COLLEGE NAME: PRIYADARSHINI ENGINEERING COLLEGE

COLLEGE CODE : 5119

COURSE NAME: Internet Of Things (IOT)

GROUP NUMBER: 1

PROJECT TITLE: SMART WATER MANGEMENT

PROJECT SUBMITTED TO: SKILL UP ONLINE

YEAR: 3rd

DEPARTMENT: ELECTRONICS AND COMMUNICATION ENGINEERING.

SEMESTER: 5th

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SPOC NAME: Dr.R.THENMOZHI.HOD/EEE

SMART WATER MANGEMENT

DEVELOPMENT 2:

Leak Detection:

Using sensors to identify and address water leaks in infrastructure, reducing water wastage.

Water Quality Monitoring:

Employing sensors to continuously monitor water quality in real-time, ensuring safe and clean water for consumption.

Data Analytics:

- Analyzing historical and real-time data to optimize water distribution, predict demand, and improve overall efficiency.

Smart Irrigation:

- Using weather data and soil moisture sensors to optimize irrigation in agriculture, conserving water resources.

Water Recycling and Reuse:

- Implementing systems to treat and reuse wastewater for non-potable purposes, reducing strain on freshwater supplies.

Consumer Engagement:

- Providing consumers with real-time usage data and tools to encourage responsible water consumption.

Remote Monitoring:

Using remote sensing technologies to assess water availability and quality in remote or hard-to-reach areas.

- Reservoir Management:

Utilizing predictive analytics to manage reservoir levels and release water as needed, particularly in drought-prone regions.

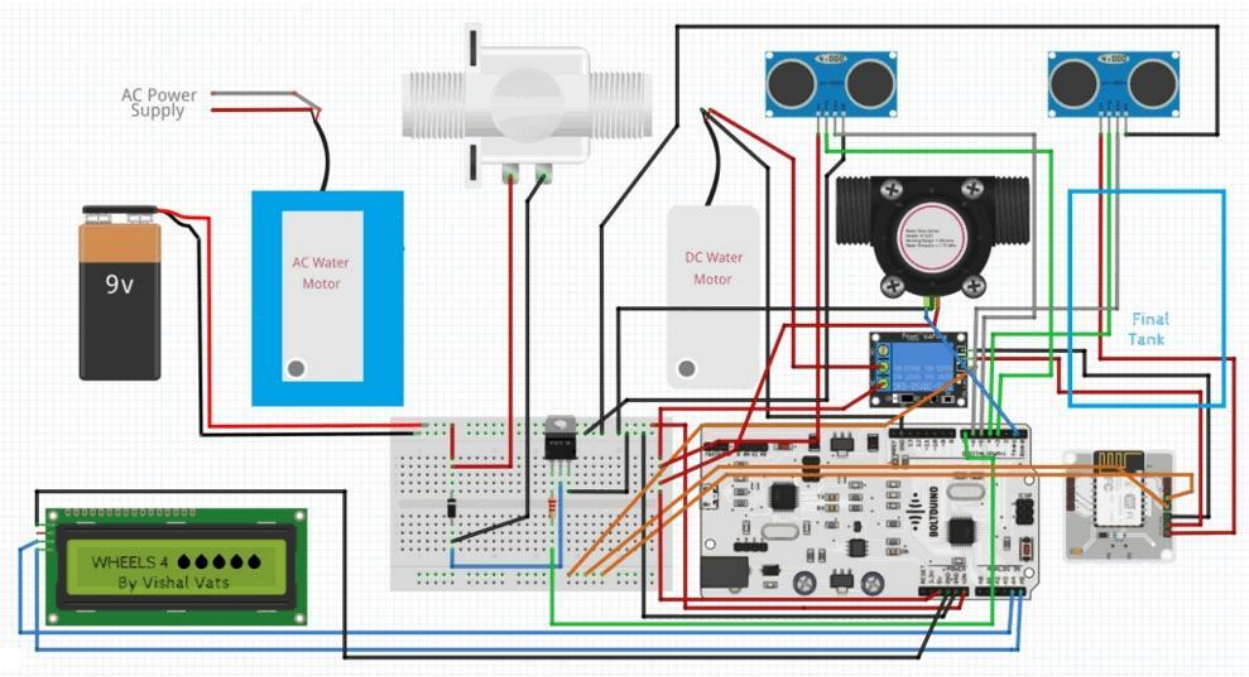
Infrastructure Maintenance:

Predictive maintenance of water infrastructure to prevent unexpected breakdowns and water loss.

Policy and Regulation:

Implementing smart policies and regulations that promote sustainable water management practices.

SOFTWARE COMPONENTS



HARDWARE COMPONENTS