

Ideation Phase
Define the Problem Statements

Date	10 October 2022
Team ID	PNT2022TMID41437
Project Name	Early Detection of Chronic Kidney Disease using Machine Learning
Maximum Marks	2 Marks

Problem Statement:

There are a large number of people in the world who gets affected to kidney related diseases. Our country India ranks first in terms of people getting affected by kidney related disease. Though population plays a major factor in it, the fact that China which has higher population than us is actually ranking in a much lower place than us in the term of people getting affected by kidney related disease. Generally, the kidney diseases are caused by the abnormal physiological functionalities of human kidney. Therefore, the characteristic symptoms are generated based on the differentiation between normal physiological functionalities and abnormal physiological functionalities of the kidney. The difference in the functionality of kidney is mainly due to the lifestyle and the food preference people have in their life. So the reason we were doing this project is to find the symptoms of kidney related diseases for the users and alert them before the disease becomes fatal for the patient. The main motive of this project is to find the symptom and its cure as soon as possible.

Who does the problem affect?	Persons who are more than 50 years old or persons who live in a place which has large number of radioactive particles like Japan and those who have hereditary transaction of CKD in their family.
What are the boundaries of the problem?	People who are in ill health due to Kidney Disease and are in the verge of death.

What is the issue?	If a human kidney is affected due to external or hereditary factors then there is a chance of the person to die or have a serious sickness in the future.
When does the issue occur?	If a person's kidney activity is been degraded from the past due to mutation in its cell then Chronic Kidney Disease occurs.
Where does the issue occur?	The issue occurs in the Kidney of the Patient.
Why is it important that we fix the Problem?	It is a life or death matter as any loss of time can result as a dangerous outcome to the patient.
What solution to solve this issue?	An automated system is introduced to identify different diseases in kidney by checking the symptoms shown in the Kidney of the patient.
What methodology used to solve the Issue?	Machine learning techniques are used to identify the diseases and suggest the precautions that can be taken for those diseases.