

Project Design Phase-I
Proposed Solution Template

Date	24 September 2022
Team ID	PNT2022TMID01477
Project Name	Project – 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)	Chronic Kidney Disease (CKD) is a major medical problem and can be cured if treated in the early stages. Usually, people are not aware that medical tests we take for different purposes could contain valuable information concerning kidney diseases.
2.	Idea / Solution description	We have Overcome this Issue in Our Proposed Solution by using attributes of various medical tests to distinguish which attributes may contain helpful information about the disease. The information says that it helps us to measure the severity of the problem and we make use of such information to build a machine learning model that predicts Chronic Kidney Disease .
3.	Novelty / Uniqueness	<p>Detecting the loss of kidney function can be done by measuring</p> <ol style="list-style-type: none"> 1. Our blood creatinine (to estimate how much blood is being filtered by the kidneys) 2. The presence of urine albumin (a type of protein) indicates that there is risk of having CKD.
4.	Social Impact / Customer Satisfaction	Early detection of chronic kidney disease has a notable impact in developing countries where both dialysis and transplant facilities are severely limited; as such it is hoped to have an especially noticeable effect on curtailing progression to end-stage renal disease, with a general increase in overall population health due to the decreased development of comorbidities.

5.	Business Model (Revenue Model)	CKD Early Detection System (CEDS) united medical resources of three levels including community health centers, district-level hospitals, and municipal-level hospitals , and established a three-stage preventive system.
6.	Scalability of the Solution	Chronic Kidney Disease is one of the most critical illnesses nowadays and proper diagnosis is required as soon as possible. Machine learning techniques have become reliable for medical treatment. With the help of advanced machine learning classifier algorithms, the doctor can detect the disease on time.