

BLUETOOTH BASED AGRICULTURE MONITORING SYSTEM

AIM:

Design and Development of Bluetooth based agriculture monitoring system.

PURPOSE:

In India more number of people depends on agriculture. Now a day's agriculture is complete manual process and spends all the time in fields. It consumes more man power. Monitoring of agriculture from remote place gives added advantage to farmers. So here we propose system like Bluetooth based agriculture monitoring system.

DESCRIPTION:

This project includes Bluetooth (HC-05) module, which is connected to Arduino through UART interface. DHT11 connected to Arduino digital pins to read Atmospheric temperature and humidity. Water level sensor connected to Arduino digital pins. Soil moisture sensor connected to Arduino digital pins.

WORKING:

Here DTH11, Water level sensor and Soil moisture sensors used. Here water level sensor placed in water well which feeds water into farm. DHT11 can read temperature and moisture of farm. Soil moisture sensor placed in farm to find water presence. All these values displaying on Android mobile Application Also in 16x2 LCD display. We can monitor all these parameters in mobile Application.

TECHNICAL SPECIFICATIONS:

HARDWARE:

Microcontroller	:	Arduino Uno
Crystal	:	16 MHz
LCD	:	16X2 LCD
Bluetooth	:	HC-05
Temperature Sensor	:	DHT11
Humidity Sensor	:	DHT11
Water Level Sensor	:	Leaded Type
Soil Moisture Sensor	:	Leaded Type w
Power Source	:	12v 2 amp Adaptor

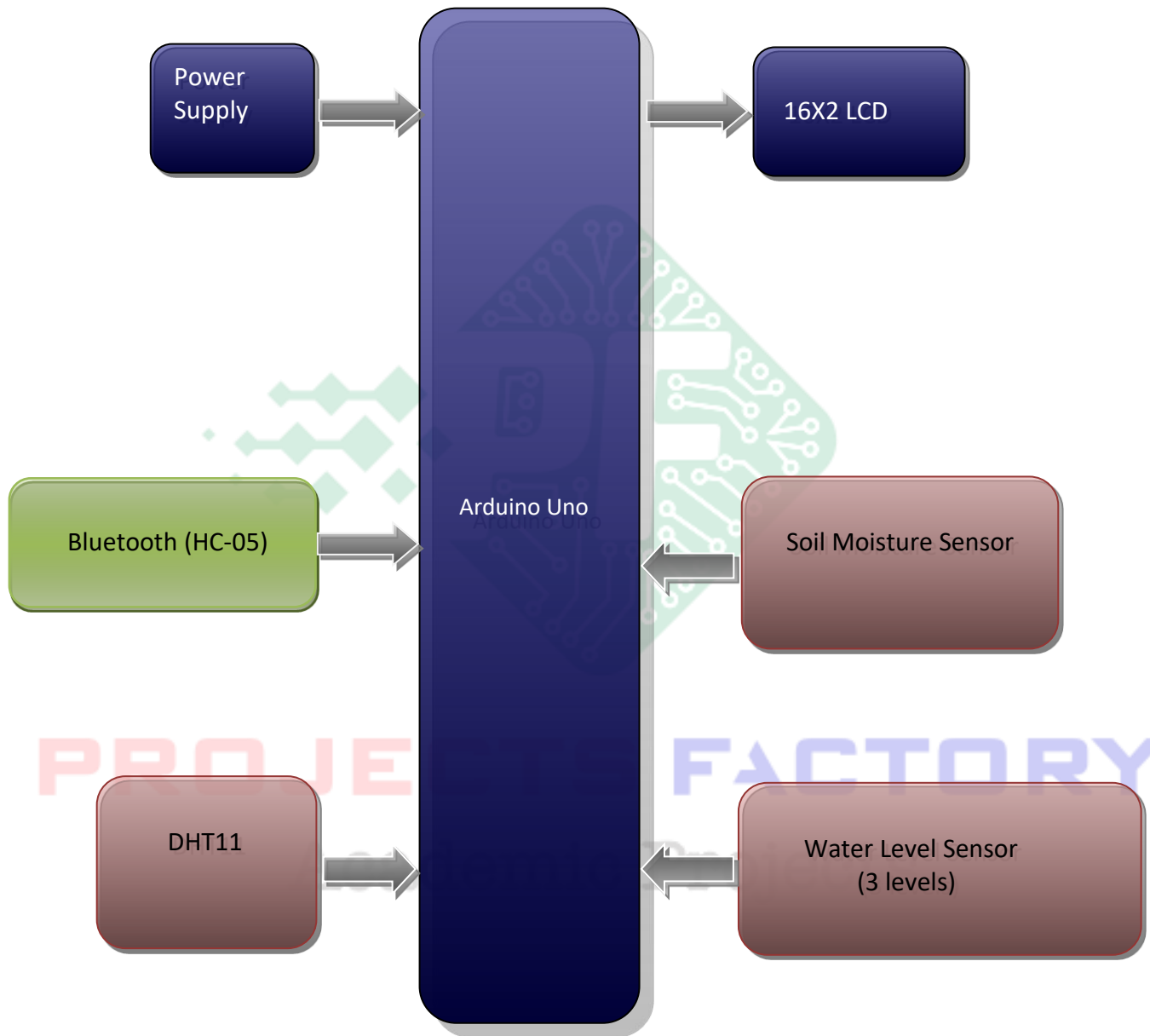
SOFTWARE:

Arduino IDE
Proteus based circuit diagram

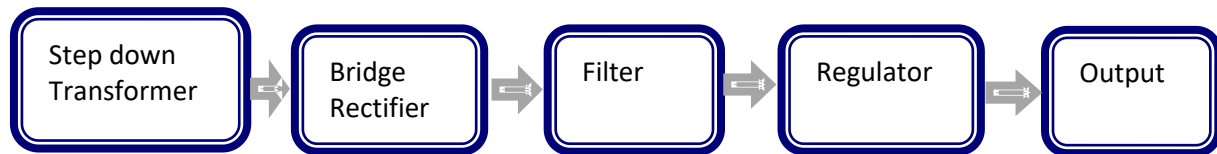
APPLICATIONS:

- Agriculture sector
- Hydroponics

BLOCK DIAGRAM:



POWER SUPPLY BLOCKDIAGRAM:



INTERFACES COVERED:

- We have covered Bluetooth (HC-05) module interfacing
- DHT11 sensor, Water Level and Soil Moisture interfacing.

PROJECTS FACTORY
Academic Projects