
SOFTWARE REQUIREMENTS SPECIFICATION

for

GLOBAL MEDICARE CONNECT

Version 1.0

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1 Introduction

In Bangladesh, many individuals face uncertainty regarding the quality of medical treatment available locally. Patients are often advised or prefer to seek advanced medical care abroad. However, the lack of proper information and a structured pathway makes this process overwhelming. People struggle to determine which hospital to choose, where to stay, and how much the entire journey will cost. If any site could address this gap by offering a comprehensive, user-friendly platform that consolidates all essential information in one place, the confusion and suffering of the patients can be reduced.

1.1 Purpose

This document specifies the requirements for Global Medicare Connect, a web-based platform designed to facilitate medical travel planning for Bangladeshi users. The platform enables users to search, customize, and book comprehensive medical treatment packages, including hospital appointments, accommodations, and flights. It ensures a seamless, transparent, and user-friendly experience, allowing patients to access quality medical care in countries such as Thailand, India, and Singapore with clear pricing and streamlined booking processes. This SRS serves as a structured guide for developers, testers, and stakeholders to understand the system's functionality, constraints, and scope.

1.2 Intended Audience

The Software Requirements Specification (SRS) for Global Medicare Connect is designed to serve a diverse group of stakeholders involved in the development, management, and use of the platform. The primary audiences include:

- Developers
- Project Managers (PMs)
- Administrators
- Quality Assurance (QA) & Testing Teams
- Marketing & Customer Support Staff
- Potential Investors & Business Partners (StakeHolders)

1.3 Intended Use

The Global Medicare Connect platform is designed to facilitate seamless medical travel planning for users seeking healthcare services abroad. The Software Requirements Specification (SRS) serves the following purposes:

- **Developers:** To understand system functionality, constraints, and technical requirements for implementation.

- **Project Managers (PMs):** To oversee the development process, ensure milestones are met, and align the project with business objectives.
- **Administrators:** To manage user accounts, platform content, and ensure the smooth operation of the system.
- **Quality Assurance (QA) & Testing Teams:** To validate system functionality, security, and ensure performance standards are met.
- **Marketing & Customer Support Staff:** To promote the platform, assist users in navigating services, and enhance engagement.
- **Potential Investors & Business Partners (Stakeholders):** To assess the platform's viability, growth potential, and investment opportunities.

By addressing the needs of these stakeholders, this SRS ensures a well-structured development, deployment, and operational framework for Global Medicare Connect.

1.4 Product Scope

Global Medicare Connect is a web-based platform designed to streamline medical travel planning for users seeking treatment abroad. It consolidates essential services such as hospital selection, appointment booking, accommodation, and flight arrangements into a single, user-friendly interface. This platform eliminates the uncertainty and difficulty that many individuals face when traveling for medical care by providing accurate information and transparent pricing.

Key Benefits of Global MediCare Connect:

- **Hospital Search:** Users can filter hospitals by country, specialty, treatment type, and doctor availability.
- **Package Customization:** Users can combine hospital appointments, hotel stays, and flight bookings into a personalized plan.
- **Pricing Transparency:** Detailed cost breakdowns for each service component, ensuring financial clarity before booking.
- **User Dashboard:** Allows users to track appointments, manage bookings, view medical records, and receive notifications.
- **Support & Guidance:** Provides real-time chat support, medical consultations, and recommendations based on user health conditions.

Objectives of Global MediCare Connect:

- Simplify the process of planning medical treatments abroad.
- Ensure accessibility to top-tier healthcare providers worldwide.
- Enhance transparency in treatment costs, accommodations, and travel expenses.
- Provide a centralized and reliable medical tourism solution.

Goals of Global MediCare Connect:

- Improve healthcare accessibility for Bangladeshi citizens by offering structured guidance for medical travel.

- Reduce complexity in treatment planning by providing a one-stop platform for all necessary services.
- Empower users with verified medical information, eliminating uncertainty about hospitals and travel logistics.
- Build trust by ensuring transparency in medical expenses and service offerings.

Global MediCare Connect’s Alignment with Corporate Goals & Business Strategies

Global Medicare Connect aligns with corporate objectives by expanding healthcare accessibility, enhancing customer satisfaction, and positioning itself as a leader in medical tourism facilitation. By addressing the growing demand for medical travel solutions, the platform diversifies services, reaches more users, and establishes itself as a pioneer in digital healthcare facilitation. Offering a convenient, transparent, and reliable solution, Global Medicare Connect serves as a trusted resource for individuals seeking affordable and quality healthcare options abroad.

This platform aims to bridge the gap between patients and international healthcare providers, offering a seamless and stress-free experience for individuals seeking advanced medical treatments abroad.

1.5 Risk Definition

- **Server Overload:** High traffic may cause downtime.
- **Data Security:** Sensitive user data (e.g., medical history) may be vulnerable to breaches.
- **User Inactivity:** Users may not actively use the platform due to a lack of awareness.
- **Integration Issues:** Third-party APIs (e.g., flight booking) may fail or become unavailable.

