#### 2.1. Functional Requirements

##### 2.1.1. User-Facing Features

* **User Registration & Profile Management:**
  + Secure user registration (email/password, potentially social logins).
  + Profile creation with basic demographic information (name, country, language preference).
  + Ability to update profile details.
* **Medical Query Submission:**
  + Intuitive form for detailing the medical condition, existing diagnosis, and specific questions.
  + Secure upload functionality for medical documents (e.g., reports, scans, lab results) in various formats (PDF, JPG, PNG, DICOM viewer integration for images if feasible).
  + Clear prompts for necessary information to ensure comprehensive submissions.
  + Option to specify preferred language for the opinion (if multi-lingual doctors are available).
* **Case Tracking & Communication:**
  + Dashboard to view the status of submitted queries (e.g., "Submitted," "Under Review," "Opinion Ready," "Closed").
  + Secure messaging system for clarification questions between user and assigned doctor (limited scope, for clarification only, not consultation).
  + Notification system for status updates (email, in-app).
* **Second Opinion Delivery:**
  + Secure delivery of the written second opinion within the application.
  + Ability to download/print the opinion.
  + Clear formatting of the opinion, highlighting key points and disclaimers.
* **Payment & Billing:**
  + Secure payment gateway integration (e.g., Stripe, PayPal) for per-query fees or subscription models.
  + Clear pricing display.
  + Invoice generation.
* **Feedback & Rating:**
  + Ability for users to provide feedback and rate the service/doctor (anonymously).
* **Legal & Disclaimer Acknowledgment:**
  + Mandatory acceptance of terms of service and disclaimers, explicitly stating "no doctor-patient relationship" and the advisory nature of the service, before any submission.

##### 2.1.2. Doctor-Facing Features

* **Doctor Registration & Verification:**
  + Secure registration for medical professionals.
  + Robust verification process for medical licenses, qualifications, and specializations (e.g., GMC registration check for UK doctors).
  + Profile creation with specialization, experience, and availability.
* **Case Assignment & Management:**
  + Dashboard displaying assigned cases and pending reviews.
  + System for automatic or manual assignment of cases based on specialization, availability, and workload.
  + Secure access to user-submitted medical information and documents.
  + Tools for reviewing documents (e.g., integrated viewers for common formats).
* **Opinion Generation:**
  + Structured interface for drafting and submitting the second opinion.
  + Templates for opinions to ensure consistency and inclusion of mandatory disclaimers.
  + Ability to request clarification from the user via the secure messaging system.
* **Workload Management:**
  + Availability settings (e.g., "Online," "Offline," "Vacation").
  + Tracking of completed cases and earnings.
* **Internal Communication:**
  + Secure internal messaging system for doctors to communicate with administrators.

##### 2.1.3. Administrator Features

* **User Management:**
  + View, edit, and manage user accounts.
  + Handle user queries and support requests.
* **Doctor Management:**
  + Onboarding and offboarding of doctors.
  + Verification of doctor credentials.
  + Monitoring doctor performance and workload.
  + Specialization and availability management.
* **Case Management:**
  + Overview of all active and completed cases.
  + Manual case assignment/reassignment.
  + Dispute resolution and moderation.
* **Content Management:**
  + Ability to update terms of service, privacy policy, and disclaimers.
  + FAQ management.
* **Reporting & Analytics:**
  + Dashboards for key metrics (user growth, case volume, revenue).
  + Reporting on doctor performance and user feedback.
* **System Configuration:**
  + Payment gateway settings.
  + Notification settings.
  + Pricing configuration.
* **Audit Trail:**
  + Comprehensive logging of all significant actions within the system for audit purposes.