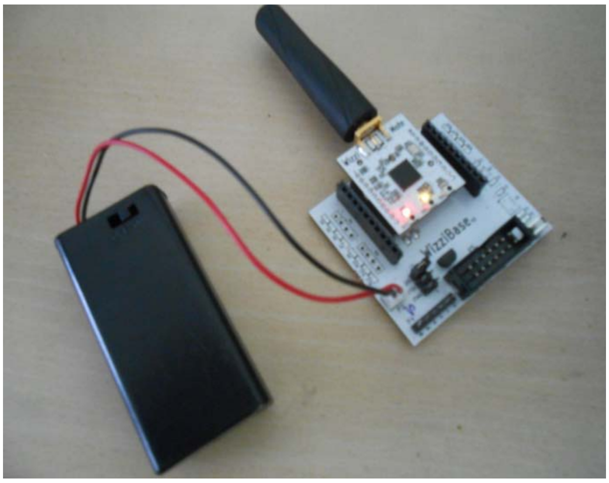

Figure 13: Emergency Node when tank is empty

6. Conclusion and Future Scope

6.1 Conclusion

The project Water Utilization Monitoring and Supplementary Sourcing Strategy using DASH7 technology has been successfully designed and implemented. Here the main objective is to design a wireless sensor network called DASH7 which is the latest technology with many advantages compared to the other wireless technologies. However the project is useful in conserving the water which is the most essential need of living beings. The project is done by using a low power MSP430 microcontroller and an ultrasonic sensor. The ultrasonic sensor indicates the level of the water tank and sends data to the microcontroller to perform the necessary action when the tank is full/empty.

Thus the system designed provides an efficient way of improving water usage by monitoring water utilization and providing supplementary sourcing strategy in different phases remotely.

6.2 Future Scope

Water utilization monitoring and supplementary sourcing strategy system can be expanded to cities as Dash7 provides long range and many more advantages compared to the present wireless technologies so that we can conserve water to a large extent. Even GPS can be interfaced to the system so that the owner of the house gets the message immediately when the tank is full/empty. Water management system can be very much improved by this system.

We can also implement a lot more complex applications like water quality and quantity monitoring in a city by using this DASH7 technology.

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