Ideation Phase
Define the Problem Statements

Date	01 September 2022
Team ID	PNT2022TMID45388
Project Name	Real-Time River Water Quality Monitoring and Control System
Maximum Marks	2 Marks

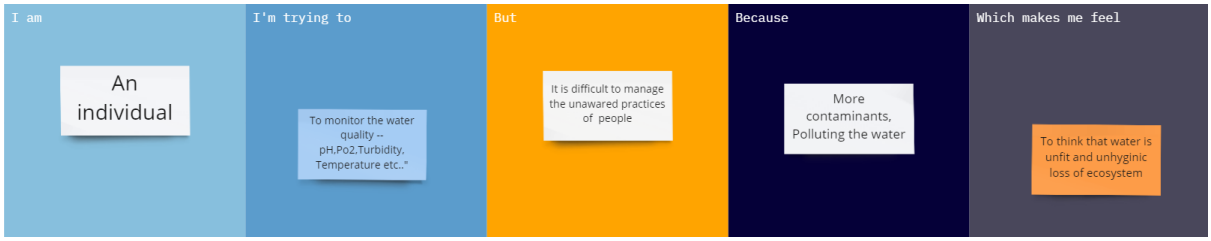
Customer Problem Statement:

The most frequent water quality issue is due to the high content of iron (iron(III) oxide) and magnesium content in raw water of treated water. Water quality disorders occur as a result of changes in the color of the water that turns yellow to a dark brown color. The color change is due to action chemical reactions that are used in the water treatment process at the Treatment Plant (Kasan, 2006). This water treatment diagnostic and auditing process still uses manual methods, where water will be measured and the quality index will be clinically measured inside the laboratory. Besides, low pH levels cause fish killed by stressing animals system and causing physical damage, which in turn makes them more vulnerable to disease. Water is the most important source of survival for all beings on earth. Therefore, water safety issues are a very important issue.

Consumer complaints and reports made by the relevant government departments indicate that consumers are dissatisfied with the quality of water supplied (Nithyanandam, Huan, & Thy, 2015). Hence, a concept in which equipment, machines, sensors and devices are connected to the Internet and there is data collection and transfer through the network developed to follow the river water quality index. Integration of the elements of sustainability and IR4.0 through the Internet of Thing by adopting electronic and Internet applications of Thing has a very positive impact to refresh the approach to lesions in Malaysia.

The production of tools that can measure the level of health (water quality 8 index) chemically (Samsudin et al., 2018). This tool is produced by reading recording function to evaluate the quality level through the special sensor of Internet of Thing. And the data obtained can be used for analysis, recording, display and it is a warning to the JPS about the health status of the river that is chemically dissolved. The information used such as the cloud database greatly facilitates the process of storage and process of data analysis while it also has high security features.

Example:


I am
An individual
I'm trying to
To monitor the water quality -- pH,Po2,Turbidity, Temperature etc.."
But
It is difficult to manage the unawared practices of people
Because
More contaminants, Polluting the water
Which makes me feel
To think that water is unfit and unhyginic loss of ecosystem