**Project Design Phase-I**

**Proposed Solution Template**

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| Date | 06 November 2022 |
| Team ID | PNT2022TMID15981 |
| Project Name | Project - Real-Time Water Quality Monitoring and Systems |
| Maximum Marks | 2 Marks |

**Proposed Solution Template:**

Project team shall fill the following information in proposed solution template.

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| **S.No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | Due to population growth,urbanization,and climatic change,competition for water resources is expected to increase,with a particular impact on agriculture,river water. |
|  | Idea / Solution description | To monitor the water supply we implement IoT (Internet of Things)setup, for river water quality monitoring systems periodically checks,dust particles,temperature and PH level by sensors and notifies for public when the water quality vaires. |
|  | Novelty / Uniqueness | We use water detection sensor has unique advantage.It consumes less time to monitor than a manual method for checking polluted levels,and notifies immediately to reduce affected rate of pollution in water. |
|  | Social Impact / Customer Satisfaction | People who are living in rural areas near to the river will be very satisfied with our idea.It will be useful to monitor water pollution in specific area.So this system prevent people from water pollution.It will be used for farming purpose to check quality water,temperature and PH level.Our Impact of this project is also create a social satisfaction for farmers too. |
|  | Business Model (Revenue Model) | It costs low compared to other model.Our real time quality monitoring model has sensors easily helps to monitor and predict the affected water scale easily in farming,drinking water,aquaculture,and other industries.It notifies by sending directly to the corporation and they can further notify the people to aware immediately.Quick actions can be taken.With the help of efficient use of mobile network,IoT and continuous monitoring it will be revolutionized model. |
|  | Scalability of the Solution | Checking the river water quality for providing clean drinking water for the people, farming, promoting aquaculture, and other industries. It is the best replacement for checking water quality in laboratories and it is user-friendly.If we add more advanced sensors in future it can be used to monitor multiple levels in water.It will show continuous real time values in maintaining the quality of water. |