GSM BASED ATM SECURITY SYSTEM

AIM:

Design and Development of GSM based ATM security System.

PURPOSE:

Now a days ATM theft happening around world. Present ATMs are static and they don't have any extra smart features regarding security system. ATM theft happens by doing ATM panel breaking and ATM lifting. We have to read these two parameters. Here we propose solution like GSM based ATM security system.

DESCRIPTION:

This project includes GSM (Sim800C) module, which is connected to Arduino through UART. MIC sensor connected to Arduino digital pin. MEMS sensor connected to Arduino analog pin. Siren controlled by relay which is connected to Arduino digital pin.

WORKING:

Here MIC sensor reads ATM panel breaking sounds. If any abnormal sounds happen around ATM MIC sensor activates and gives signal to Arduino. MEMS sensor attached to ATM system. If anyone trying to move ATM from one place to another place then MEMS sensor activates. If anyone sensor activates then SMS will send to police station (here registered mobile number). Sensors status displayed on 16X2 LCD. Sire will be ON to alert security guards about ATM theft.

TECHNICAL SPECIFICATIONS

HARDWARE:

Microcontroller	:	Arduino Uno
Crystal	:	16 MHz
LCD	:	16X2 LCD
GSM	:	SIM800C
MEMS	:	ADXL335
Sound Sensor	:	Condenser MIC
Relay	:	12V DC Electromagnetic
Power Source	:	12v 2 amp Adaptor

SOFTWARE:

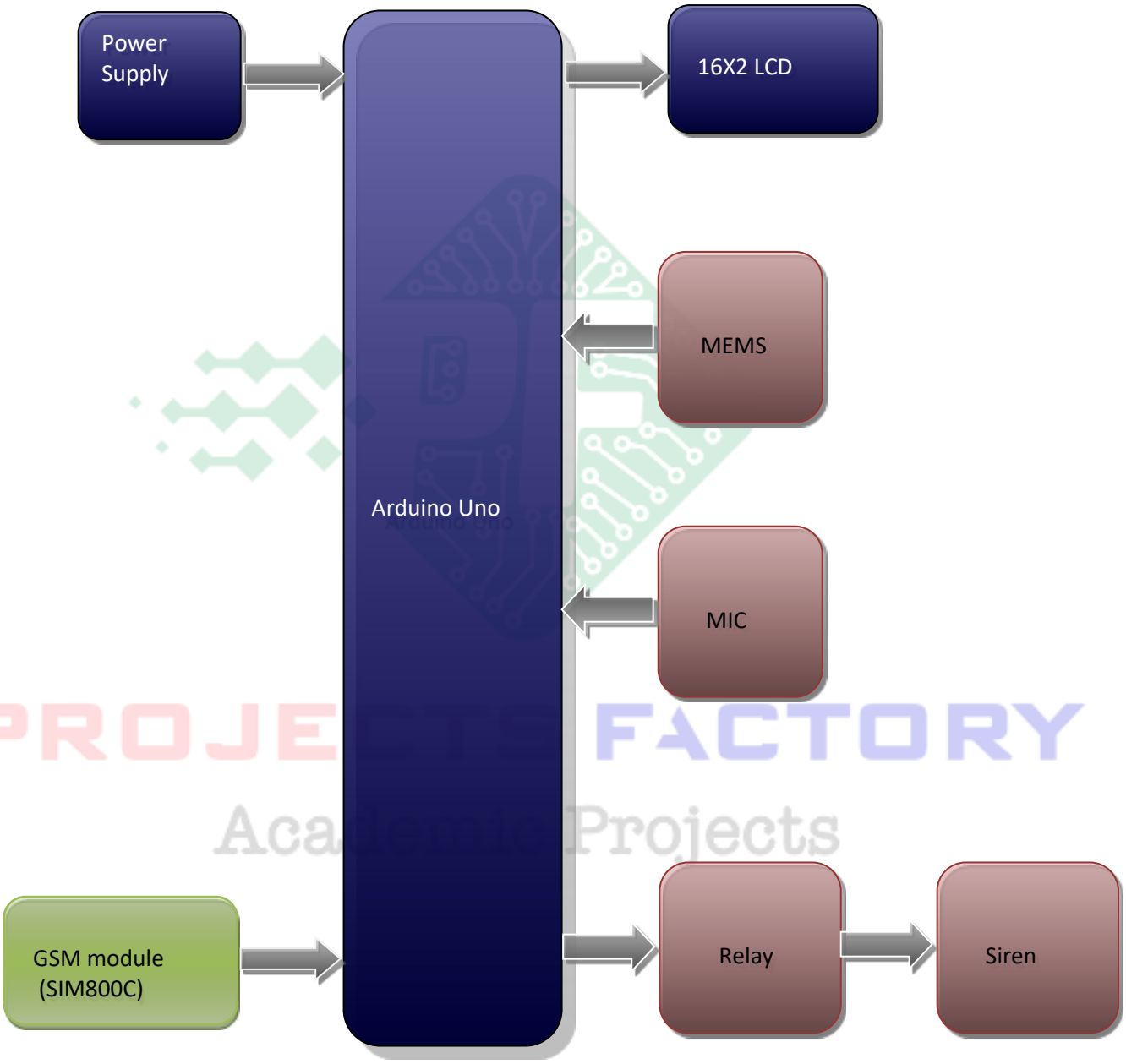
Arduino IDE

Proteus based circuit diagram

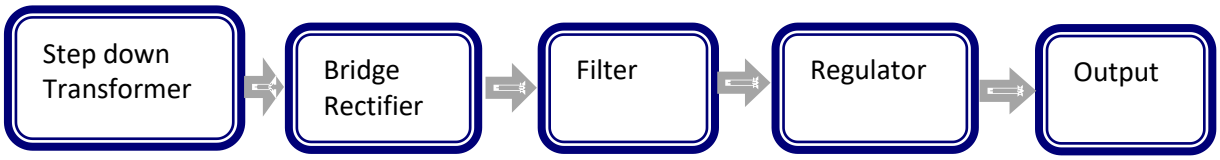
APPLICATIONS:

- ATM Security
- Bank Security
- Asset Security

BLOCK DIAGRAM:



POWER SUPPLY BLOCKDIAGRAM:



INTERFACES COVERD:

- We have covered GSM (SIM800C) module interfacing
- Sensors like MEMS and Condenser MIC