

**Early Detection of Chronic Kidney Disease Using
Machine Learning**

Project Design Phase - 1

Proposed Solution

Team ID	PNT2022TMID03830
Team lead	Robsi Rani
Team members	Swathi K Subashini V Mythilee KL

Proposed Solution:

S.No	Parameter	Description
1.	Problem Statement	People who have a chronic illness need a tool that can detect disease early with the help of machine learning and provide very effective treatment to stop it from getting worse.
2.	Idea and solution Description	<ul style="list-style-type: none">● Because some data sets are missing, the first step is to perform preprocessing. The dataset is cleaned, scaled, and the numbers are normalized during pre-processing.● Using dimensionality reduction, the important features in the dataset will be identified, and the unnecessary ones will be removed.● Using dimensionality reduction, the important features in the dataset will be identified, and the unnecessary

		ones will be removed.
3.	Novelty/Uniqueness	The amount of a waste product called creatinine in the blood is a sign of how well the kidneys are working. By examining these data, deviations from the norm can be used to identify early kidney disease.
4.	Social impact/ Customer Satisfaction	This application's primary goal is early prediction, and effective treatments may be able to slow or stop the disease from getting any worse. As a result, you remain fit and healthy.
5.	Revenue Model	From a business perspective, it can partner with the healthcare industry to generate revenue from kidney disease patients.
6.	Scalability of the Solution	<ul style="list-style-type: none"> ● By increasing the number of features taken into account, the dimensionality reduction procedure can be modified to produce precise predictions. ● The best model can be chosen by comparing its accuracy to others. ● In addition to treating chronic conditions, it can be utilized for a variety of illnesses. ● In addition to treating chronic conditions, it can be utilized for a variety of illnesses. The best model can be chosen by comparing its accuracy to others.