**AUTOMATIC WATER LEVEL INDICATOR AND CONTROLLER** - by Anushi Chauhan

Table of Content

1. Abstract
2. Requirements
   1. High Level Requirement
   2. Low Level Requirement
3. Block Diagram
4. Components
5. Applications
6. Abstract

The amount of drinking water available is limited and the water crisis in many regions is reaching alarming proportions. Hence, it is important to preserve water. A lot of water getting wasted is witnessed in households due to overflow in tanks.

Automatic Water Level Controller can provide a solution to this problem by indicating the water level in the tank and controlling the functioning of pump according to it. The level of water will work as signals to ON and OFF the switch of pump. When the water level rises up a certain level the sensors will sense and send the signal to turn OFF the pump.

1. Requirements
   1. High Level Requirements

|  |  |
| --- | --- |
| ID | High Level Requirement |
| HLR1 | Ultrasonic sensor should sense the water level in tank |
| HLR2 | LED should glow RED/GREEN indicating actions |
| HLR3 | Servo motor should be ON/OFF at desired level |
| HLR4 | Voltmeter should give accurate voltage rating |

* 1. Low Level Requirements

|  |  |  |
| --- | --- | --- |
| ID | Low Level Requirement | HLR ID |
| LLR1 | LED should glow RED when sensor detects water above desired level | HLR2 |
| LLR2 | LED should glow GREEN when sensor detects water below desired level | HLR2 |
| LLR3 | Servo motor should be ON when signal is GREEN | HLR3 |
| LLR4 | Servo motor should be OFF when signal is RED | HLR3 |
| LLR5 | Potentiometer should regulate the voltage properly | HLR4 |

1. Block Diagram

1. Components