Project Design Phase-I
Proposed Solution

Date	19 September 2022
Team ID	PNT2022TMID35730
Project Name	Early Detection of Chronic Kidney Disease using Machine Learning
Maximum Marks	2 Marks

Proposed Solution :

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	• Patients with Chronic Kidney Disease require a medium to prevent its development into a severe condition by early detection and effective treatment. • With the advancement of machine learning, we can now be able to search through patient medical records and spot Chronic Kidney Disease in its early stages.
2.	Idea / Solution description	• The first phase in pre-processing involves cleaning of the dataset, scaling, and normalising the numbers because some data are missing. • The following stage is to utilise dimensionality reduction to find the important characteristics in the dataset and eliminate any that are unnecessary. • Various Machine Learing models need to be fitted in order to diagnose Chronic Kidney Disease early using the key parameters mentioned.
3.	Novelty / Uniqueness	• Along with the Detection of Chronic Kidney Disease, our system would also point out the anomalies in various other health parameters based on the age wise threshold of the health parameters. • The User Interface of the System will also include the information to spread awareness about the Chronic Kidney Disease.
4.	Social Impact / Customer Satisfaction	• Early prediction is the main objective of this application, and effective treatments would be able to stop or delay the disease from progressing to an advanced stage.

		• People may use this system to detect the presence of the disease time and cost effectively.
5.	Business Model (Revenue Model)	• The system can work with the healthcare industry to make money from clients who come for the diagnosis of kidney illness.
6.	Scalability of the Solution	• In addition to chronic conditions, it is also effective for a number of other diseases. • The parameters required for all the disease can be inputed from the patients and given them the analysis for various diseases.