# **VertexHub E-Medical System Guide**

Welcome to VertexHub E-Medical, a comprehensive healthcare management system designed to revolutionize medical services through seamless integration and advanced features. This guide provides a detailed overview of the system's entities, functionalities, and usage instructions for both users and administrators.

# **System Entities:**

# 1. Users:

- Patients: Individuals seeking medical services.
- Administrators: Personnel responsible for managing the system.

## 2. **Physicians**:

- General Physicians
- ENT Specialists
- Eye Specialists
- Bone Specialists
- Teeth Specialists
- Allergy Specialists
- Heart Specialists
- Neuro Specialists

#### 3. Lab Facilities:

- X-Ray Lab
- MRI Scan Lab
- Ultrasound Lab
- ECG Scan Lab
- Urine Test Lab
- Blood Test Lab
- Sugar Test Lab

# 4. Medicine Categories:

- General Medicine
- Specialized Medicine
- Preventive Medicine

## 5. Health Education Resources:

• Articles

- Videos
- Interactive tools on various health topics.

# **Functionalities:**

#### For Users:

# 1. Account Management:

- SignUp: Register for a new account securely.
- Login: Access the system with registered credentials.
- Password Reset: Reset password if forgotten.

#### 2. Appointment Management:

- View Services: Explore available medical services.
- Book Appointment: Schedule appointments with preferred physicians.
- Cancel Appointment: Cancel scheduled appointments.
- View Appointments: Review upcoming and past appointments.

#### 3. Health Education Resources:

- Explore articles, videos, and interactive tools on various health topics.
- Search and filter resources based on categories or keywords.

#### 4. Feedback and Reviews:

• Provide feedback and ratings for healthcare providers and services.

# For Administrators:

# 1. User Management:

- CRUD operations for managing user accounts (Patients, Administrators, and Physicians).
- Manage user permissions and access levels.

## 2. Appointment Management:

- View and manage appointment schedules for all users.
- Confirm, reschedule, or cancel appointments as needed.

#### 3. Content Management:

• CRUD operations for managing medical entities:

- Physicians: General Physicians, ENT Specialists, Eye Specialists, Bone Specialists, Teeth Specialists, Allergy Specialists, Heart Specialists, Neuro Specialists.
- Lab Facilities: X-Ray Lab, MRI Scan Lab, Ultrasound Lab, ECG Scan Lab, Urine Test Lab, Blood Test Lab, Sugar Test Lab.
- Medicine Categories: General Medicine, Specialized Medicine, Preventive Medicine.

## 4. System Logs Management:

- View and monitor system activities and logs for security and audit purposes.
- Ensure system integrity and troubleshoot issues as needed.

# 5. Security and Settings:

- Implement and manage robust security measures to safeguard user data and system integrity.
- Configure system settings and parameters to optimize system performance and user experience.

# **Usage Instructions:**

## 1. User Registration and Authentication:

- Patients can register for a new account using the SignUp interface.
- Upon registration, users can log in using their credentials.

# 2. Appointment Booking:

- Users can explore available services and schedule appointments with preferred physicians.
- Appointments can be canceled if needed, and users can view their appointment history.

## 3. Medical History and Resources:

• Users can explore health education resources for self-learning.

## 4. Administrator Controls:

• Administrators have full control over user management, appointment scheduling, content management, system logs, and settings.