

**Project Design Phase-I**  
**Proposed Solution Template**

Date	25 September 2022
Team ID	PNT2022TMID53897
Project Name	Early Detection of Chronic Kidney Disease using Machine Learning
Maximum Marks	2 Marks

**Proposed Solution Template:**

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<p>Chronic kidney disease (CKD) is one of the most critical health problems due to its increasing prevalence. It is also known as chronic renal disease which is a condition characterized by a gradual loss of kidney function over time.</p> <p>A better testing method which could possibly detect CKD in the early stages would be much more useful using machine learning algorithm</p>
2.	Idea / Solution description	<p>The idea of approaching the problem is by creating a suitable machine learning model which involves deep understanding of the data which needs to be collected from real time , handle the missing data and standardizing the data by preprocessing technique which makes it suitable for ml model training and prediction using different approach of model creation depending on the dataset and output</p>
3.	Novelty / Uniqueness	<ul style="list-style-type: none"><li>• Easy to use User interface (UI)</li><li>• accurate accuracy by comparing the performance of different ml model technique</li></ul>
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"><li>• Greater cost reduction in hospitals for testing</li><li>• Helps in early diagnosis of the disease</li><li>• Chances of recovery is higher</li></ul>
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"><li>• subscription based model with initial trial basis</li><li>• charges/commission for the actual prediction and recovery of a person</li></ul>
6.	Scalability of the Solution	<ul style="list-style-type: none"><li>• The server in which the app is deployed containing the ml model must be capable of handling concurrent request and handle multiple request</li></ul>

		<ul style="list-style-type: none"><li>● maintaining the ml model by tweaking the parameter which doesn't play vital role in prediction by seeing the next set of dataset</li><li>● regular maintenance and changes in model with new features included in it</li></ul>
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