

Water Scheduling in Municipalities using RTC

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Abstract: *Water is a precious natural resource that serves various purposes such as drinking and cooking. However, it is often wasted and not efficiently utilized. The conservation of water has become increasingly crucial due to the growing gap between diminishing water supplies caused by inadequate water management and the rising demand from population growth. Consequently, the cost of water is continuously rising. Therefore, it is essential to monitor daily water usage. Moreover, residents living in apartments face the issue of unfair billing, where customers who use minimal water and those who consume the maximum amount are charged the same. To address this problem, a proposed system utilizes RTC (Real-Time Clock) to track water usage accurately. Additionally, the project incorporates a TDS (Total Dissolved Solvents) sensor to measure the level of dissolved solvents in the water. Furthermore, a soil moisture sensor is employed to detect any water leakage by monitoring the moisture level in the soil. If an increase in moisture level is detected, the system sends a text message to registered recipients, alerting them of the potential leakage and helping to minimize water wastage. Another feature of this project is a push button that allows users to view their bill on an LCD display when pressed.*

Keywords: Real-Time Clock