Define CS, fit into CC

1. CUSTOMER SEGMENT(S) CS

Patients that face mild to severe symptoms ranging from unusual fatigue, high blood pressure, malaise to insufficient urine production, high levels of creatinine, kidney failure; that maybe an indication of a serious health issue like chronic kidney disease prediction.

6. CUSTOMER CONSTRAINTS CC

i. Although free, the web program works on computers, smartphones, and other electronic gadgets, which may be out of reach for the less fortunate members of the society.
ii. Requires recent blood/urine test results, making this a requirement for the machine learning model before it can offer a forecast.

5. AVAILABLE SOLUTIONS AS

The primary treatments are lifestyle to keep you as healthy as possible, medication to manage related issues like high blood pressure and high cholesterol, and dialysis. None of these options focuses on early kidney disease detection using data from specific human body testing. All primary therapies may be avoided by quickly completing an early diagnostic.

Explore AS, differentiate

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

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

The following jobs are to be done:
i. Identify the most important diagnostic data that can cause chronic kidney disease
ii. Create an ML model that can predict the presence of chronic kidney disease
iii. Design an interactive, simple and freely available UI for communicating with the patients.

9. PROBLEM ROOT CAUSE RC

Kidney disease is most frequently brought on by diabetes. However, obesity and heart disease can also contribute to the harm that results in renal failure. Long-term functional decline can also be brought on by problems with the urinary system and inflammation in various kidney regions.

7. BEHAVIOUR BE

First, it is assumed that the patient would undergo a few tests and provide the required results as input to the frontend of the created system. Based on this data, the machine learning model predicts the future. The fact that the application is free to use makes it incredibly beneficial to users.

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

Identify strong TR & EM

3. TRIGGERS TR

Patients are encouraged to get a kidney function test if they experience symptoms that point to potential renal issues. These signs and symptoms may include: unusual nausea and vomiting; blood in urine (hematuria) and painful urination (dysuria).

4. EMOTIONS: BEFORE / AFTER EM

Patients experience a rush of terror prior to interacting with the suggested system. They will feel relieved and acquire a diagnosis after seeing the results.

10. YOUR SOLUTION SL

Patients with chronic kidney disease require a means to prevent its development into a severe condition by early detection and effective treatment. With the advancement of machine learning, it is now able to search through patient medical records and spot chronic kidney disease in its early stages. The system successfully resolves the aforementioned issue without charging a fee by combining the machine learning model with an intuitive UI.

8. CHANNELS of BEHAVIOUR CH

8.1. ONLINE
In order for the machine learning model to produce predictions, the patients are required to provide the appropriate health check test results into the online application.
8.2. OFFLINE
In order to complete the required health examination, patients must visit laboratories or hospitals, from which the information can be entered into the web application.

Identify strong TR & EM