User Requirement Specification (URS)

UNIFIED HEALTHCARE MANAGEMENT SYSTEM (UHMS)

Last Updated Date: 04/04/2024

Note:

FR: Functional Requirements

NFR: Non-Functional Requirements

FR-01: Store Doctor, Patient and Administrator personal information.

First Name
Last Name
Date Of Birth
Gender
Telephone Number
SSN
Email Address
Home Address
Password
Doctor Job ID
Administrator Job ID
Doctor Specialization

FR-02: Register Doctors, Patients and Administrators through website.

FR-03: Healthcare Professionals including administrators must have access to desktop application where they will search for patients, update medical records, generate prescriptions, and manage appointments.

FR-04: Update Doctors, Patients and Administrators profiles (Personal information such as Telephone Number, Email Address, Home Address).

FR-05: Have a medical record for every patient.

FR-06: Medical records cannot be deleted.

FR-07: Medical records cannot be updated by patients.

FR-08: Allow Patients to select allergies from their profiles (if they have any).

FR-09: Allow doctors to filter patients using patient's SSN and view their profiles.

FR-10: Patients can give access to doctors to view their medical records.

FR-11: Allow doctors to update patient's medical record.

FR-12: Allow doctors to generate prescriptions.

FR-13: Patients can search doctors based on their need (Specialization/city).

FR-14: Patients can get an appointment with doctors.

FR-15: Patients can cancel appointments.

FR-16: Administrators can manage appointments (Accept, Cancel).

FR-17: An algorithm designed to generate health alerts and predict potential medical conditions for patients based on their medical records.

NFR-01: Performance

- Ensure fast response times under peak usage.
- Optimize database queries to efficiently handle a large volume of patient records, ensuring quick access and timely updates.

NFR-02: Reliability

- Achieve system availability of 99.9% uptime, with redundancy and failover mechanisms in place to handle system failures without data loss or significant downtime.

NFR-03: Usability

- Design intuitive user interfaces for patients, doctors, and administrators, ensuring ease of use, minimal training requirements, and a positive user experience.
- Ensure the website is accessible on various devices, including desktops, tablets, and smartphones, providing a consistent experience across all platforms.

NFR-04: Maintainability

- The system should be easy to maintain and update, with clear documentation for future development and troubleshooting.

NFR-05: Disaster Recovery

- Implement a comprehensive disaster recovery plan, including regular backups and clear procedures for restoring the system and data in case of a catastrophic failure.