

## **AADHAR BASED FINGERPRINT ELECTRONIC VOTING SYSTEM**

### **AIM:**

Design and Development of Aadhar based finger print electronic voting system.

### **PURPOSE:**

Normal voting system done by electronic machines or ballot papers. These are not secure and manual presence need to avoid rigging. For secure voting process we need any smart voting systems. Here we want to add biometric to voting system along with aadhar card number, this gives high level security for voting process. Here project title is aadhar based fingerprint electronic voting system.

### **DESCRIPTION:**

This project includes Finger print module (R307-biometric), which is connected to Arduino through UART interface. 4X4 Keypad and buzzer connected to Arduino digital pins.

### **WORKING:**

In this project voting process happen through aadhar card number and fingerprint. Initially enrollment need to do for storing fingerprints in module. Aadhar card number need to enter to keypad and it will ask for fingerprint. If aadhar card number and fingerprint matches then it allows us to do vote. If aadhar card number and fingerprint not matched then buzzer will notify. All this information will display on 16X2 LCD display.

## TECHNICAL SPECIFICATIONS:

### HARDWARE:

Microcontroller	:	Arduino Uno
Crystal	:	16 MHz
LCD	:	16X2 LCD
Finger Print Module	:	Bio-metric Module (R307)
4X4 keypad	:	Matrix Type
Buzzer	:	5vDC
Power Source	:	12v 2 amp Adaptor

### SOFTWARE:

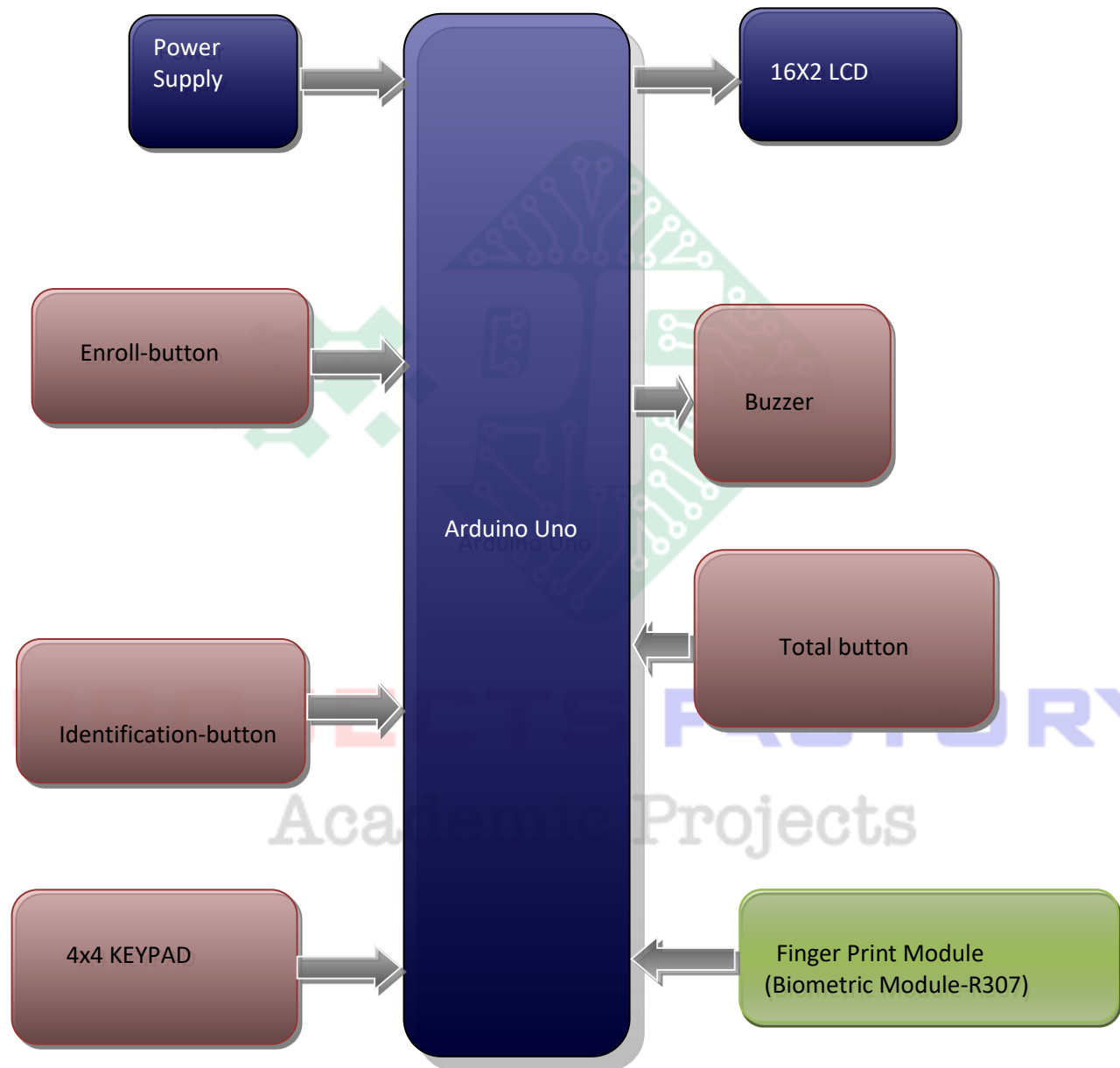
Arduino IDE  
Proteus based circuit diagram

### APPLICATIONS:

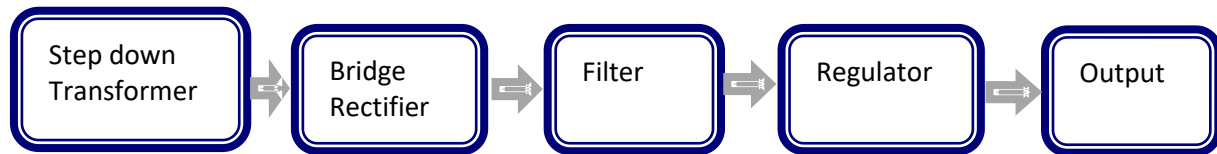
- Voting Applications

**PROJECTS FACTORY**  
Academic Projects

## BLOCK DIAGRAM:



## POWER SUPPLY BLOCKDIAGRAM:



## INTERFACES COVERED:

- We have covered finger print module (R307-Biometric Module) interfacing
- 4x4 keypad interface



**PROJECTS FACTORY**  
Academic Projects