## WATER-LEVEL METRE using wifi shield.

The arduino wifi shield connects your Arduino to the internet wirelessly. Connect it to the wireless network by following a few simple instructions

To start controlling our home world through internet. The wifi shield communicates with the arduino using the SPI bus, so is compatible with any of board that have this type of bus.

## **Components used:**

Arduino micro & Genuino Micro

Espressi ESP8266 ESP-01

Wifi shield

Ultrasonic sensor-HC-SR04(Generic)

Arduino IDE

## Idea:

The idea is to make a sensor which can sense the water level of tanks where the motor pumps are used. There is no specific method to check the level of the water. The project under discussion has the capability to check the water level and also send the data over WiFi.

This product can be very helpful for home purpose and can be easily Controlled with wifi on android or ios phones. This product can reduce Human effort in homes for controlling or checking the level of under-Ground water in tanks.

To check the water level, ultrasonic HC-SR04 is the distance sensor. The waves are transmitted and received by the module and calculate the next obstacle.

For transmission over WiFi, ESP8266-01 is used. It is configured by the AT Commands. The ESP connect with the Access point and becomes Web Server. When the specified IP of the ESP module browsed, HTML page which specify the water level.

## **Circuit model:**

