Innovative Projects- Arduino Using Embedded 'C' (CSE1002)

Phase –I Review Presentation WORK QUALITY ANALYSIS USING ARDUINO

Submitted to the Presidency University, Bengaluru in partial fulfillment of the requirements for the Innovative Project-Arduino Using Embedded 'C'

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Project Brief Summery

- Overview: Water pollution affects human health by causing waterborne diseases. To prevent the water pollution, necessary steps are to be taken. First step is to estimate the water parameters like pH, turbidity, conductivity etc., as the variations in the values of these parameters point towards the presence of pollutants.
- Objective: To ensure the safe supply of drinking water, the quality should be monitored in real time for that purpose Arduino based water quality monitoring has been proposed. In this report, the design of Arduino based water quality monitoring system that monitors the quality of water in real time is presented. This system consists of different sensors which measures the water quality parameter such as pH, conductivity, muddiness of water, temperature. The measured values from the sensors are processed by microcontroller and the processed values are transmitted using GSM to the concerned authority.
- Outcome: The experimental setup for water quality monitoring system using Arduino Uno is shown in the Figure. Whenever the sensed parameter values exceed the threshold, message is sent to authorized person. Based on the parameters sensed by different sensors, an alert message will be received by the authorized person and accordingly they take necessary action to prevent or control pollution level.

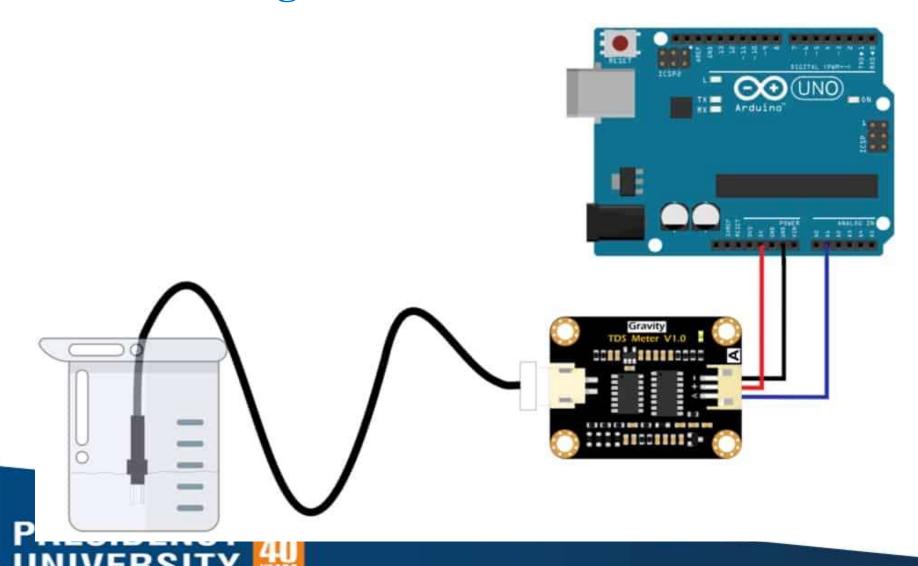


Challenges Faced in Project

- The budget of the project is quite expensive because of the usage of different kinds of sensors(temperature sensor, pH sensor, etc.,).
- The coding part and connections of this project are difficult to comprehend for beginners in this field.
- On a final note, time management and balance between academics and the innovation project is crucial for the implementation of the project.



Circuit/Block Diagram



Project Timeline

Phase 1

Phase 2

Phase 3

Selection of the title of the project referring to various research articles.

Creating a circuit diagram related to the topic and writing the code for the same.

Implementation of the project by using the knowledge of connections in the project and executing the outcome of the project efficiently.



Q&A

Thank you!!

