

REAL TIME WATER AVAILABILITY DASHBOARD



1. WHAT?

The objective of this project is to create a real-time internet-connected water availability dashboard. This dashboard will display the water availability in the entire society and also indicate the temperature of water and the hardness in ppm.

2. WHY?

Benefits include accurate water-level monitoring, live water quality assessment, automated data collection, reduction in wastage of resources, accessibility of live data to the public, informs users about availability of safe-to-drink water.



3. HOW?

This project uses the ESP32 microcontroller and various sensors to accurately measure the data. The data is measured very frequently and is then uploaded to a server and stored in a database. Users can access live and historical data by visiting the mobile app dashboard.

4. Pocket-Friendly

This is a very cheap to implement solution which can be easily incorporated into any industrial or domestic purposes. The total cost of a prototype usually ranges between ₹900-1000.



5. Easy-To-Maintain

Since this product is easy to maintain, there is very low labor cost involved. The TDS sensor needs fortnightly cleaning, and the temperature sensor needs monthly cleaning. Regular maintenance will ensure longevity of the sensors and the microcontroller.