

Prepaid Water Meter with Quality Checker and Auto Complaint Generation using IOT

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Abstract: *Water efficiency is crucial globally, leading to the development of smart water systems. Prepaid water meters track usage, while shared meters share overcharged homes' consumption. These systems provide financial benefits to both utilities and customers, addressing water usage issues and promoting water conservation. By utilizing advanced algorithms and patient-specific data, the healthcare advisor provides recommendations that are not only customized but also timely, aiming to improve the overall quality of life for individuals dealing with long-term health challenges. The project is intended to empower patients with actionable insights, supporting them in making informed decisions about their health and well-being. The study proposes a solution to the water usage problem by using a device to calculate flow rate and amount of water usage, sending data to the cloud, and addressing the lack of monitoring in the Municipal Corporation Water Distribution system, which requires additional staff. The "Prepaid water meter" is an IoT solution for monitoring and controlling water supply, addressing the issue of depletion due to urbanization, climate change, and wasteful use. It offers real-time internet based data collection, addressing the challenges of measuring flow rates and requiring research. The water quality in residences is monitored using turbidity sensors and solenoid valves, with a PH sensor determining safe drinking water. Web apps are developed using Java, and charges, usage, and client data are recorded in a MySQL database.*

Keywords: Turbidity sensors, gas sensors, PH sensors, microcontroller, cloud storage, sensors, Internet of Things (IOT), and solenoid valve, real time monitoring