

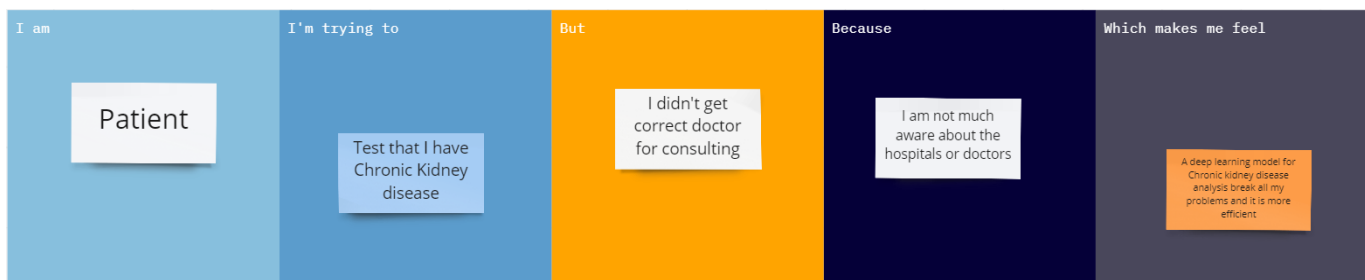
## Ideation Phase

### Define the Problem Statements

Date	10 October 2022
Team ID	PNT2022TMID14357
Project Name	Detection of Chronic Kidney Disease using Machine Learning
Maximum Marks	2 Marks

### Customer Problem Statement Template:

Chronic Kidney Disease (CKD) or chronic renal disease has become a major issue with a steady growth rate. A person can only survive without kidneys for an average time of 18 days, which makes a huge demand for a kidney transplant and Dialysis. It is important to have effective methods for early prediction of CKD. Machine learning methods are effective in CKD prediction. This work proposes a workflow to predict CKD status based on clinical data, incorporating data preprocessing, a missing value handling method with collaborative filtering and attributes selection. Out of the 11 machine learning methods considered, the extra tree classifier and random forest classifier are shown to result in the highest accuracy and minimal bias to the attributes. The research also considers the practical aspects of data collection and highlights the importance of incorporating domain knowledge when using machine learning for CKD status prediction.



Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	Patient	Test that I have Chronic Kidney disease	I didn't get correct doctor for consulting	I am not much aware about the hospitals or doctors	A deep learning model for Chronic kidney disease analysis break all my problems and it is more efficient

