BLUETOOTH CONTROL HOME AND INDUSTRIAL APPLIANCES

AIM:

Design and development of Bluetooth control home and industrial appliances.

PURPOSE:

In homes and industries, there will be various loads to be operated and these loads are to be operated at some specific intervals according to our requirements and also based on the device constraints. For this manual intervention is needed always. Appliances control by remote or smart phone is very easy. Now days everybody has smart phones which can support any kind of applications. Here we propose Bluetooth control home and industrial appliances. This project can be developed by Bluetooth and mobile application.

DESCRIPTION:

This project includes Bluetooth (HC-05) module, which is connected to Arduino through UART interface. Three loads connected to Arduino digital pins which are light, Motor and fan respectively through relays.

WORKING:

User can control loads from Bluetooth App. Here We have customized app in our mobile. It has buttons on screen. By pressing keys we can control light, fan, and motor respectively. All these loads status displayed on 16X2 LCD. Here we used own customized app and we can keep our college name on top of app screen.

TECHNICAL SPECIFICATIONS:

HARDWARE:

Microcontroller	:	Arduino Uno
Crystal	:	16 MHz
LCD	:	16X2 LCD
Bluetooth	:	HC-05
Light	:	AC 230V
Fan	:	DC 12V
Motor	:	DC Gear Motor
Relay	:	12v DC Coil type
Power Source	:	12v 2 amp Adaptor

SOFTWARE:

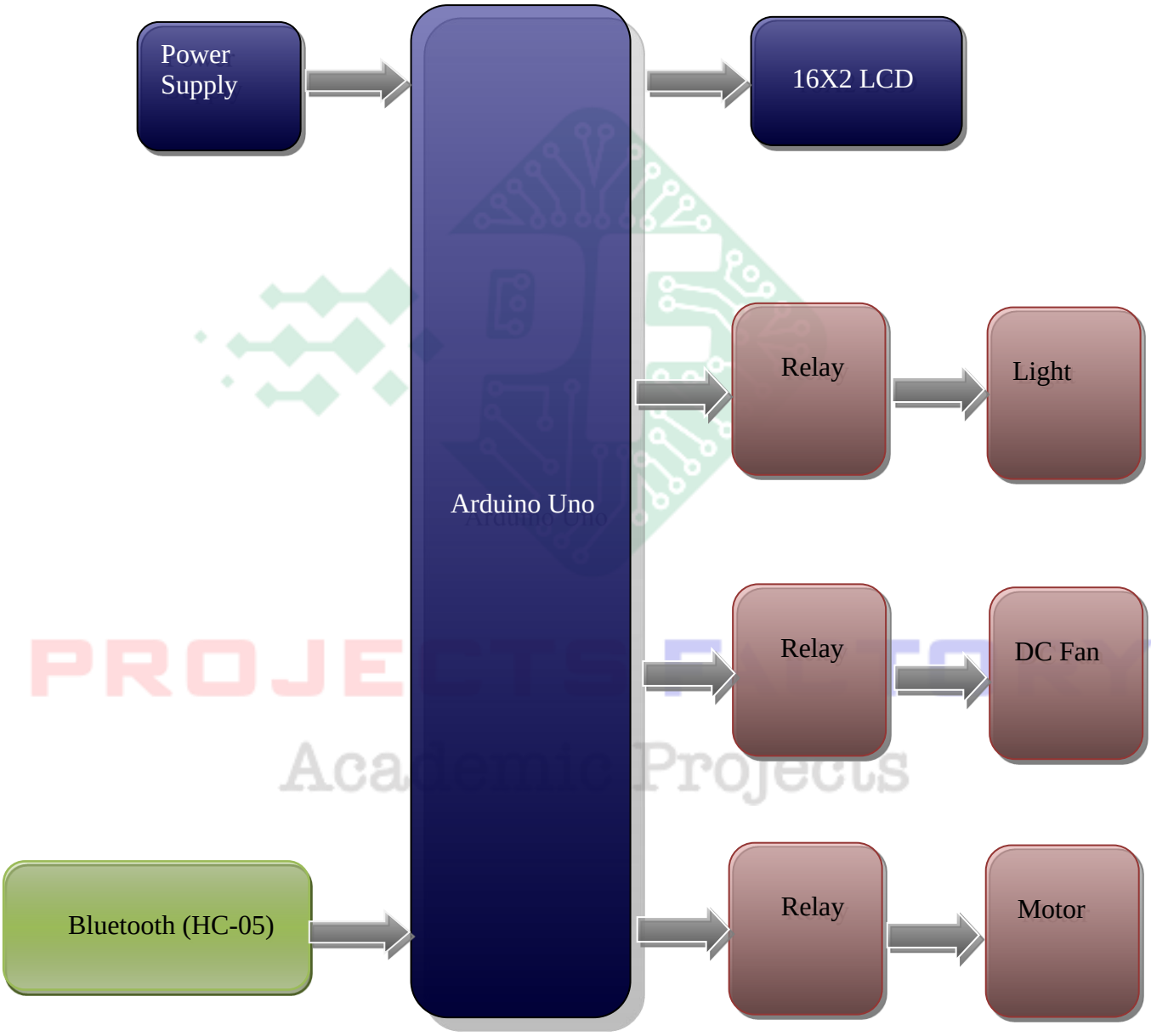
Arduino IDE

Proteus based circuit diagram

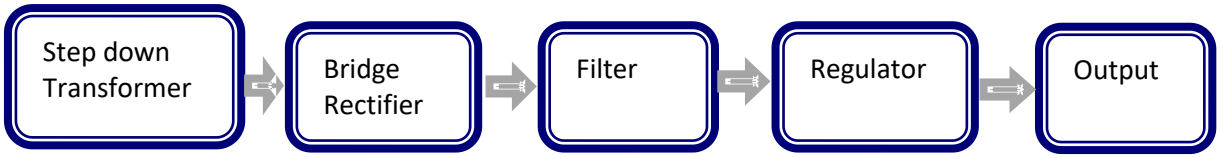
APPLICATIONS:

- Home Appliances
- Industrial Applications

BLOCK DIAGRAM:



POWER SUPPLY BLOCKDIAGRAM:



INTERFACES COVERD:

- We have covered Bluetooth (HC-05) module interfacing
- 12V DC Relays with loads like Light, Fan and Motor