2 Overall Description

Global Medicare Connect is a web-based platform designed to streamline medical travel planning by connecting patients with trusted international hospitals, doctors, and accommodations. It provides a centralized solution for booking treatments, managing travel logistics, and ensuring pricing transparency. Built from scratch, this innovative system simplifies the complexities of medical tourism, offering a seamless, accessible, and hassle-free experience for users.

2.1 User Classes and Characteristics

In Global Medicare Connect, users can be classified into distinct categories based on their roles and interactions with the platform. These classifications ensure that each group has tailored functionalities to facilitate seamless medical travel planning and healthcare coordination.

2.1.1 User Class: Patients & Caregivers

Characteristics:

- Patients actively search for hospitals, doctors, and treatment options based on their medical needs.
- They can customize treatment packages, including hospital appointments, accommodations, and flights.
- Patients engage in teleconsultations with doctors to discuss treatment plans before making travel arrangements.
- They require pricing transparency to compare healthcare costs and plan their medical trips efficiently.
- Patients manage their medical records, appointments, and travel bookings through a personalized dashboard.
- Caregivers assist patients in managing travel logistics, communicating with healthcare providers, and ensuring smooth coordination.

2.1.2 User Class: Healthcare Providers (Hospitals & Clinics)

Characteristics:

- Hospitals and clinics list their services on the platform, providing information on treatment options, costs, doctor availability, and facilities.
- They manage patient inquiries and appointments, ensuring real-time availability updates.
- Healthcare providers offer teleconsultation services, enabling patients to discuss their medical conditions before traveling.
- They process booking requests, confirm appointments, and coordinate pre-arrival medical requirements.
- Hospitals and clinics ensure that their profiles, service details, and accreditation are up to date for patient transparency.

2.1.3 User Class: Travel & Accommodation Service Providers

Characteristics:

- Travel agencies and hotel service providers list travel packages and accommodations suitable for medical tourists.
- They provide real-time availability updates and pricing details for flights and hotels.
- They ensure secure bookings, flexible rescheduling options, and medical-friendly accommodation.
- Service providers handle customer inquiries, ensuring smooth communication for travel and lodging needs.

2.1.4 User Class: Administrators

Characteristics:

- Administrators oversee the entire platform, ensuring smooth operation and user compliance.
- They manage user accounts, verify healthcare providers, and regulate service listings.
- Admins enforce security measures, data protection policies, and system integrity.
- They handle user complaints, inquiries, and issue resolution to maintain platform trust.
- Administrators ensure that pricing transparency, user experience, and healthcare accessibility are maintained at the highest standards.

2.2 User Needs

This section outlines the specific requirements and expectations of patients, healthcare providers, travel service providers, and administrators.

2.2.1 Patients & Caregivers

- **Hospital & Doctor Search:** Patients need an easy way to search and filter hospitals, doctors, and treatment options by country, specialty, and cost.
- **Package Customization:** The system should allow users to combine hospital bookings, accommodations, and flights into a single itinerary.
- **Teleconsultation Services:** Patients require a virtual consultation feature to discuss treatment plans before finalizing bookings.
- **Medical Records Management:** A secure dashboard to store and access appointment history, prescriptions, and treatment plans.
- **Transparent Pricing & Cost Breakdown:** Users should be able to compare pricing for medical procedures, accommodations, and travel.
- **Emergency Assistance:** A 24/7 support system to assist patients in case of emergencies during travel.

2.2.2 Healthcare Providers (Hospitals & Clinics)

- **Listing & Profile Management:** Providers need tools to update service offerings, doctor availability, and treatment costs.
- **Patient Appointment Handling:** Hospitals require a structured system for managing patient bookings and scheduling consultations.
- **Medical Record Access:** Healthcare providers should have a secure way to share and receive patient records for better treatment planning.
- **Billing & Payment Processing:** A streamlined billing system for processing payments related to medical treatments.

2.2.3 Travel & Accommodation Service Providers

- **Flight & Hotel Listings:** Service providers should be able to list, update, and manage travel packages for medical tourists.
- **Real-Time Availability & Pricing:** Ensure users can book verified accommodations and travel tickets with up-to-date pricing.
- **Medical-Friendly Accommodation Options:** Hotels should provide special amenities for patients, such as wheelchair access and proximity to hospitals.

2.2.4 General User Needs

- **Secure Authentication & Data Protection:** The platform should have robust security measures to protect sensitive medical and financial data.
- **Mobile Responsiveness & Accessibility:** The system must be easy to use on various devices, ensuring a smooth user experience.
- **Notification & Alerts System:** Users should receive updates on appointment schedules, payment confirmations, and travel changes.
- **User Support & Assistance:** A helpdesk feature to assist users with booking, medical inquiries, and travel support.

By addressing these user-specific needs, Global Medicare Connect ensures an efficient, secure, and seamless medical travel experience for all stakeholders.

