**WATER LEVEL SENSOR USING ARDUINO UNO WITH APPLICATION**

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**Abstract:**

This project presents the development of a water level sensing system utilizing Arduino Uno microcontroller, coupled with a user-friendly application interface. The system aims to provide real-time monitoring of water levels in tanks or reservoirs, enabling efficient management and timely action to prevent overflow or shortage. The water level sensor interfaced with Arduino Uno continuously measures the water level and transmits the data to the application interface, allowing users to remotely monitor the status. The integration of Arduino Uno and the application provides a cost-effective and accessible solution for water level monitoring in various applications.

**Key Features:**

* Real-time monitoring: Continuous tracking of water levels for timely management.
* User-friendly application interface: Intuitive interface for easy access and control.
* Customizable alerts: Configurable alerts for low or high water levels to prevent incidents.
* Data logging: Recording historical water level data for analysis and optimization.
* Arduino Uno compatibility: Utilization of Arduino Uno for robust and reliable hardware integration.

**Technological Stack:**

* Hardware: Arduino Uno microcontroller, water level sensor
* Software: Arduino IDE for programming, Application development using suitable frameworks (e.g., Android Studio for Android applications)

**Significance:**

This project addresses the crucial need for efficient water management by providing a cost-effective and accessible solution for monitoring water levels in tanks or reservoirs. The integration of Arduino Uno with a user-friendly application interface enhances accessibility and usability, enabling users to remotely monitor and manage water resources effectively. By facilitating real-time monitoring and timely intervention, this system contributes to water conservation efforts and minimizes the risks associated with water overflow or shortage.