**Project Design Phase-I**
**Proposed Solution**

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| Date | 24 September 2022 |
| Team ID | PNT2022TMID35688 |
| Project Name | Project - IOT Based Real-time River Water Quality Monitoring and Control System |
| Maximum Marks | 2 Marks |

**Proposed Solution:**

| S.No. | Parameter | Description |
|---|---|---|
| 1. | Problem Statement (Problem to be solved) | Massive growth of algae called eutrophication leads to pollution. (Monitoring and controlling the quality of river water) |
| 2. | Idea / Solution description | • Detecting the dust particles, PH level of water,Dissolved oxygen and temperature to be Monitored and altering the authorities if waterQuality is not good.<br>• If the water is contaminated an alert is made to the user/ local authority through SMS or can be viewed through web application anytime. |
| 3. | Novelty / Uniqueness | By observing the river water quality it can be used in a proper manner for domestic purpose and to control the industrial wastes dumped into the water |
| 4. | Social Impact / Customer Satisfaction | Algal growth, fertilizers, pesticides cause river pollution which can impact all living beings. Better monitoring and control measures can impact health and vegetation massively. |
| 5. | Business Model (Revenue Model) | Service based product is developed to serve the local people to know the quality of water before consuming it or using it for any purpose. This prevents health issues or at most loss of living being. |
| 6. | Scalability of the Solution | Measuring of real time values and continuous monitoring helps in maintaining the quality of water. |