarea class="form-control" id="content" name="content" required></textarea>
        </div>
        <div class="mb-3">
            <label for="date" class="form-label">Date</label>
            <input type="date" class="form-control" id="date" name="date" required>
        </div>
        <button type="submit" class="btn btn-primary">Create Report</button>
        <a href="{{ route('reports.index') }}" class="btn btn-secondary">Back</a>
    </form>
@endsection

```

Edit View

```

<!-- resources/views/reports/edit.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Edit Report</h1>
    <form action="{{ route('reports.update', $report) }}" method="POST">
        @csrf
        @method('PUT')
        <div class="mb-3">
            <label for="patient_id" class="form-label">Patient</label>
            <select class="form-select" id="patient_id" name="patient_id" required>
                @foreach($patients as $patient)
                    <option value="{{ $patient->patient_id }}" {{ $patient->patient_id ==
                        {{ $patient->first_name }} {{ $patient->last_name }}
                    </option>
                @endforeach
            </select>
        </div>
        <div class="mb-3">
            <label for="doctor_id" class="form-label">Doctor</label>
            <select class="form-select" id="doctor_id" name="doctor_id" required>
                @foreach($doctors as $doctor)
                    <option value="{{ $doctor->doctor_id }}" {{ $doctor->doctor_id == $rep
                        {{ $doctor->name }}
                    </option>
                @endforeach
            </select>
        </div>
        <div class="mb-3">
            <label for="content" class="form-label">Report Content</label>
            <textarea class="form-control" id="content" name="content" required>{{ $report
        </div>
        <div class="mb-3">
            <label for="date" class="form-label">Date</label>
            <input type="date" class="form-control" id="date" name="date" value="{{ $repor
        </div>
        <button type="submit" class="btn btn-primary">Update Report</button>
        <a href="{{ route('reports.index') }}" class="btn btn-secondary">Back</a>
    </form>
@endsection

```

Show View


```
<!-- resources/views/reports/show.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Report Details</h1>
    <table class="table">
        <tr>
            <th>Report ID</th>
            <td>{{ $report->report_id }}</td>
        </tr>
        <tr>
            <th>Patient</th>
            <td>{{ $report->patient->first_name }} {{ $report->patient->last_name }}</td>
        </tr>
        <tr>
            <th>Doctor</th>
            <td>{{ $report->doctor->name }}</td>
        </tr>
        <tr>
            <th>Content</th>
            <td>{{ $report->content }}</td>
        </tr>
        <tr>
            <th>Date</th>
            <td>{{ $report->date }}</td>
        </tr>
    </table>
    <a href="{{ route('reports.index') }}" class="btn btn-secondary">Back</a>
@endsection
```

Message Views

Index View

```

<!-- resources/views/messages/index.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Messages</h1>
    <a href="{{ route('messages.create') }}" class="btn btn-primary mb-3">Create Message</a>
    @if(session('success'))
        <div class="alert alert-success">{{ session('success') }}</div>
    @endif
    <table class="table">
        <thead>
            <tr>
                <th>Message ID</th>
                <th>Sender</th>
                <th>Receiver</th>
                <th>Content</th>
                <th>Date</th>
                <th>Actions</th>
            </tr>
        </thead>
        <tbody>
            @foreach($messages as $message)
                <tr>
                    <td>{{ $message->message_id }}</td>
                    <td>{{ $message->sender->name }}</td>
                    <td>{{ $message->receiver->name }}</td>
                    <td>{{ $message->content }}</td>
                    <td>{{ $message->date }}</td>
                    <td>
                        <a href="{{ route('messages.show', $message) }}" class="btn btn-in
                        <a href="{{ route('messages.edit', $message) }}" class="btn btn-wa
                        <form action="{{ route('messages.destroy', $message) }}" method="P
                            @csrf
                            @method('DELETE')
                            <button type="submit" class="btn btn-danger">Delete</button>
                        </form>
                    </td>
                </tr>
            @endforeach
        </tbody>
    </table>
@endsection

```

Create View

