

Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID48665
Project Name	Project – Prediction 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)	CKD is a progressive disease often resulting in irreversible kidney failure, known as end-stage renal disease (ESRD), at which point dialysis or a kidney transplant is required to survive. So, early detection of Chronic Disease will help to reduce mortality rate.
2.	Idea / Solution description	Machine learning (ML) techniques are excellent in predicting CKD. The current study offers a methodology for predicting CKD status using clinical data, which incorporates data preprocessing, a technique for managing missing values, data aggregation, and feature extraction.
3.	Novelty / Uniqueness	In the proposed solution, we use some specified algorithms such as Decision tree, K-nearest neighbour is suitable for accurate prediction. we can predict the chronic Kidney Disease with more than 97% accuracy.
4.	Social Impact / Customer Satisfaction	This will aid in the achievement of improved outcomes as well as the accuracy and efficiency with which healthcare practitioners can anticipate kidney issues. This will enhance the dependability of the framework as well as the framework's presentation. The hope is that it would encourage people to seek early treatment for chronic renal disease and to make improvements in their lives.
5.	Business Model (Revenue Model)	When the patients use this model, they don't have to spend more amount of money for initial stages of diagnosis. This model will identify and predict chronic disease earlier so more number of clients will approach us and it makes more profit in both sides.
6.	Scalability of the Solution	Training the model with more number of attributes will increase the efficiency.