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

Date	26 October 2022
Team ID	PNT2022TMID351612
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	• Accesses the website • Homepage about CKD ,cause and treatment • New user registers /sign up. If existing user then asked to login
FR-2	User Confirmation	• The User is asked to provide their email id or phone number. • Confirmation is done via OTP
FR-3	Collection of Dataset	• Collect the dataset based on CKD and process the Data
FR-4	Training the Model	• The model is trained using the processed date to get better accuracy
FR-5	Testing the Model	• Model is tested using the data
FR-6	Prediction	• After completing the above steps the result is predicted . That is ether the person had CKD or not.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Predicting CKD at an early stage can reduce mortality rate. The use of technology to predict whether a person has CKD is very useful for the society and can transform the healthcare sector to greater heights.
NFR-2	**Security**	The data and the reports are to be maintained securely and confidentially.
NFR-3	**Reliability**	The user will be able to predict CKD accurately and also maintain the data securely. This creates a sense of trust within the users.
NFR-4	**Performance**	Repeated training to obtain higher accuracy is done so as to achieve a high performance model.

NFR-5	**Availability**	Website is set up to be available to use at all times.
NFR-6	**Scalability**	This model provides an easily accessible form to predict whether a person has CKD. With more attributes the accuracy of the model can be increased as to make the model more efficient.