**Project Design Phase-I**

**Proposed Solution Template**

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| Date | 24 September 2022 |
| Team ID | PNT2022TMID06942 |
| Project Name | Real Time river water quality Monitoring and Control System |

**Proposed Solution Template:**

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| **S.No.** | **Parameter** | **Description** |
| 1. | Problem Statement (Problem to be solved) | Most of the water is affected by the industrial wastes containing chemicals, medical wastes and by washing vehicles the engine oil is mix with the river water. |
| 2. | Idea / Solution description | \* To measure various chemical and physical properties of water like pH, temperature and particle density of water using sensors.  \* Dispose the industrial waste, toxic chemicals and medical waste properly. |
| 3. | Novelty / Uniqueness | \* If the acquired value is above the threshold value automated warning SMS will be sent to the agent.  \* The uniqueness of our proposed paper is to obtain the water monitoring system with high frequency, high mobility and low powered. |
| 4. | Social Impact / Customer Satisfaction | \* Everyday peoples and animals will drink only the pure water.  \* The risk of water-borne diseases can be reduced.  \* Good environment surrounding the river.  \* The good quality river water is mainly used for farmers. |
| 5. | Business Model (Revenue Model) | By using this system we can find the quality of water because river water is the basic raw material for food and beverage industries. |
| 6. | Scalability of the Solution | \* Water quality data with a high spatial and temporal resolution for thousands of lakes at a time.  \* It supports the evaluation of environmental problems and potential health risks through the analysis of changes in water quality and the detection of harmful algal blooms. |