

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

Date	01November 2022
Team ID	PNT2022TMID16555
Project Name	Early Detection of Chronic Kidney Disease using Machine Learning

**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 are done through forms Registration are done through Gmail
FR-2	User Confirmation	Confirmation via Email will be sent to user Confirmation via OTP will be generated
FR-3	Data Collection	Input data through Form will be collected The data collected and stored in database
FR-4	Data Analysis	Check whether the input format is correct Pre-process the data
FR-5	Prediction of disease	Evaluate the ML model with the dataStore that result in database
FR-6	Provide output to the user	Display the prediction result in UI

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	The Web UI is simple and easy for navigation and understanding, even by common people with the help of knowing the labels and description.
NFR-2	<b>Security</b>	The users are required to register so the verified users are only allowed to use the application.
NFR-3	<b>Reliability</b>	Accuracy and freedom from errors are expected in the predicted result
NFR-4	<b>Performance</b>	The webpage should be loaded quickly even when the internet connection is low.  The ML Model should predict the result with great accuracy and speed.

NFR-5	<b>Availability</b>	The website should be free from any downtime for any updates.
NFR-6	<b>Scalability</b>	This simple web application should have high scalability for supporting more/large number of users.