

PROBLEM: Early Detection of Chronic Kidney Disease using Machine Learning

TEAM ID: PNT2022TMID12451

PROJECT DESIGN PHASE-I: Best outfit solutions

I.CUSTOMER SEGMENT: A Patient of Logesh Lokesh is a 70-year-old diabetic patient, and has been observing many unusual symptoms like vomiting, sleep problems, fatigue and weakness, Muscle cramps. He also has a family history of chronic kidney disease and wants to know if he is hereditarily affected by CKD.	VII.BEHAVIOUR: Lokesh has been trying to change his daily routines and he has decided to take healthier foods and also he had taken a decision of doing exercises regularly.
II.PROBLEMS OF CKD: People with diabetes, hypertension, heart disease and family history are at increased risk for developing CKD and depending on the region, it may also be important to consider comorbidities, environmental exposures or genetic risk factors.	VIII.CHANGES OF BEHAVIOUR: ONLINE: Lokesh browsed online about the unusual symptoms and developed his suspicions for CKD and tried to alleviate his ailments using home treatments OFFLINE: Lokesh attends awareness programs to find out more about CKD and tries to conclude if he is affected, he later approaches a doctor to confirm his suspicions of CKD.
III.TRIGGERS: Lokesh has noticed his change in his appearance which has caused him to develop insecurities. He has also lost his appetite, and developed insomnia.	IX.CAUSES: People with diabetes, hypertension, heart disease and family history are at increased risk for developing CKD and depending on the region, it may also be important to consider comorbidities, environmental exposures or genetic risk factors.
IV.CHANGES APPEARED: BEFORE: Lokesh was incompetent to decide if he has been affected by the disease and this caused him to feel distressed and uneasy. AFTER: Lokesh, after he has been identified has a better understanding of what the disease is and feels more secure about the decisions, he should take to face CKD.	X.SOLUTION FOR CKD: Targeted screening and detection of probable CKD can enable GPs to confirm a diagnosis and assess the level of risk of cardiovascular disease and progression of CKD. This in turn guides management. Early detection and subsequent timely management can slow down or even prevent deterioration in kidney function and help to improve cardiovascular outcomes

V.STEP TAKEN:

Lokesh can consult a doctor, stating that he has been facing some unusual symptoms recently, following the prescription he could take tests to discover if he has CKD or not.

VI.CUSTOMER NEEDS:

People with less awareness get diagnosed with CKD only when the symptoms get worse and becomes more difficult to treat and is more deadly. CKD is a condition in which the kidneys are damaged and cannot filter blood as well as they should. Because of this, excess fluid and waste from blood remain in the body and may cause other health problems, such as heart disease and stroke.