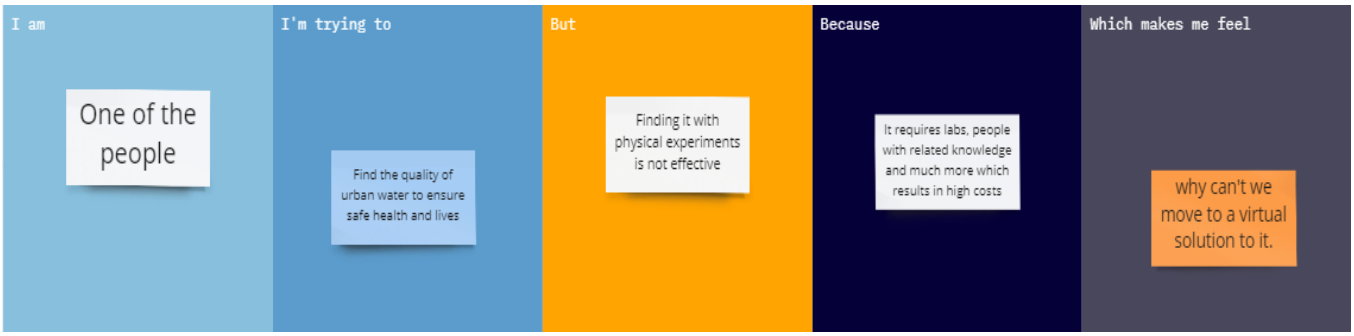
Ideation Phase
Define the Problem Statements

Date	01 September 2022
Team ID	PNT2022TMID15407
Project Name	Efficient Water Quality Analysis and Prediction Using Machine Learning
Maximum Marks	2 Marks

Customer Problem Statement:

Water is considered a vital resource that affects various aspects of human health and lives. Rapid Industrialization has consequently led to the deterioration of water quality at an alarming rate. The quality of water is a major concern for people living in urban areas. However, predicting the urban water quality is a challenging task since the water quality varies in urban spaces non-linearly and depends on multiple factors, such as meteorology, water usage patterns, and land uses. Water quality is currently estimated through expensive and time-consuming labs which require sample collection, and transport of these samples to the lab collected from one of the water sources and it takes a considerable amount of time for the calculation of results which is quite ineffective if the water polluted with waste that causes diseases.



Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	One of the people	Find the quality of urban water to ensure safe health and lives	Finding it with physical experiments is not effective	It requires labs, people with related knowledge and much more which results in high costs	Why can't we move to a virtual solution to it.