

SMART CROP PROTECTION SYSTEM FROM ANIMALS USING GSM

AIM:

Design and development of Smart Crop Protection System From Animals using GSM with Arduino.

PURPOSE:

Agri sector is very important and it is always far away from modern technology. Especially animals like elephants, goats, buffaloes are destroying crops in some seasons. But there is no cost effective solution to protect crops. Here we have solution like smart protection system from animals using GSM with Arduino.

DESCRIPTION:

This project includes GSM (Sim800c) module, which is connected to Arduino through UART interface. Ultrasonic sensor (HCSR-04) connected to Arduino digital pins.

WORKING:

Ultrasonic sensor installed at border edge of farm. When Ultrasonic sensor sense any objects (any kind of animals), Arduino sends notification to mobile through GSM module. Buzzer sound will come when ultrasonic sense animals or intruder.

TECHNICAL SPECIFICATIONS:

HARDWARE:

Microcontroller	:	Arduino Uno
Crystal	:	16 MHz
LCD	:	16X2 LCD
GSM	:	SIM800C
Sensor	:	Ultrasonic HCSR04
Buzzer	:	5vDC
Power Source	:	12v 2 amp Adaptor

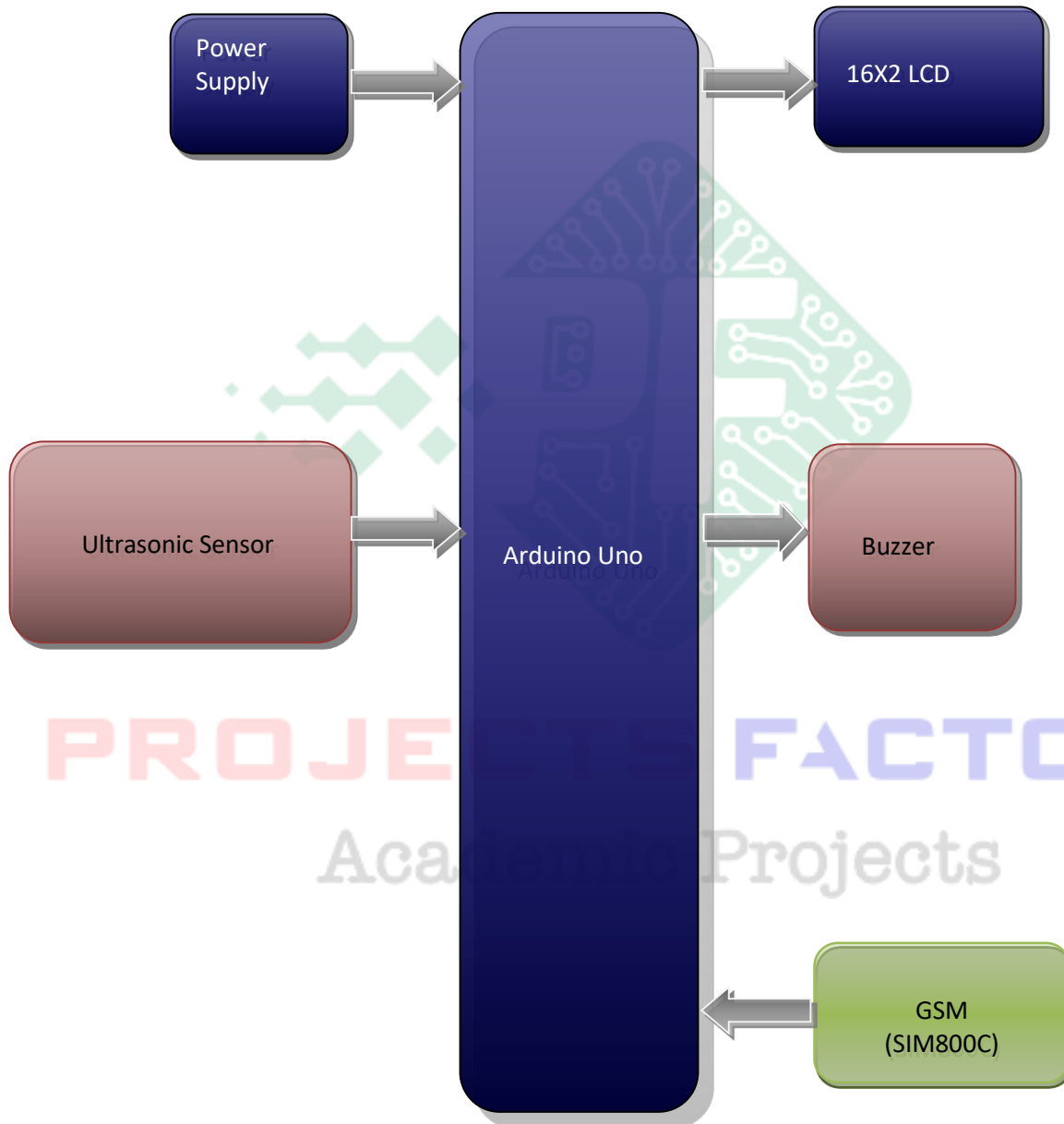
SOFTWARE:

Arduino IDE
Proteus based circuit diagram

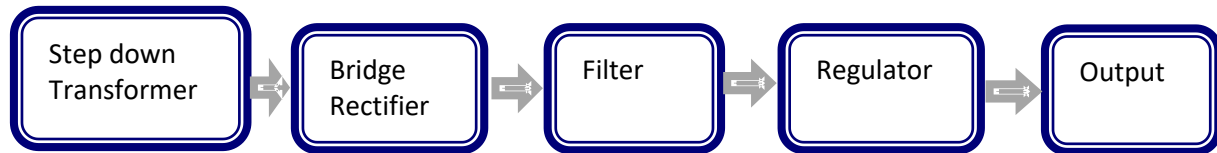
APPLICATIONS:

- Agri sector
- Crop Monitoring

BLOCK DIAGRAM:



POWER SUPPLY BLOCKDIAGRAM:



INTERFACES COVERED:

- We have covered GSM (SIM800C) module interfacing
- PIR Sensor interface

PROJECTS FACTORY
Academic Projects