Project Design Phase-II Solution Requirements (Functional & Non-functional)

Date	20 October 2022
Team ID	PNT2022TMID47062
Project Name	Analytics For Hospitals -Healthcare Data
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Bed requirements	Analyzing and monitoring of beds which are required are the most important task. Using flawless systems for accurately tracking the availability of beds.
FR-2	Patient Records	It should be easily accessible when required. A Proper record or documentations need to be maintained regarding the patients who all consulted and detailed analysis of their health details.
FR-3	Creating data model	The process of analyzing and defining all the data, as well as the relationships between those bits of data comes under this.
FR-4	Prediction and Analysis	The hidden trends are analyzed and the final results are predicted using machine learning and AI algorithms.
FR-5	Clinical Care	The admission of the patient must be examined properly and patients who comes in a critical position should be given immediate treatment. Enhanced and improved reliability on reporting a data. Access medication history from external sources (ex. Surescripts). Predict length of stay of inpatients.
FR-6	Appointments	Recurrent appointments and scheduling the available time slots in a regular basis. Showing the number of appointments on given day. After sign in asking for a ID and phone number to avoid any issues. Generating appointment. Supporting group appointments and automatically creating a billing charge for completed appointments. Appointment Status can be as follows: a. No Show b. Confirmed c. Cancelled (No Reschedule) d. Cancelled (Reschedule) e. Pending f. Completed

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The project must be easy to use. The user needs to have a good experience while working with the interface. Usable systems are straightforward to use by as many people as possible, both in case of either end users or administrators to view the hospital records when needed.
NFR-2	Security	Every user can access the website only if they posses the password. The database is secured with encryption techniques which provides high levels of security
NFR-3	Reliability	The project must have minimal degree of failure under normal usage and how often does the user get access to this work. Understanding the current trend and working on to it to solve the problem in efficient manner. Being software as a service, HMS is highly resilient to any technology disruptions, downtime, or crashes experienced by other technology systems.
NFR-4	Performance	The project must respond quickly to the user's actions or even if the user has to wait the waiting period must be short. Response time: Providing acknowledgment in minimal time about the patient information. Comfortability: To ensure that the guidelines and accessibilities are followed.
NFR-5	Availability	The project is platform independent. It runs perfectly on almost every platform. Better coordination with the hospital management to provide all its resources accessible when needed. Accessibility of all medical facilities.
NFR-6	Scalability	The project allows multiple users to handle data at the same time. It is highly scalable since adding features and making advancements in website is uncomplicated. Make sure that a work is done in more efficient way with the appropriate resources. Make complex decisions understandable with proper data.