

PROJECT DESIGN PHASE-I
PROPOSED SOLUTION

Date	22 September 2022
Team ID	PNT2022TMID15455
Project Name	Early Detection of Chronic Kidney Disease Using Machine Learning
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S. No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Early Detection of Chronic Kidney Disease using Machine Learning.
2.	Idea / Solution description	Early detection and cure of Chronic Kidney Disease (CKD) is extremely desirable as it can lead to the prevention of unwanted consequences. Machine learning methods are used to predict the various stages of CKD using the dataset obtained from the medical records of affected people.
3.	Novelty / Uniqueness	Specifically, we have used the Random Forest and J48 algorithms to obtain a sustainable and practicable model to detect various stages of CKD with comprehensive medical accuracy.
4.	Social Impact / Customer Satisfaction	As the Chronic Kidney Diseases (CKD) is a silent disease, as most sufferers have no symptoms until kidney function drops. Our project can be a huge game changer in a medical field by helping doctors to predict the CKD in a early stage and to the lives of thousands of people.
5.	Business Model (Revenue Model)	This application is recommended to patients in low cost with subscription basis.
6.	Scalability of the Solution	Machine-learning methods can be employed to better analyse nanomaterials and nanoscale biological materials, and aid in the effort to find new materials and the best routes to design nanomaterials optimally.