Project Title : Early Detection of Chronic Kidney Disease Using Machine Learning **Project Design Phase-I - Solution Fit Template** **Team ID: PNT2022TMID03830**

Define CS, fit into CC

1.CUSTOMER SEGMENT(S) CS

- People facing mild symptoms and problem related to kidney.
- Diabetic patients .
- Hospital and Doctors.

6.CUSTOMER CONSTRAINTS CC

- Lack of Awareness.
- Expensive treatment in private hospitals.
- Fear about the treatment results.
- CKD is a silent killer ,cause symptoms are found in later stages.

5.AVAILABLE SOLUTIONS AS

- Maintaining normal blood pressure.
- Practise exercise and meditation.
- Less intake of salted food to reduce and maintain BP.
- Kidney transplant.

Explore AS, differentiate

Focus on J&P, tap into BE, understand RC

2.JOBS-TO-BE-DONE / PROBLEMS J&P

- Create an patient-friendly user interface for collecting the requirements.
- The UI should interactive and simple.
- A brief and clear information should be given to who lack in the knowledge about the particular disease.
- Create a model using ML to predict CKD in early stages.

9.PROBLEM ROOT CAUSE RC

- Diabetes is the main cause.
- Hypertension.
- Prolonged blockage to the urinary system - kidney stones.
- Sometimes genetics may be a cause.

7.BEHAVIOUR BE

- The access to the platform which predicts CKD Should be fast and easy so that patients can utilize it.
- The requirements and test results are given initially.
- The final results are given by using ML and appropriate treatment must be given by skilled doctors.

Focus on J&P, tap into BE, understand RC

Identify strong TR & EM

3. TRIGGERS TR

Patients are triggered when they feel symptoms of CKD .Some of the symptoms are weight loss , poor appetite,insomnia , breath shortness…

4. EMOTIONS: BEFORE / AFTER EM

Before : Fear , Sick , Depressed.

After : Healthy ,Relieved ,Happy.

10. YOUR SOLUTION SL

Early Detection of Chronic Kidney Disease using best Machine Learning algorithm to provide accurate results. The results say if the kidney is affected with the disease or not.

8. CHANNELS OF BEHAVIOUR CH

8.1 ONLINE

The user / patient can get their results from online method designed by providing necessary test results and other details.

8.2 OFFLINE

Later patient should visit the hospital for doctors consultation and further treatments/medications they should undergo with their results.

Identify strong TR & EM