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SCHOOL OF COMPUTING

SMART IoT-BASED WATER LEVEL CONTROLLER

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OBJECTIVE

To promote judicious water management and conservation by preventing wastage in overhead tanks.

WORKING PRINCIPLE

1) Water level is detected using HC-SR04 Ultrasonic Sensor, connected to a Raspberry Pi 3 Model B.
2) A permissible range is set through Java ME 8.3 code, to prevent overflow. When the range lies within threshold levels, an LED glows, the motor switches ON, and the tank is filled.
3) When the level exceeds the capacity limit, the LED and motor turn OFF, water flow to the tank stops.

RESULTS

The water level is controlled by automating the motor, and overflow is prevented on time. Real time readings are obtained on the Raspberry Pi Terminal and Java ME emulator on the local host system.