**Functional & Non-Functional Requirements Specification (FRS & NFRS)**

**Purpose:**

To ensure all system functionalities and technical expectations (performance, security, compliance, user experience) are fully documented and traceable throughout the SDLC.

**Functional Requirements (FRS)**

| **ID** | **Description** | **Priority** | **Module** |
| --- | --- | --- | --- |
| FR1 | Users can log in via biometric or secure PIN | High | Authentication |
| FR2 | System allows offline data entry with auto-sync | High | Mobile Core |
| FR3 | Admin can assign, revoke, or edit user roles | High | Admin Portal |
| FR4 | HR staff can generate staff movement reports | Medium | Reporting |
| FR5 | Device geo-fencing to restrict sensitive actions | Medium | Security |

**Non-Functional Requirements (NFRS)**

| **Category** | **Specification** |
| --- | --- |
| **Security** | AES-256 encryption in transit & at rest; ISO 27001 compliance; biometric + 2FA |
| **Performance** | Mobile app loads within 2s; Sync queues <30s under 3G; concurrent users: 10,000 |
| **Scalability** | Modular design to scale to 40+ countries and 500K users |
| **Usability** | UX optimized for low digital literacy; WCAG 2.1 accessibility; <3-tap workflows |
| **Interoperability** | Integrates with DHIS2, Workday, SAP HR, and Kobo Toolbox APIs |
| **Maintainability** | Microservices-based, containerized deployment; weekly release cycles |
| **Localization** | Multilingual support (EN, FR, SW, AR); date formats adapt by region |