# SMART WATER MANAGEMENT USING IOT

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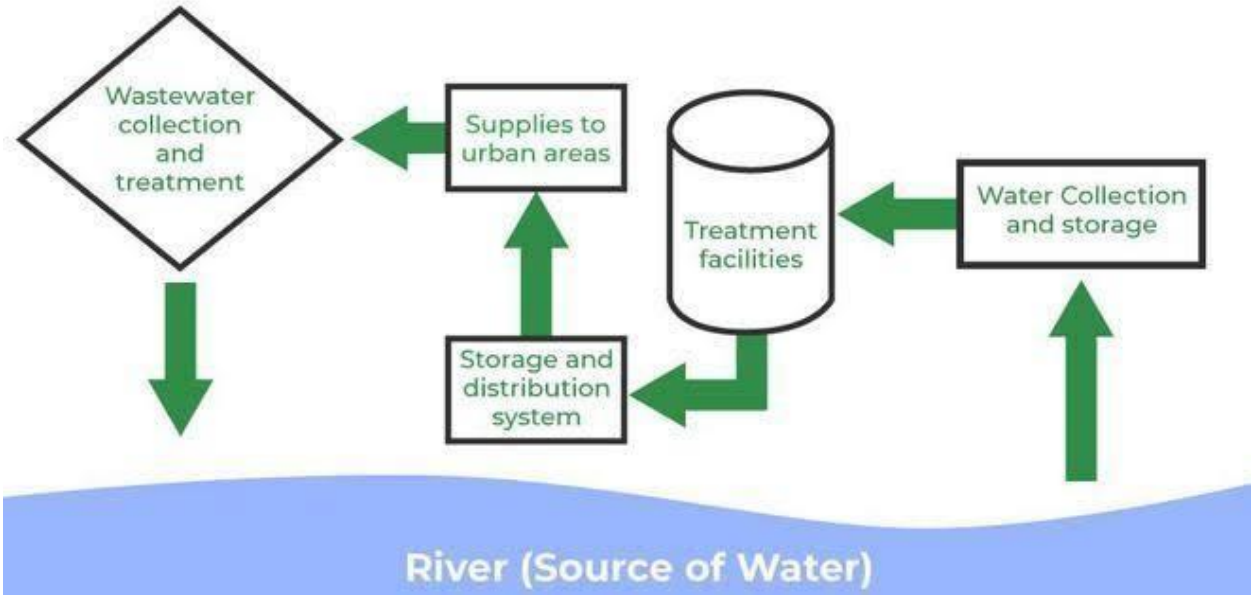
| PROJECT NAME | SMART WATER MANAGEMENT |
| TEAM ID | Proj_220534_Team_1 |

INTRODUCTION :

Here we bring an Mobile application for Water management system in rural and urban areas .As we know that there are many problems are facing in rural areas related to canal supply of water for irrigation, no arrangement of water within particular distance areas like no wells, no hand pumps, no canals, no ponds so with this app the people can directly communicate with the government officials And similarly in urban areas we have seen that the water scarcity problem is happening now a days, and like water distribution management problems. These problems are generally resultant in wastage of water,cost,time instead of the problem is not being solved. so for solving all problems we have Smart WMS.

ABSTRACT :

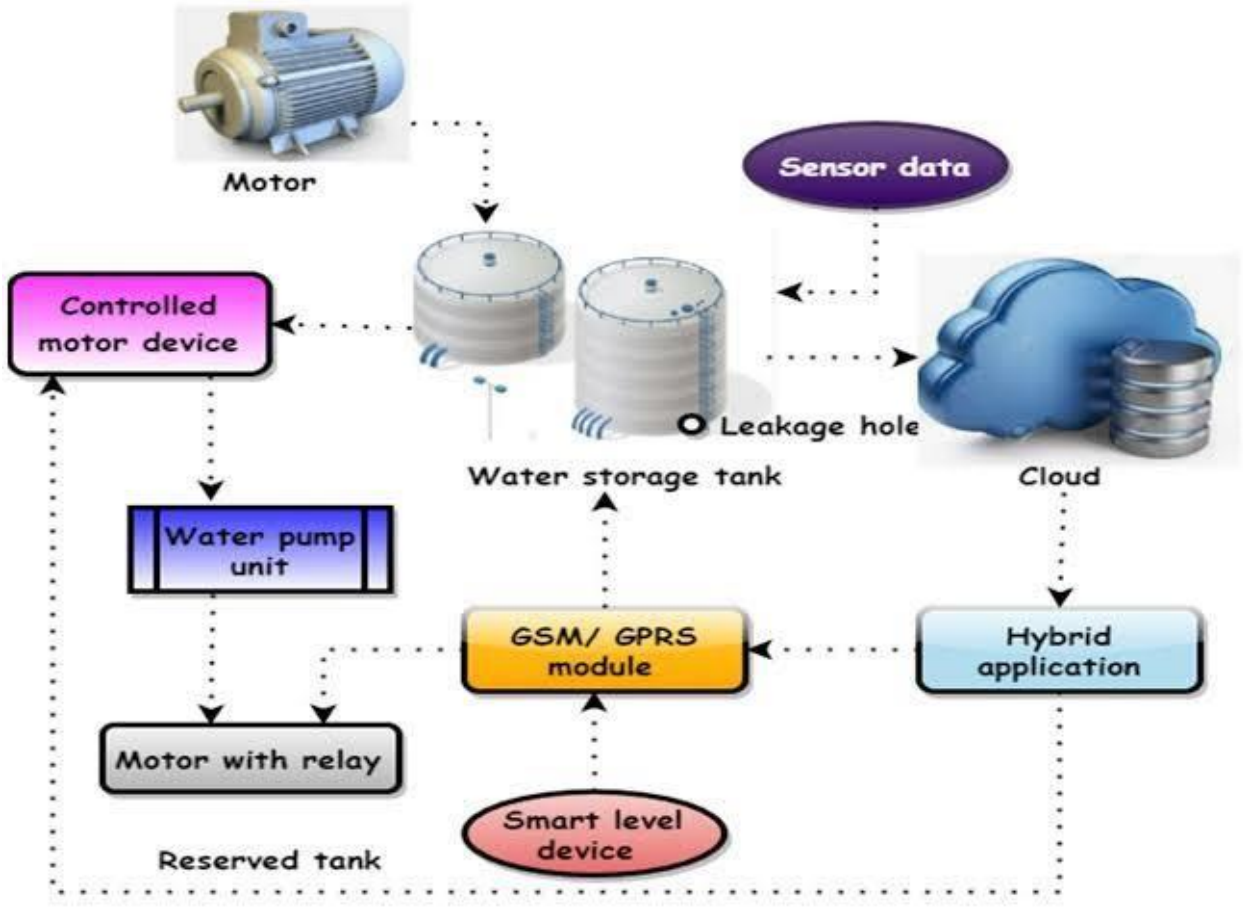
Smart water management involves using technology and data-driven approaches to efficiently monitor, control, and conserve water resources. It encompasses a wide range of solutions, including IoT sensors, real-time data analysis, and automation to optimize water distribution, detect leaks, and promote sustainable water usage. The abstract for a smart water management paper or project would summarize these concepts and highlight the significance of adopting such strategies to address water scarcity and ensure long-term environmental sustainability.




