

Ideation Phase

Defining the problem statements

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| Date | Oct 2022 |
| Team ID | PNT2022TMID19880 |
| Project Name | Real-Time River Water Quality Monitoring and Control System |
| Maximum marks | 2 marks |

| Problem Statements (PS) | I am | I am trying to | But | Because | Which makes me feel |
|--------------------------------|--------------------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| PS1 | I am a health minister | I want to make sure that the residents are provided good quality water supply. | I am unable to evaluate the water quality in large volume and in an optimized manner. | If the river water quality is evaluated in large volume, it ensures maximum accuracy and easy assessment. | That a proper and enhanced system to evaluate the water quality would make me propose appropriate solutions to improve the quality. |
| PS2 | I am a farmer | I want to ensure that the water I use for irrigation is up to the mark. | I am unable to assess the quality of water in an economical way. | If I could know the quality of water that I use for my crops, I can provide supplementary nutrients that are required. | An economical system to measure the water quality would make my crops healthier. |
| PS3 | I am an environmentalist | I want to know the quality of water in my locality. | I am unable to identify the water quality and thus devise strategies for pollution control. | If I could know the river water quality, I can come up with remedies to reduce water pollution. | I will need an enhanced and quick water quality assessment system to develop pollution control strategies. |