2.3 Operating Environment

- **Frontend:** HTML, CSS, JavaScript (React.js optional)
- **Backend:** Django (Python) + PostgreSQL
- **Database:** PostgreSQL
- **Hosting:** Local development (for academic purposes)
- **Software Requirements:** Web Browsers: Latest Chrome, Firefox, Edge, Safari
- **Network Requirements:** Stable internet connection

2.4 Constraints

2.4.1 Technical Constraints

- The system must support secure payment processing for medical bookings.
- It should be scalable as the user base grows.
- Integration with third-party travel & healthcare APIs must be stable.

2.4.2 Time Constraints

- Development phases are structured with fixed milestones for feature implementation and testing.
- The system must be operational before the peak medical tourism season.

2.5 Assumptions

2.5.1 User Participation and Proficiency

- Users (patients, caregivers, healthcare providers) will actively use the platform for booking, managing appointments, and travel arrangements.
- Patients and caregivers have basic digital literacy to navigate the platform.
- Healthcare providers are familiar with online patient management systems.

2.5.2 Administrator Authority

- Admins will have full control over user management, service verification, and security enforcement.

2.5.3 Reliable Internet Access

- Users will have a stable internet connection to ensure uninterrupted use of the platform.

By ensuring these technical, regulatory, and user-related constraints, Global Medicare Connect aims to deliver a secure, efficient, and user-friendly medical travel solution.

3 Requirements

3.1 Functional Requirements

3.1.1 Hospital Search

As a user

I want to search for hospitals and doctors based on treatment type, location, and cost so that I can find the most suitable healthcare provider for my condition.

Confirmation:

- The system allows users to enter search terms related to their treatment needs.
- Users can filter results by country, city, specialty, and hospital accreditation.
- Users can see hospitals with key details such as pricing, facilities, and doctor availability.
- Users can sort results by relevance, cost, or rating.

3.1.2 Hospital Comparison

As a user

I want to compare multiple hospitals based on treatment packages and facilities so that I can make an informed decision about where to seek treatment.

Confirmation:

- Users can select multiple hospitals from the search results.
- The system provides a side-by-side comparison of treatment costs, facilities, and services.
- Users can compare doctor qualifications and past patient reviews.
- Users can save comparison results for future reference.

3.1.3 Package Customization

As a user

I want to create a customized medical travel package including treatment, accommodation, and flights so that I can plan my entire medical journey in one place.

Confirmation:

- Users can select specific treatments from hospital offerings.
- The system suggests nearby accommodation options with cost breakdowns.
- Users can book flights based on their treatment schedule.
- The system calculates the total estimated cost for the complete package.

3.1.4 Appointment Booking

As a user

I want to securely book an appointment with my selected hospital or doctor so that I can receive medical consultation without delays.

Confirmation:

- Users can check available time slots for doctors or treatments.
- Users can book appointments directly through the system.
- The system confirms appointments and sends reminders via email/SMS.
- Users can modify or cancel appointments based on hospital policies.

3.1.5 Secure Payments

As a user

I want to make secure payments for my treatment package so that I can confirm my booking without financial risk.

Confirmation:

- Users can view a detailed cost breakdown before making payments.
- The system supports multiple payment methods, including credit card and bank transfers.
- Users receive an invoice and booking confirmation after payment.
- The system securely processes refunds according to hospital policies.

3.1.6 Medical Records Management

As a user

I want to store and manage my medical records securely so that I can share them with healthcare providers when needed.

Confirmation:

- Users can upload and categorize medical reports and prescriptions.
- The system encrypts stored medical data for security.
- Users can share selected medical records with healthcare providers.
- Users can view their medical history within the dashboard.

3.1.7 Reviews and Ratings

As a user

I want to leave reviews and ratings for hospitals and doctors so that other patients can make informed decisions.

Confirmation:

- Users can write detailed reviews of their experiences.
- The system allows users to rate hospitals and doctors on different criteria (service, cost, facilities).
- Only verified patients can submit reviews.

3.1.8 Administrator Management

As a system administrator

I want to manage user accounts and provider registrations so that I can ensure the platform operates securely and efficiently.

Confirmation:

- Admins can verify and approve healthcare provider registrations.
- Admins can suspend or remove fraudulent accounts.
- The system logs all admin actions for auditing.
- Admins can modify platform settings related to data security and compliance.

3.1.9 User Login Authentication

As a user I want to securely log in to my account using my email and password so that I can access personalized features and manage my medical records.

Confirmation:

- Users can register using their email, phone number, or social media accounts.
- The system securely encrypts user credentials and stores them safely.
- Users receive email verification upon registration to activate their accounts.
- Users can reset their password via email if they forget their login credentials.
- After successful authentication, users are redirected to their dashboard.

3.2 Non-Functional Requirements

3.2.1 Performance

- The system should respond to user actions within 3 seconds.

3.2.2 Security

- User data must be encrypted during transmission and storage.

3.2.3 Usability

- The system should have an intuitive and user-friendly interface.

4 Appendices

4.1 Glossary

- **SRS:** Software Requirements Specification.
- **API:** Application Programming Interface, used for integrating third-party services.

This SRS document follows academic guidelines and provides a structured and detailed requirement specification for the Global Medicare Connect.