**Monitoring Water Quality Analysis for Safety**

**Introduction:**

On October 25, 2023, we try to propose our Project title as my group members Epis, Steven, Decio, Daisy, Encinas, Jan keilah, Jamel, Abegail, and Panugaling, Chelsea Mariae. As time goes by I and my group presented the Proposal Captone title, In the end Monitoring Water Quality Analysis for Safety is one of the Title that We proposed has been approved. This Project is designed to help the community to identify the quality of the water. We seek to improve this project to add a level of awareness to the people.

**Overview of the Project:**

The "Monitoring Water Quality Analysis" project proposes a comprehensive effort to assess and ensure the quality of water in a specific place. This project is of utmost importance for both environmental conservation and public health. Over the course of this report, we will discuss the objectives of the project, the methods employed, and the expected impacts of its successful execution.

Water is an invaluable resource that sustains life on Earth. Access to clean and safe water is fundamental for human well-being and ecosystem health. However, with increasing industrialization and urbanization, water bodies are facing various contaminants that compromise their quality. The "Monitoring Water Quality Analysis" project is a proactive approach to address this issue by regularly assessing and ensuring the quality of water.

**Instructor's Recommendations:**

To prevent and more Effective they Add some feature that can Identify the bacteria of the water and, they add LED light to easily monitor if the water is good or not. However

They issued that We include that all the sensor that mentioned are present in the incoming Capstone 1.

**Project Progress and Future Steps:**

Since the approval of the "Monitoring Water Quality Analysis for Safety" project, our team has made significant progress in its development. We are committed to making this project a valuable resource for the community and ensuring the safety of the water supply. Here are the key developments and future steps for the project:

**Sensor Integration:** We have started the process of integrating various sensors into our water quality monitoring system. These sensors will help us gather data on parameters such as pH, turbidity, Bio Sensor, dissolved oxygen, and temperature. In response to the instructor's recommendation, we are also in the process of including sensors to identify waterborne bacteria. This will allow us to provide a more comprehensive assessment of water quality.

**LED Light Indicators:** As suggested by the instructor, we have incorporated LED light indicators into our system. These indicators will provide a quick visual representation of water quality. Green lights will indicate safe water, while red lights will signal potential issues. This feature will make it easier for users, including community members, to understand the water quality immediately.

**Data Collection and Analysis:** To ensure the accuracy and reliability of our water quality assessments, we are working on a robust data collection and analysis system. This system will compile data from various sensors and perform real-time analysis. It will generate reports that can be accessed by both our team and the community.

**Community Engagement:** As we move forward, we recognize the importance of community engagement. We plan to conduct awareness campaigns, workshops, and training sessions to educate the community about the importance of water quality. We believe that involving the community in this project will not only raise awareness but also provide valuable local insights.