

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

Date	18 October 2022
Team ID	PNT2022TMID13778
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	Collect Dataset	ML depends heavily on Data, without Data, It is Impossible for an AI to learn. It is an actual Dataset used to train the model for performing various actions.
FR-4	Clean Dataset	Analyze the dataset Find the missing values, handle the missing values Split the data into independent and dependent variable Split the data into Train and Test
FR-5	Model Creation	The results showed that Random Forest Classifier Model better predicts Chronic Kidney Disease(CKD)
FR-6	Application Building	Building HTML pages Building Server-Side Script.

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	Used to understand the data and Analyse the data
NFR-2	<b>Security</b>	Securing Data in the Cloud
NFR-3	<b>Reliability</b>	Predefined Datasets
NFR-4	<b>Performance</b>	Analyse the dataset and the results are showed by Random Forest Classifier Model

NFR-5	<b>Availability</b>	It is user interactive Application
NFR-6	<b>Scalability</b>	It depends on Prediction of Data