```

<!-- resources/views/messages/create.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Create Message</h1>
    <form action="{{ route('messages.store') }}" method="POST">
        @csrf
        <div class="mb-3">
            <label for="sender_id" class="form-label">Sender</label>
            <select class="form-select" id="sender_id" name="sender_id" required>
                <option value="">Select Sender</option>
                @foreach($users as $user)
                    <option value="{{ $user->user_id }}">{{ $user->name }}</option>
                @endforeach
            </select>
        </div>
        <div class="mb-3">
            <label for="receiver_id" class="form-label">Receiver</label>
            <select class="form-select" id="receiver_id" name="receiver_id" required>
                <option value="">Select Receiver</option>
                @foreach($users as $user)
                    <option value="{{ $user->user_id }}">{{ $user->name }}</option>
                @endforeach
            </select>
        </div>
        <div class="mb-3">
            <label for="content" class="form-label">Message Content</label>
            <textarea class="form-control" id="content" name="content" required></textarea>
        </div>
        <div class="mb-3">
            <label for="date" class="form-label">Date</label>
            <input type="date" class="form-control" id="date" name="date" required>
        </div>
        <button type="submit" class="btn btn-primary">Create Message</button>
        <a href="{{ route('messages.index') }}" class="btn btn-secondary">Back</a>
    </form>
@endsection

```

Edit View

```

<!-- resources/views/messages/edit.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Edit Message</h1>
    <form action="{{ route('messages.update', $message) }}" method="POST">
        @csrf
        @method('PUT')
        <div class="mb-3">
            <label for="sender_id" class="form-label">Sender</label>
            <select class="form-select" id="sender_id" name="sender_id" required>
                @foreach($users as $user)
                    <option value="{{ $user->user_id }}" {{ $user->user_id == $message->se
                        {{ $user->name }}
                    </option>
                @endforeach
            </select>
        </div>
        <div class="mb-3">
            <label for="receiver_id" class="form-label">Receiver</label>
            <select class="form-select" id="receiver_id" name="receiver_id" required>
                @foreach($users as $user <option value="{{ $user->user_id }}" {{ $user->us
                    {{ $user->name }}
                </option>
            @endforeach
            </select>
        </div>
        <div class="mb-3">
            <label for="content" class="form-label">Message Content</label>
            <textarea class="form-control" id="content" name="content" required>{{ $messag
        </div>
        <div class="mb-3">
            <label for="date" class="form-label">Date</label>
            <input type="date" class="form-control" id="date" name="date" value="{{ $messa
        </div>
        <button type="submit" class="btn btn-primary">Update Message</button>
        <a href="{{ route('messages.index') }}" class="btn btn-secondary">Back</a>
    </form>
@endsection

```

Show View

```
<!-- resources/views/messages/show.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Message Details</h1>
    <table class="table">
        <tr>
            <th>Message ID</th>
            <td>{{ $message->message_id }}</td>
        </tr>
        <tr>
            <th>Sender</th>
            <td>{{ $message->sender->name }}</td>
        </tr>
        <tr>
            <th>Receiver</th>
            <td>{{ $message->receiver->name }}</td>
        </tr>
        <tr>
            <th>Content</th>
            <td>{{ $message->content }}</td>
        </tr>
        <tr>
            <th>Date</th>
            <td>{{ $message->date }}</td>
        </tr>
    </table>
    <a href="{{ route('messages.index') }}" class="btn btn-secondary">Back</a>
@endsection
```

Emergency Contact Views

Index View

```

<!-- resources/views/emergency_contacts/index.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Emergency Contacts</h1>
    <a href="{{ route('emergency_contacts.create') }}" class="btn btn-primary mb-3">Create
    @if(session('success'))
        <div class="alert alert-success">{{ session('success') }}</div>
    @endif
    <table class="table">
        <thead>
            <tr>
                <th>Contact ID</th>
                <th>Patient</th>
                <th>Name</th>
                <th>Phone</th>
                <th>Actions</th>
            </tr>
        </thead>
        <tbody>
            @foreach($emergencyContacts as $contact)
                <tr>
                    <td>{{ $contact->contact_id }}</td>
                    <td>{{ $contact->patient->first_name }} {{ $contact->patient->last_name }}</td>
                    <td>{{ $contact->name }}</td>
                    <td>{{ $contact->phone }}</td>
                    <td>
                        <a href="{{ route('emergency_contacts.show', $contact) }}" class="btn btn-primary">Show</a>
                        <a href="{{ route('emergency_contacts.edit', $contact) }}" class="btn btn-primary">Edit</a>
                        <form action="{{ route('emergency_contacts.destroy', $contact) }}"
                            @csrf
                            @method('DELETE')
                        <button type="submit" class="btn btn-danger">Delete</button>
                        </form>
                    </td>
                </tr>
            @endforeach
        </tbody>
    </table>
@endsection

```

Create View

