

PASSWORD BASED DOOR LOCKING SYSTEM

AIM:

Design and Development of Password based door locking system.

PURPOSE:

Security is primary concern in everywhere. Here we want to develop password based door locking system using Arduino. Here user has to give password on matrix keypad, if password is correct then lock will open and close. Here there are two passwords, one is for open and second one is for close.

DESCRIPTION:

This project includes 4X4 Keypad connected to Arduino digital pins. L293d connected to Arduino digital pins.

WORKING:

Here 4X4 matrix keypad works based on rows and columns switching. 4 rows and 4 columns aligned in matrix way and it has 16 keys. If any button pressed then corresponding row and column activated. Based on row and column value will fetch from look up table. Here there are two passwords. For open and close two passwords works accordingly. If password is wrong then buzzer will ON. All passwords status will display on 16X2 LCD display.

TECHNICAL SPECIFICATIONS:

HARDWARE:

Microcontroller	:	Arduino Uno
LCD	:	16X2 LCD Display
Crystal	:	16 MHz
Keypad	:	4X4 Matrix Keypad
H-Bridge IC	:	L293D
DC motor	:	12V/5V DC
Buzzer	:	5V DC
Power Source	:	12v 2 amp Adaptor

SOFTWARE:

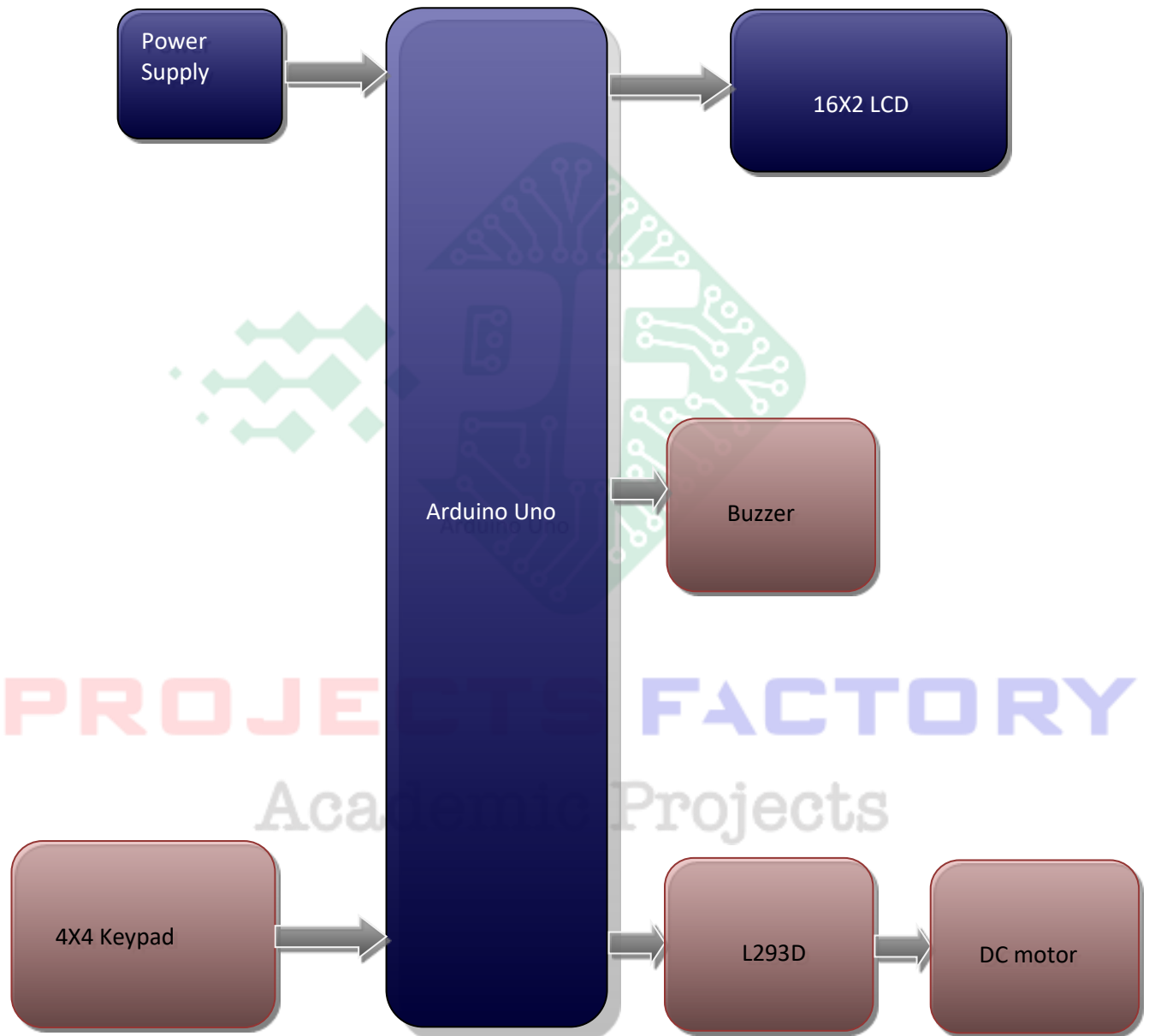
Arduino IDE
Proteus based circuit diagram

APPLICATIONS:

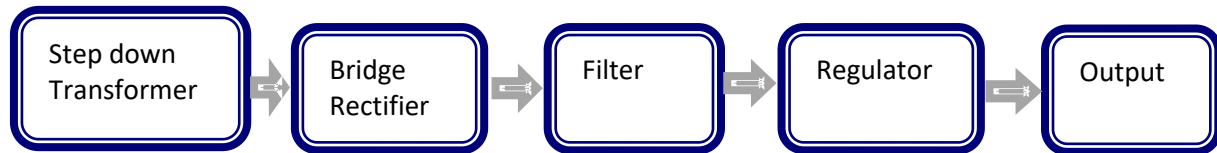
- Door Locking Applications
- Security Systems

PROJECTS FACTORY
Academic Projects

BLOCK DIAGRAM:



POWER SUPPLY BLOCKDIAGRAM:



INTERFACES COVERED:

- We have interface 4X4 Matrix Keypad interface
- L293d and Sliding DC motor interface

PROJECTS FACTORY
Academic Projects