# **Skinnovate - System Requirements Tables**

## Functional Requirements *- define what the system should do.*

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| **ID** | **Requirement Name** | **Description** | **Rationale** | **Priority** |
| **FR1** | **User Registration & Authentication** | The system shall allow users to register using email, OTP, or social login. | Ease of access for patients. | High |
| **FR2** | **AI Image Upload** | The system shall allow patients to upload images for AI analysis. | Supports remote diagnosis. | High |
| **FR3** | **AI Skin Analysis & Diagnosis** | The system shall analyze uploaded images and suggest diagnoses and treatments using AI. | Fast preliminary advice. | High |
| **FR4** | **Dermatologist Review & Validation** | The dermatologist shall review, confirm, or modify AI suggestions before applying treatments. | Prevents misdiagnosis and supports professional validation. | High |
| **FR5** | **Appointment Scheduling & Management** | The system shall enable patients to schedule, cancel, or reschedule appointments online. | Convenience for patients. | High |
| **FR6** | **Emergency Appointment Handling** | The system shall prioritize emergency appointment requests. | Supports urgent skin conditions. | High |
| **FR7** | **Teledermatology & Video Consultation** | The system shall support video consultations with dermatologists. | Enables teledermatology. | Medium |
| **FR8** | **Patient Treatment Record Management** | The dermatologist shall view and update patient treatment records. | Keeps patient data up to date. | High |
| **FR9** | **Automated Follow-up Reminders** | The system shall send automated reminders for follow-ups and treatments. | Improves patient compliance. | High |
| **FR10** | **Electronic Health Records (EHR) Management** | The system shall store and manage electronic health records securely. | Legal and ethical responsibility. | High |
| **FR11** | **E-Prescription & Pharmacy Integration** | The system shall enable e-prescriptions and send them directly to partnered pharmacies. | Streamlines medication access. | High |
| **FR12** | **Loyalty Program & Rewards** | The system shall calculate and apply loyalty points to returning patients. | Encourages repeat visits. | Medium |
| **FR13** | **Admin Appointment Dashboard** | The system shall generate daily appointment dashboards for clinic admins. | Improves scheduling and resource use. | Medium |
| **FR14** | **Role-Based Access Control** | Each user shall have role-based access control (e.g., admin, patient, doctor, IT). | Maintains data confidentiality. | High |
| **FR15** | **Audit Logs & Security Monitoring** | The system shall log all access and modifications to sensitive data. | Ensures traceability and security. | High |

## **Non-Functional Requirements**

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| **ID** | **Requirement** | **Type** |
| **NFR1** | The system shall respond to AI analysis requests within 5 seconds. | Product requirement |
| **NFR2** | The system shall be available 99.9% of the time. | Product requirement |
| **NFR3** | The system shall encrypt all data at rest and in transit. | External requirement |
| **NFR4** | The system shall support up to 100 concurrent users. | Product requirement |
| **NFR5** | The user interface shall be accessible on both desktop and mobile devices. | Product requirement |
| **NFR6** | Patient data shall comply with GDPR and healthcare data protection laws. | External requirement |
| **NFR7** | Dermatologists shall be able to use the system effectively after 3 hours of training. | Usability |
| **NFR8** | The system shall auto-backup data every 6 hours. | Organizational |
| **NFR9** | Any system failure shall be recoverable within 15 minutes using automated backups. | Product requirement |
| **NFR10** | Compliance with Albania’s Personal Data Protection Law to safeguard patient records. | External requirement |
| **NFR11** | Compliance with Ministry of Health guidelines for dermatological and telemedicine services. | External requirement |
| **NFR12** | Compliance with medical billing and tax regulations for healthcare institutions. | External requirement |
| **NFR13** | Adherence to insurance claim processing laws for dermatology treatments. | External requirement |

## **Domain Requirements**

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| **ID** | **Requirement** | **Description** |
| **DR1** | **Regulatory Compliance** | The system must comply with GDPR, HIPAA, and national health data laws. It must follow telemedicine policies. |
| **DR2** | **AI-Based Diagnostics and Risk Management** | AI diagnoses must be validated by dermatologists. The system must track AI accuracy. |
| **DR3** | **Electronic Health Records (EHR) & Prescription Management** | Secure cloud storage for patient data. EHRs must be compatible with national systems. |
| **DR4** | **Security and Data Protection** | Uses encryption and MFA for secure logins and data protection. |
| **DR5** | **Teledermatology & Remote Access** | Supports video consultations and chatbots for basic skincare guidance. |
| **DR6** | **Scalability and Performance** | Handles high patient loads and supports future AI updates. |
| **DR7** | **Audit and Reporting** | Keeps detailed logs and generates compliance reports. |
| **DR8** | **Customer Experience and Service** | Offers a user-friendly interface, multi-language support, and self-service options. |
| **DR9** | **Workflow and Automation** | Sends appointment reminders and suggests treatments automatically. |
| **DR10** | **Documentation and Training** | Provides training materials for AI use and data security compliance. |