```
<!-- resources/views/emergency_contacts/create.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Create Emergency Contact</h1>
    <form action="{{ route('emergency_contacts.store') }}" method="POST">
        @csrf
        <div class="mb-3">
            <label for="patient_id" class="form-label">Patient</label>
            <select class="form-select" id="patient_id" name="patient_id" required>
                <option value="">Select Patient</option>
                @foreach($patients as $patient)
                    <option value="{{ $patient->patient_id }}">{{ $patient->first_name }}
                @endforeach
            </select>
        </div>
        <div class="mb-3">
            <label for="name" class="form-label">Contact Name</label>
            <input type="text" class="form-control" id="name" name="name" required>
        </div>
        <div class="mb-3">
            <label for="phone" class="form-label">Phone</label>
            <input type="text" class="form-control" id="phone" name="phone" required>
        </div>
        <button type="submit" class="btn btn-primary">Create Emergency Contact</button>
        <a href="{{ route('emergency_contacts.index') }}" class="btn btn-secondary">Back</a>
    </form>
@endsection
```

Edit View

```
<!-- resources/views/emergency_contacts/edit.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Edit Emergency Contact</h1>
    <form action="{{ route('emergency_contacts.update', $contact) }}" method="POST">
        @csrf
        @method('PUT')
        <div class="mb-3">
            <label for="patient_id" class="form-label">Patient</label>
            <select class="form-select" id="patient_id" name="patient_id" required>
                @foreach($patients as $patient)
                    <option value="{{ $patient->patient_id }}" {{ $patient->patient_id ==
                        {{ $patient->first_name }} {{ $patient->last_name }}
                    </option>
                @endforeach
            </select>
        </div>
        <div class="mb-3">
            <label for="name" class="form-label">Contact Name</label>
            <input type="text" class="form-control" id="name" name="name" value="{{ $conta
        </div>
        <div class="mb-3">
            <label for="phone" class="form-label">Phone</label>
            <input type="text" class="form-control" id="phone" name="phone" value="{{ $con
        </div>
        <button type="submit" class="btn btn-primary">Update Emergency Contact</button>
        <a href="{{ route('emergency_contacts.index') }}" class="btn btn-secondary">Back</
    </form>
@endsection
```

Show View


```
<!-- resources/views/emergency_contacts/show.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Emergency Contact Details</h1>
    <table class="table">
        <tr>
            <th>Contact ID</th>
            <td>{{ $contact->contact_id }}</td>
        </tr>
        <tr>
            <th>Patient</th>
            <td>{{ $contact->patient->first_name }} {{ $contact->patient->last_name }}</td>
        </tr>
        <tr>
            <th>Name</th>
            <td>{{ $contact->name }}</td>
        </tr>
        <tr>
            <th>Phone</th>
            <td>{{ $contact->phone }}</td>
        </tr>
    </table>
    <a href="{{ route('emergency_contacts.index') }}" class="btn btn-secondary">Back</a>
@endsection
```

Feedback Views

Index View

```

<!-- resources/views/feedbacks/index.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Feedbacks</h1>
    <a href="{{ route('feedbacks.create') }}" class="btn btn-primary mb-3">Create Feedback
    @if(session('success'))
        <div class="alert alert-success">{{ session('success') }}</div>
    @endif
    <table class="table">
        <thead>
            <tr>
                <th>Feedback ID</th>
                <th>Patient</th>
                <th>Content</th>
                <th>Date</th>
                <th>Actions</th>
            </tr>
        </thead>
        <tbody>
            @foreach($feedbacks as $feedback)
                <tr>
                    <td>{{ $feedback->feedback_id }}</td>
                    <td>{{ $feedback->patient->first_name }} {{ $feedback->patient->last_n
                    <td>{{ $feedback->content }}</td>
                    <td>{{ $feedback->date }}</td>
                    <td>
                        <a href="{{ route('feedbacks.show', $feedback) }}" class="btn btn-
                        <a href="{{ route('feedbacks.edit', $feedback) }}" class="btn btn-
                        <form action="{{ route('feedbacks.destroy', $feedback) }}" method=
                            @csrf
                            @method('DELETE')
                            <button type="submit" class="btn btn-danger">Delete</button>
                        </form>
                    </td>
                </tr>
            @endforeach
        </tbody>
    </table>
@endsection

```

Create View

