

FINGERPRINT VOTING SYSTEM

Fingerprint Voting System is implemented with the Arduino technology. In this System a voter can poll his vote easily. In this database server all voters' information is stored to register in this system, the voter should fill a registration form with the help of a user id and password. This information will be checked by the database server. Because all the information about the voter would be already there so if anything is wrong, the system will not allow the voter to poll his or her vote. This system is helpful to the voter's as it decreases the time of voting process also. It is a more secured way of voting as it stops fake voting.

REQUIRED COPONENTS:-

1. Arduino Uno
2. Finger Print Sensor Module
3. Push Buttons
4. LEDs - 2
5. 1K Resistor - 3
6. 2.2K Resistor
7. Power
8. Connecting wires
9. Buzzer
10. 16x2 LCD
11. Bread Board

DESCRIPTION OF COMPONENTS USED :-

FINGERPRINT SENSOR MODULE is a module which captures finger's print image and then converts it into the equivalent templates and saves them into its memory on selection ID(location) by Arduino. Here all the process is commanded by Arduino like taking an image of finger print, convert it into templates and storing location etc. It contains four terminals GND(ground), TD(Data output), RD(Data input) and VCC(+5v).

It works on DC power 3.6V-6.0V and 100mA to 150mA. Its storage capacity depends on its model like R30X series has storage capacity of 256 etc. Fingerprint processing has two parts:

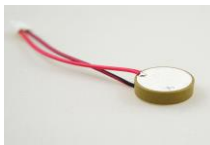
fingerprint enrollment and fingerprint matching. Fingerprint enrollment enrolls the fingerprint a ID and fingerprint matching confirms the enrolled print to ID



ARDUINO UNO is a microcontroller board based on the ATmega328. It has 20 digital input/output pins(of which 6 can be used as PWM(pulse with modulation) and 6 can be used as analog inputs),a 16 MHz resonator,a USB connection,a power jack,an in-circuit system programing header ,reset button,led connected to pin 13.



PIEZO SPEAKER/BUZZER-It is a type of speaker which uses analog signal to produce sound. In the arduinoIDE it uses tone() function.



LCD DISPLAY:-16x2 LCD is used for displaying the polled votes.



RESISTORS:-



CIRCUIT DIAGRAM

