Project Design Phase-I
Proposed Solution
Template

Date	19 September 2022
Team ID	PNT2022TMID19815
Project Name	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. Consequently, attributes of various medical tests are investigated 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 CKD.
2.	Idea / Solution description	To predict the early onset of CKD, various Machine Learning algorithm are used. They are (i) Random Forest ,Support Vector Machine, Decision tree (ii) Using the above mentioned algorithm the effectiveness of the software is evaluated and the prediction of CKD is done successfully.
3.	Novelty / Uniqueness	Using the algorithm the severity of the problem can be measured and CKD is predicted in early stage to improve the quality of life of patients and to suggest correct course of treatment.
4.	Social Impact	As people don't undergo regular medical test CKD cannot be detected in the early stages. This creates a great social impact as people

		are not aware of CKD. By using this software the people can predict CKD at early stage to improve their life span.
5.	Business Model (Revenue Model)	The widespread use of machine learning of predicting the CKD in the Medical Industries promotes medical innovation, lower medical expenses and improves medical quality. Using this the hospitals have been gaining profits by curing patients.
6.	Scalability of the Solution	Awareness of CKD has been low among the public. With the machine learning algorithm the CKD can be diagnosed during the early stages and the correct course of treatment can be prescribed to the patients.