```
@extends('layouts.app')
@section('content')
    <h1>Create Feedback</h1>
    <form action="{{ route('feedbacks.store') }}" method="POST">
        @csrf
        <div class="mb-3">
            <label for="patient_id" class="form-label">Patient</label>
            <select class="form-select" id="patient_id" name="patient_id" required>
                <option value="">Select Patient</option>
                @foreach($patients as $patient)
                    <option value="{{ $patient->patient_id }}">{{ $patient->first_name }}
                @endforeach
            </select>
        </div>
        <div class="mb-3">
            <label for="content" class="form-label">Feedback Content</label>
            <textarea class="form-control" id="content" name="content" required></textarea>
        </div>
        <div class="mb-3">
            <label for="date" class="form-label">Date</label>
            <input type="date" class="form-control" id="date" name="date" required>
        </div>
        <button type="submit" class="btn btn-primary">Create Feedback</button>
        <a href="{{ route('feedbacks.index') }}" class="btn btn-secondary">Back</a>
    </form>
@endsection
```

Edit View

```
<!-- resources/views/feedbacks/edit.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Edit Feedback</h1>
    <form action="{{ route('feedbacks.update', $feedback) }}" method="POST">
        @csrf
        @method('PUT')
        <div class="mb-3">
            <label for="patient_id" class="form-label">Patient</label>
            <select class="form-select" id="patient_id" name="patient_id" required>
                @foreach($patients as $patient)
                    <option value="{{ $patient->patient_id }}" {{ $patient->patient_id ==
                        {{ $patient->first_name }} {{ $patient->last_name }}
                    </option>
                @endforeach
            </select>
        </div>
        <div class="mb-3">
            <label for="content" class="form-label">Feedback Content</label>
            <textarea class="form-control" id="content" name="content" required>{{ $feedback
        </div>
        <div class="mb-3">
            <label for="date" class="form-label">Date</label>
            <input type="date" class="form-control" id="date" name="date" value="{{ $feedback
        </div>
        <button type="submit" class="btn btn-primary">Update Feedback</button>
        <a href="{{ route('feedbacks.index') }}" class="btn btn-secondary">Back</a>
    </form>
@endsection
```

Show View

```

<!-- resources/views/feedbacks/show.blade.php -->
@extends('layouts.app')
@section('content')
    <h1>Feedback Details</h1>
    <table class="table">
        <tr>
            <th>Feedback ID</th>
            <td>{{ $feedback->feedback_id }}</td>
        </tr>
        <tr>
            <th>Patient</th>
            <td>{{ $feedback->patient->first_name }} {{ $feedback->patient->last_name }}</td>
        </tr>
        <tr>
            <th>Content</th>
            <td>{{ $feedback->content }}</td>
        </tr>
        <tr>
            <th>Date</th>
            <td>{{ $feedback->date }}</td>
        </tr>
    </table>
    <a href="{{ route('feedbacks.index') }}" class="btn btn-secondary">Back</a>
@endsection

```

To create a dashboard page in Laravel for displaying consolidated project data, you can follow these general steps:

Set Up Routes: Define a route in your web.php file for the dashboard.

Create a Controller: Generate a controller that will handle the logic for fetching and consolidating the project data.

Fetch Data: In the controller, retrieve the necessary data from your models. You may want to aggregate data from multiple models to provide a comprehensive overview.

Create a View: Design a Blade view for the dashboard. Use Bootstrap or any other CSS framework to style the dashboard and present the data in a user-friendly manner.

Display Data: Pass the consolidated data from the controller to the view and display it using charts, tables, or cards as needed.

Add Interactivity: Optionally, you can use JavaScript libraries like Chart.js or Vue.js to make the dashboard interactive.

1. Set Up Routes

In your routes/web.php, add a route for the dashboard:

```
Route::get('/dashboard', [DashboardController::class, 'index'])->name('dashboard');
```

2. Create a Controller

Generate a controller using Artisan command:

```
php artisan make:controller DashboardController
```

3. Fetch Data

In the DashboardController, fetch the necessary data:

