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

Date	18th October 2022
Team ID	PNT2022TMID39626
Project Name	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
FR-2	User Confirmation.	Confirmation via Email Confirmation via OTP
FR-3	Dataset Collection.	Collect the data set related to Chronic Kidney Disease and process the data.
FR-4	Training the Model.	By using the processed data the model will be trained again and again by using back propagation techniques.
FR-5	Testing the Model.	By using 20% of dataset the model will be tested.
FR-6	Detection.	By using the data collected from the tested model the result is Detected.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Creating a machine learning model that uses the attributes of medical tests taken for different purposes to detect chronic kidney disease at early stage.
NFR-2	**Security**	The reports are maintained confidentially to the patients.
NFR-3	**Reliability**	The model will identify and detect the kidney disease earlier, so more number of clients will approach us and it results how the model is more reliable to the customers.
NFR-4	**Performance**	We can detect the chronic kidney disease with more than 95% of accuracy. we have more hidden layers and hence its accuracy also high.
NFR-5	**Availability**	It is used a website and trained model to detect it will work at any time.
NFR-6	**Scalability**	This model can be expanded to include more attributes for more accurate detection. Training the model with even more attributes will increase the efficiency.