

APPROACH DETAILS :

Ministry Category : Andhra Pradesh Innovation Society, ITE&C Department

Problem Statment : Build an online system for monitoring water quality, leaks, contamination, and managing pipeline network.

Problem Code : VS17

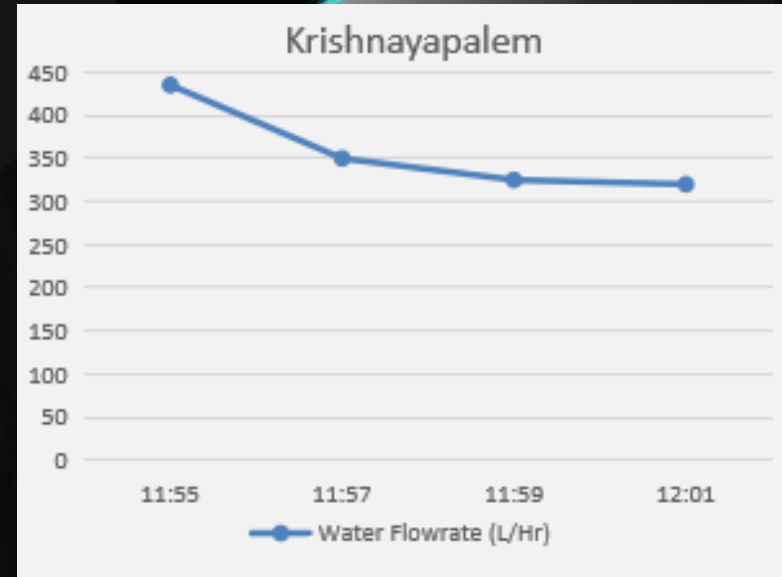
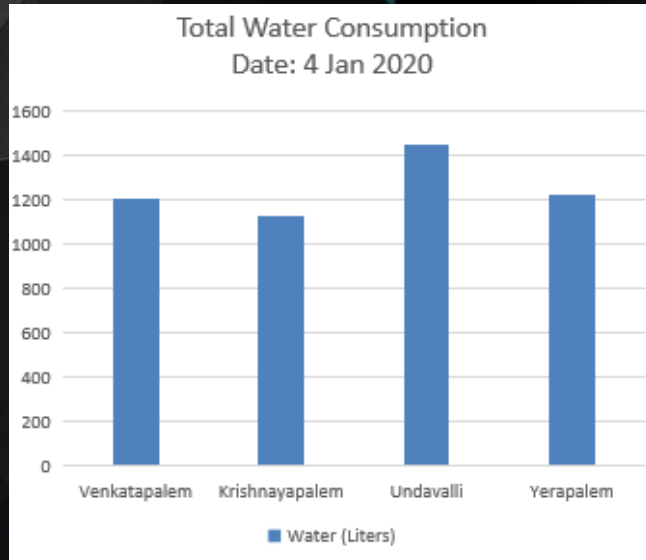
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College Code : 1-3517156853

IDEA :

The idea is to design a hardware and software system for monitoring water quality, water usage and water leaks. This system will use machine learning algorithms to predict methods of optimum water usage. In case of leaks, an alert will be generated to the concerned authority about the location of the leak.

PROTOTYPE :



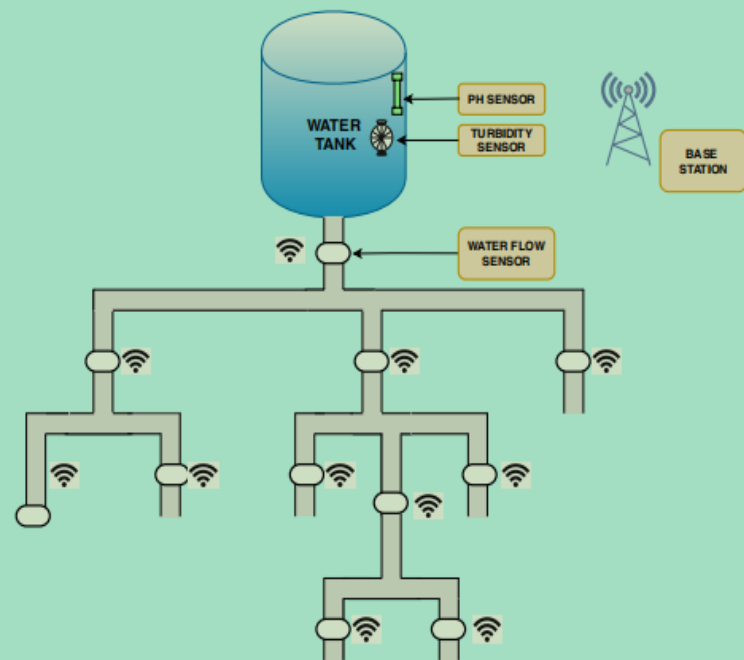
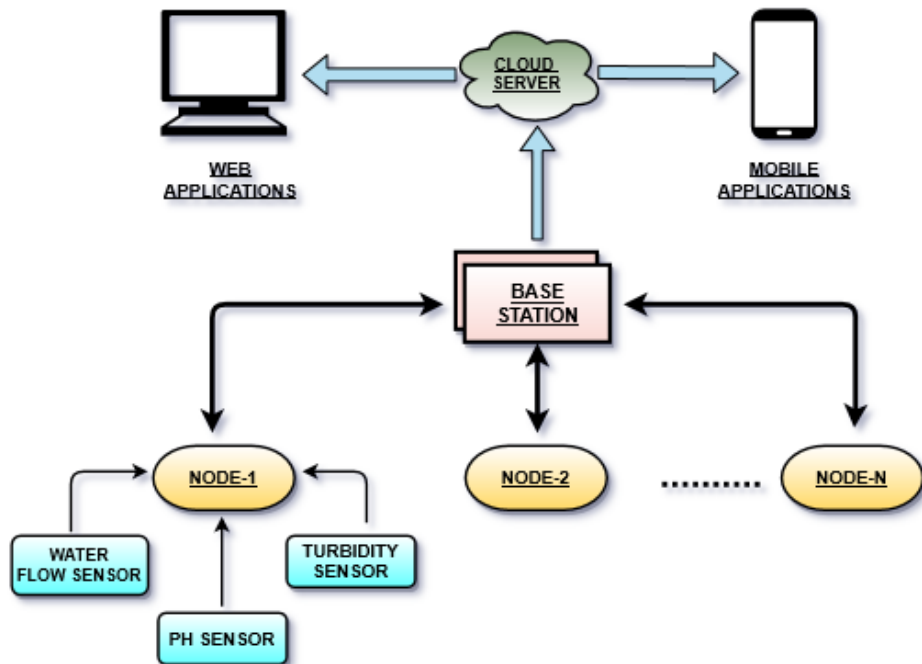
PROTOTYPE :