CURRENT SYSTEM PROBLEM :

- In rural areas we have seen that due to improper water utilization and due to erosion and cutting of canals, farmers suffer from irrigation problem and also when they go for the government offices then they have to wait for months for resolving the problem and hence it takes time, travel fatigue and also loss of money due improper convenience. And still there are many problems of water management related to irrigation. We have also seen that on many public places mostly on railway stations there are wastage of water unusually like flowing of water form a pipeline that spends water in much amount and the railway official don't resolve the problem at the time so the precious water flows unusually.

BLOCK DIAGRAM




STAGE OF WATER TREATMENT

Aeration: Oxygen is added in to the water by propelling the water into the air.

Coagulation: Coagulation is a process where chemicals are added such as alum which produces positive charges to neutralize the negative charges on the particles.
Flocculation: flocculation refers to the process by which fine particulates are caused to clump together into a flock

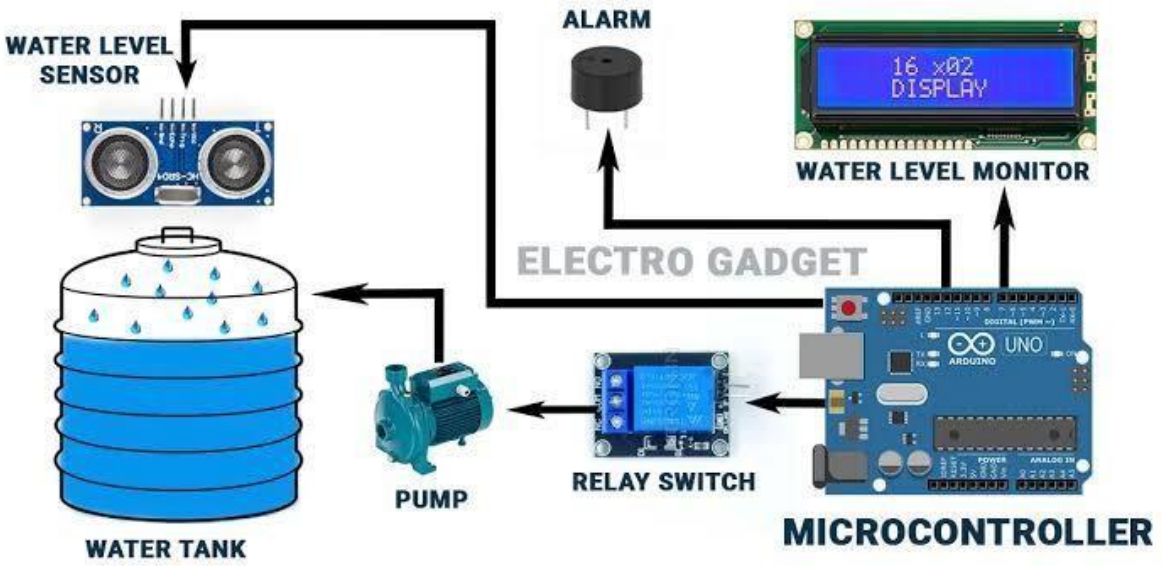
Process

Water discharged from homes, businesses, and industry enters sanitary sewers Water from rainwater on streets enters storm water sewers

Combined sewers carry both sanitary wastes and storm water

Water moves toward the wastewater plant primarily by gravity flow

>Lift stations pump water from low lying areas over hills




END USER BENEFITS :

In urban areas there are many problems related to water tank, gutters, and supply of electricity and related to the wastes and other municipal problems so that will also send to the city municipal corporation. Also we have seen that there are many problems related to unusual wastage of water and other at many public places so that can be also resolved using this application because through this application the end user can share, complain and send suggestions to the corresponding officer.

Conclusion

water is one of the most important source on earth

It is known as universal solvent

We must not waste the water

The waste water that we obtain from our daily purposes and from industries must be treated in treatment systems in order to reduce pollution.

our govt must provide facilities and infrastructure to avoid water pollution and manage waste water.