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

Date	03 October 2022
Team ID	PNT2022TMID40348
Project Name	Project – Early Detection of Chronic Kidney Disease Using Machine Learning
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	User Registration	Registration through Form Registration through Gmail Registration through LinkedIN
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Single and Multi-factor Authentication	Single and Multi-factor authentication services for user sign-up/sign-in
FR-4	Ask for User Data	Get user's Name Get user's Age Get user's BP Level Get user's Sugar Level Get user's height & weight Get user's eGFR rate Get user's Albumin level
FR-5	Navigation	Allows users to navigate across, into and back out from the pieces of content within the app
FR-6	Media Access	Allows user to share previous medical records and ECG Report [Not a Mandatory Field]
FR-7	Display Results	The summary result indicates the percentage of risk factor for Chronic Kidney Disease
FR-8	Sending Test Results via Email	A copy of the user's responses will be emailed to the email address provided.
FR-8	Chat integration	Integrate In-app Chat API & SDK and a fully managed chat platform on the backend into the application to build a better customer support experience
FR-9	Analytics for tracking User engagement	This metric shows the time that our app screen was in foreground or in focus. This helps to understand when users actively use our app

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Ease of use and user-friendly interface, that allow users to seamlessly interact with the app.
NFR-2	**Security**	The app uses HTTPS protocol and includes additional authentication for API access. The app operation includes private data processing, and external attack risk reduction which increases customer engagement and loyalty.
NFR-3	**Reliability**	The app completely detects the presence of Chronic Kidney Disease at free of cost, does not create downtime, and perform correctly in every scenario
NFR-4	**Performance**	Response time is faster. System can service multiple users simultaneously. It is capable of handling the load and perform well even when usage spikes.
NFR-5	**Availability**	The infrastructure, system, or solution remains operational 24/7 in order to serve its intended purpose. The customer is able to get their issue resolved no matter what day or time it is.
NFR-6	**Scalability**	The applications' infrastructure is able to support a large number of requests per minute(RPM).It is able to handle a growing user base without affecting the user experience and the app's performance.