

DTMF BASED INDUSTRIAL LOAD CONTROL

AIM:

Design and Development of DTMF based Industrial load control.

PURPOSE:

There are so many ways to control industrial loads. But DTMF is inexpensive and high reliable. DTMF nothing but dual tone multi frequency which is generated from mobile dial tones. Here mobile phone converts itself into wireless remote. Here project title is DTMF based industrial load control.

DESCRIPTION:

This project includes DTMF module (CM8870), which is connected to Arduino digital pins. DC Motor, AC bulb and DC LED strip controlled by relays which are connected to Arduino digital pins.

WORKING:

Here we control industrial loads using mobile phone through DTMF technology. DTMF have provision with audio jack. Mobile phone connected to DTMF audio jack. Any key pressed in dial pad then it converts into DTMF tone. DTMF tones converts into 4 bit number format. By pressing keys in dial pad loads will be ON and OFF. AC bulb, LED strip and DC motor controlled by dial pad numbers. Loads status will display on 16X2 LCD display.

TECHNICAL SPECIFICATIONS:

HARDWARE:

Microcontroller	:	Arduino Uno
Crystal	:	16 MHz
LCD	:	16X2 LCD
DTMF Module	:	CM8870
Relay	:	12v DC Coil type
Bulb	:	AC 230V
DC Motor	:	12V/5V DC
LED Strip	:	12V/5V DC
Power Source	:	12v 2 amp Adaptor

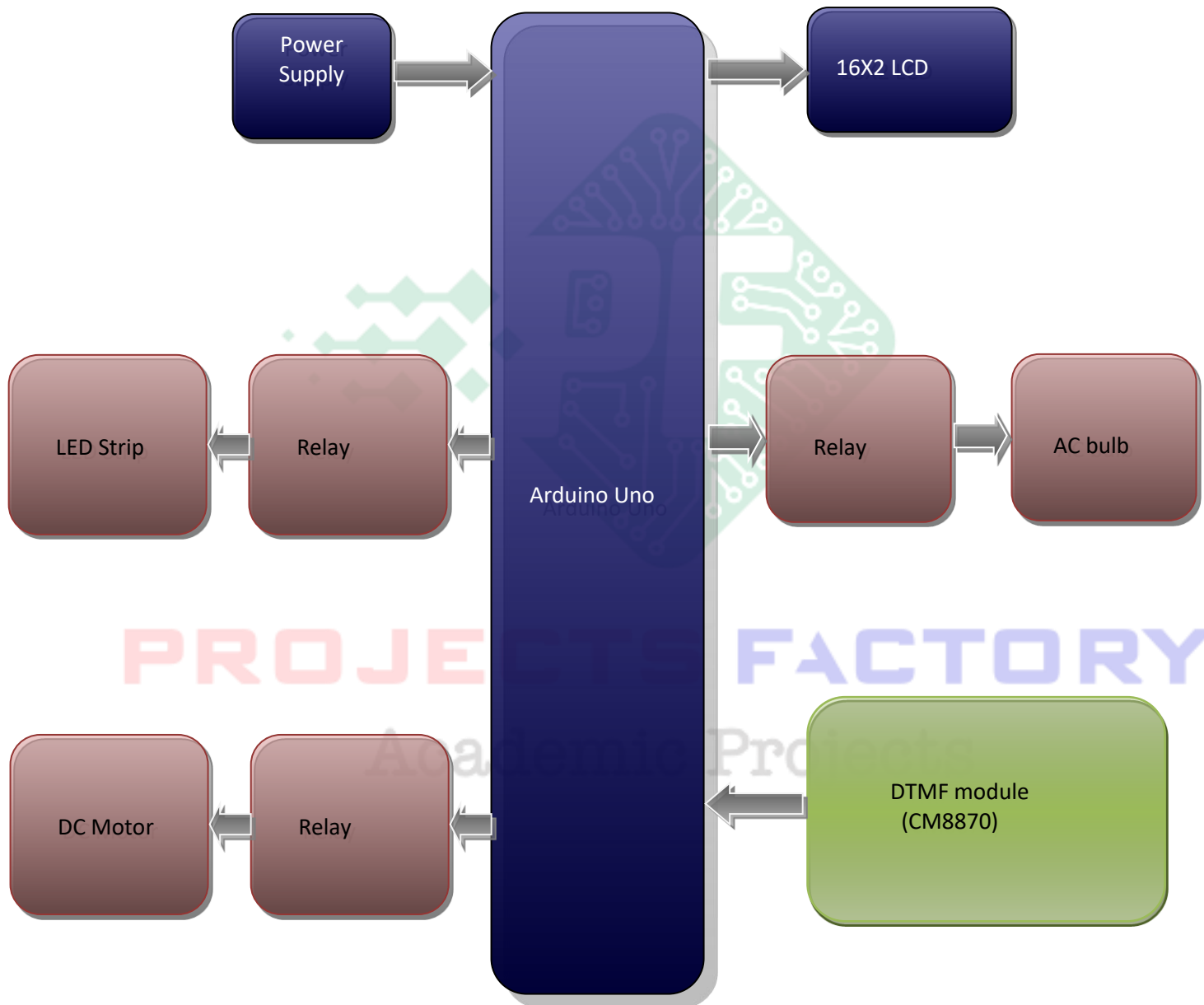
SOFTWARE:

Arduino IDE
Proteus based circuit diagram

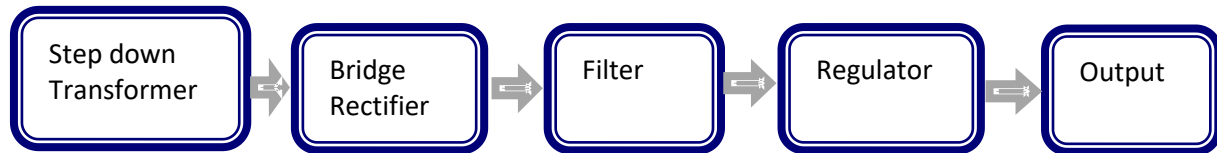
APPLICATIONS:

- Home Applications
- Industrial Applications

BLOCK DIAGRAM:



POWER SUPPLY BLOCKDIAGRAM:



INTERFACES COVERED:

- We have covered DTMF module (CM8870) interfacing
- AC bulb, DC Motor and LED strip interface

PROJECTS FACTORY
Academic Projects