id	ph	turbidity	date	time
1	7.78	2680.29	2020-01-21	15:36:08
2	7.78	2680.29	2020-01-21	15:36:09
3	7.77	2680.29	2020-01-21	15:36:10
4	7.78	2680.29	2020-01-21	15:36:14
5	7.79	2680.29	2020-01-21	15:36:22
6	7.79	2680.29	2020-01-21	15:36:29
7	7.79	2680.29	2020-01-21	15:36:37
8	7.79	2680.29	2020-01-21	15:36:44
9	7.79	2680.29	2020-01-21	15:36:48
10	7.79	2680.29	2020-01-21	15:36:51
11	7.79	2680.29	2020-01-21	15:36:52

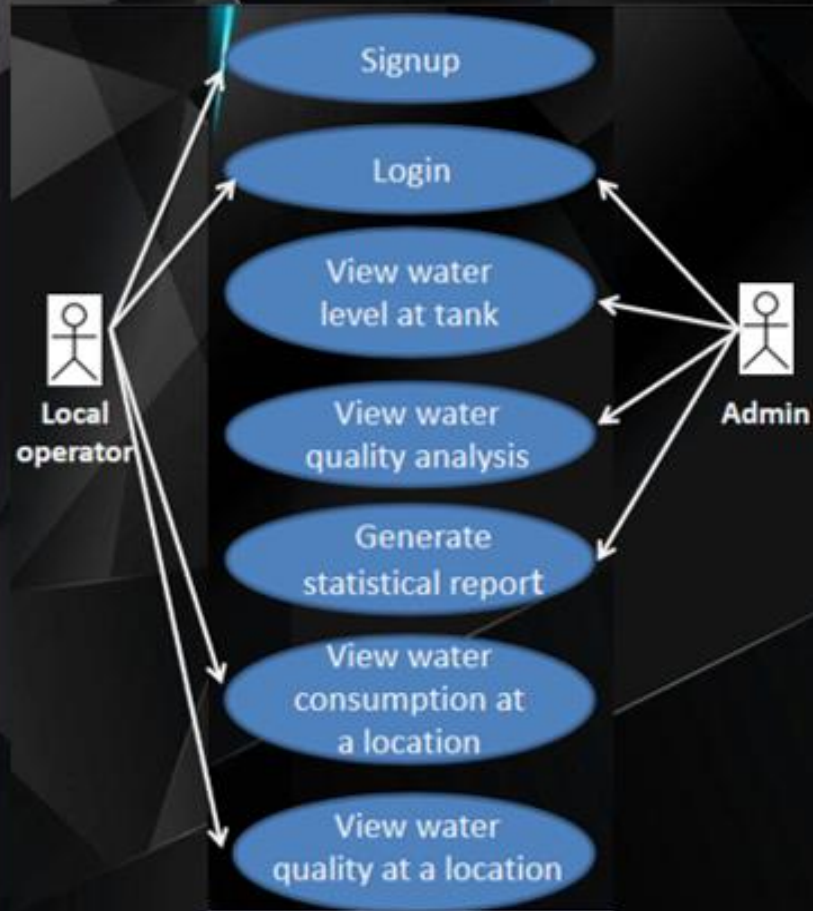
id	node	waterflow	totalwater	time	date
1	Node_2	144	10.69	15:36:07	2020-01-21
2	Node_3	16	1.61	15:36:07	2020-01-21
3	Node_4	112	8.22	15:36:08	2020-01-21
4	Node_3	16	1.62	15:36:09	2020-01-21
5	Node_4	112	8.25	15:36:10	2020-01-21
6	Node_3	16	1.62	15:36:11	2020-01-21
7	Node_4	112	8.28	15:36:11	2020-01-21
8	Node_2	144	10.81	15:36:12	2020-01-21
9	Node_3	16	1.63	15:36:12	2020-01-21
10	Node_4	112	8.31	15:36:13	2020-01-21

TECHNOLOGY STACK :

- Wireless Network.
- Embedded System
- Django.
- Javascript, JQuery and Ajax.
- SQLite.
- Python3.
- Android Studio.



USE CASE :



DEPENDENCIES :