```
namespace App\Http\Controllers;
use App\Models\Patient;
use App\Models\Doctor;
use App\Models\Appointment;
use App\Models\Invoice;
use App\Models\Payment;
use App\Models\InventoryItem;
use App\Models\LabTest;
use App\Models\Prescription;
use App\Models\Report;
use App\Models\Message;
use App\Models\EmergencyContact;
use App\Models\Feedback;
class DashboardController extends Controller
{
    public function index()
    {
        $patientsCount = Patient::count();
        $doctorsCount = Doctor::count();
        $appointmentsCount = Appointment::count();
        $invoicesCount = Invoice::count();
        $paymentsCount = Payment::count();
        $inventoryItemsCount = InventoryItem::count();
        $labTestsCount = LabTest::count();
        $prescriptionsCount = Prescription::count();
        $reportsCount = Report::count();
        $messagesCount = Message::count();
        $emergencyContactsCount = EmergencyContact::count();
        $feedbacksCount = Feedback::count();
        return view('dashboard.index', compact(
            'patientsCount', 'doctorsCount', 'appointmentsCount',
            'invoicesCount', 'paymentsCount', 'inventoryItemsCount',
            'labTestsCount', 'prescriptionsCount', 'reportsCount',
            'messagesCount', 'emergencyContactsCount', 'feedbacksCount'
        ));
    }
}
```

4. Create a View

Create a new Blade view file at resources/views/dashboard/index.blade.php:

```
@extends('layouts.app')
@section('content')
    <div class="container">
        <h1>Dashboard</h1>
        <div class="row">
            <div class="col-md-3">
                <div class="card text-white bg-primary mb-3">
                    <div class="card-header">Total Patients</div>
                    <div class="card-body">
                        <h5 class="card-title">{{ $patientsCount }}</h5>
                    </div>
                </div>
            </div>
            <div class="col-md-3">
                <div class="card text-white bg-success mb-3">
                    <div class="card-header">Total Doctors</div>
                    <div class="card-body">
                        <h5 class="card-title">{{ $doctorsCount }}</h5>
                    </div>
                </div>
            </div>
            <div class="col-md-3">
                <div class="card text-white bg-warning mb-3">
                    <div class="card-header">Total Appointments</div>
                    <div class="card-body">
                        <h5 class="card-title">{{ $appointmentsCount }}</h5>
                    </div>
                </div>
            </div>
            <div class="col-md-3">
                <div class="card text-white bg-danger mb-3">
                    <div class="card-header">Total Invoices</div>
                    <div class="card-body">
                        <h5 class="card-title">{{ $invoicesCount }}</h5>
                    </div>
                </div>
            </div>
        </div>
        <div class="row">
            <div class="col-md-3">
                <div class="card text-white bg-info mb-3">
                    <div class="card-header">Total Payments</div>
                    <div class="card-body">
                        <h5 class="card-title">{{ $paymentsCount }}</h5>
                    </div>
                </div>
            </div>
            <div class="col-md-3">
                <div class="card text-white bg-secondary mb-3">
                    <div class="card-header">Total Inventory Items</div>
```



```
        <div class="card-body">
            <h5 class="card-title">{{ $inventoryItemsCount }}</h5>
        </div>
    </div>
</div>
<div class="col-md-3">
    <div class="card text-white bg-light mb-3">
        <div class="card-header">Total Lab Tests</div>
        <div class="card-body">
            <h5 class="card-title">{{ $labTestsCount }}</h5>
        </div>
    </div>
</div>
<div class="col-md-3">
    <div class="card text-white bg-dark mb-3">
        <div class="card-header">Total Prescriptions</div>
        <div class="card-body">
            <h5 class="card-title">{{ $prescriptionsCount }}</h5>
        </div>
    </div>
</div>
</div>
<div class="row">
    <div class="col-md-3">
        <div class="card text-white bg-success mb-3">
            <div class="card-header">Total Reports</div>
            <div class="card-body">
                <h5 class="card-title">{{ $reportsCount }}</h5>
            </div>
        </div>
    </div>
    <div class="col-md-3">
        <div class="card text-white bg-warning mb-3">
            <div class="card-header">Total Messages</div>
            <div class="card-body">
                <h5 class="card-title">{{ $messagesCount }}</h5>
            </div>
        </div>
    </div>
    <div class="col-md-3">
        <div class="card text-white bg-danger mb-3">
            <div class="card-header">Total Emergency Contacts</div>
            <div class="card-body">
                <h5 class="card-title">{{ $emergencyContactsCount }}</h5>
            </div>
        </div>
    </div>
    <div class="col-md-3">
        <div class="card text-white bg-info mb-3">
            <div class="card-header">Total Feedbacks</div>
            <div class="card-body">
                <h5 class="card-title">{{ $feedbacksCount }}</h5>
            </div>
        </div>
    </div>
</div>
```

```
        </div>
    </div>
</div>
</div>
</div>
@endsection
```

5. Add Interactivity (Optional)

To enhance the dashboard, consider integrating charts using libraries like Chart.js. You can create visual representations of the data, such as pie charts for patient demographics or line charts for appointment trends over time.