Project Design Phase-I

Proposed Solution

Date	23 October 2022
Team ID	PNT2022TMID41072
Project Name	Early Chronic Kidney Disease using Machine Learning
Maximum Marks	2 Marks

Proposed Solution:

S.No.	Parameter	Description
1.	Problem Statement	Chronic Kidney Disease is a major concern for the global health care system. Chronic Kidney Disease is now wreaking havoc on society and is spreading at an alarming rate. Various efforts have been undertaken to advance early therapy to prevent the condition from progressing to CKD. Recent research suggest that some of the negative outcomes can be avoided with early identification and treatment.
2.	Feasibility of idea	To predict the early onset of CKD, three Machine Learning techniques are used: *Random Forest, Decision Tree, Support Vector Machines. Using these techniques, each algorithm' s effectiveness is evaluated and the prediction of how many people have been affected by CKD is identified.

3.	Novelty	The renal patient is recognized by undertaking two primary tests. *A Blood Test to determine Glomerular Filteration Rate(GFR). *A Urine Test to determine Albumin.
4.	Social Impact	As people don't undergo the general test of their health, early detection of CKD is not identified. This creates a great social impact of not being aware of CKD. As a result of this many people are getting affected by CKD.
5.	Business Model	The widespread use of Machine Learning of predicting the CKD in the Medical Industries promotes medical innovation, lowers medical expenses, and improves medical quality. In order to cure the CKD patients, the hospitals have been gaining business profit in recovering the patients.
6.	Scalability of solution	This Chronic Kidney Disease have been spreading widely now a days. Early prediction of CKD using Machine Learning that is more efficient to analyze the disease so that it can be cured on time.