

## **SMART DOMESTIC WATER PUMP WITH WATER CONSUMPTION MEASUREMENT THROUGH ANDROID APPLICATION**

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In this paper, we measure the water level available in the rooftop tank and in the ground water tank using ultrasonic sensors. The basic principle behind the use of ultrasonic sensor is the distance measurement through the reflection of ultrasonic sound waves (ECHO). When sound waves are transmitted towards an object they are reflected back to the sensor as ECHO after bouncing off the object. This duration attained is used to calculate the distance of the object. This concept is used in our project where the water motor pump is automatically turned on when water level in the destination roof top tank goes below the set threshold value. Also the volume of water used by each user if in an apartment considered is also calculated and sent through the android application through IoT. The pump is made to work under two modes namely, the auto mode and the manual mode. In both modes the user can observe the level of water available in destination tank via an Android application.

