HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY

DEVELOPMENT OF ELECTRONIC VOTING MACHINE WITH BIOMETRIC FINGERPRINT IDENTIFIER

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INTRODUCTION:

- **Electronic Voting** is the standard means of conducting elections using Electronic Voting Machines, sometimes called "**EVMs**" in India.
- Prior to the introduction of electronic voting, India used paper ballots and manual counting. The paper ballots method was widely criticised because of fraudulent voting and booth capturing
- In paper ballot System,there is possibilities of stuffing them with pre-filled fake ballots

ABSTRACT:

- Voting is one of the fundamental rights of every citizen of a democratic country. By utilizing the right of the voting, people elect their most suitable leader who will lead them.
- The usual system for voting in india is ballot paper-based voting system, where voting is sometimes unfair.
- In this proposed system we have used Arduino and fingerprint Scanner that can identify each voter, count votes and can prevent fake votes.

Literature review with related works:

AUTHORS	MICROCONTROLLER	FINGERPRINT SENSOR	AAHDAR DATABASE
B.Mary Havilah Haque,G.M.Owais Ahmed,D.Sukruthi	Arduino	Yes	Yes
Prof.R.L.Gaike,Vishnu P.Lokhande,Shubham T.Jadhav	ARM7	Yes	No
Ambavarapu Bhavana, M.Jasmine	ARM7	Yes	Yes
J.Josephine,A.Santhanapoo	PIC microcontroller	Yes	Yes

EXISTING SYSTEM:

- As soon as the last voter has voted, the Polling Officer in-charge of the Control Unit will press the 'Close' Button.
- Thereafter, the EVM will not accept any votes. Further, after the close of poll, the Balloting Unit is disconnected from the Control Unit and kept separately.
- Again the Presiding officer, at the close of the poll, will hand over to each polling agent present an account of votes recorded.
- At the time of counting of votes, the total will be tallied with this account and if there is any discrepancy, this will be pointed out by the Counting Agents.
- During the counting of votes, the results are displayed by pressing the 'Result' button.

DEMERITS:

- On or before election days transport system totally ceases and maximum surface transport vehicles are taken off the road for election purpose.
- Moreover official works in a majority of public sectors are suspended during election months. Officers and staffs from public sectors are appointed on election duties.
- On a particular election day, the election booths become heavily crowded. People have to stand in the scorching sunlight for hours just to cast “a vote”. Aged people and senior citizens have to face the same problems.

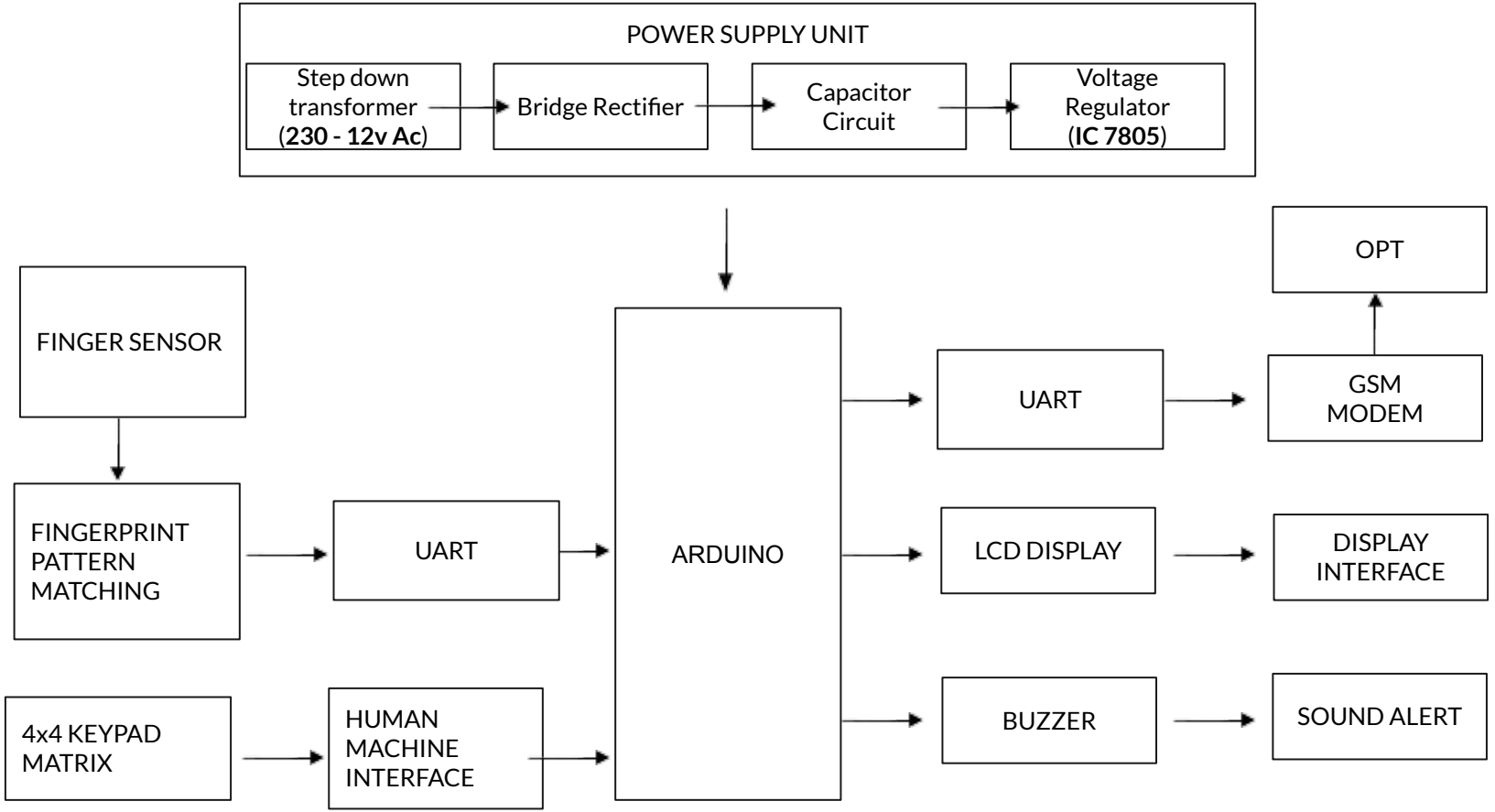
PROPOSED SYSTEM:

- Here we planned to interface biometric fingerprint sensor with Arduino microcontroller, also interface GSM.
- The fingerprint sensor help to detect the biometric fingerprint of each and every person.
- Once fingerprint sensor provide proper value to controller. Then the control will send the OTP (One Time Password) to registered mobile number.We need this OTP to proceed next.
- Once the OTP is enter properly, the system will provide opportunity to put Vote for any party.

PROPOSED SYSTEM Contd...

- Once a person register his vote, the system will not allow to next chance.
- Here the LCD display will help to display the details of voting stages.
- The keypad device will help to communicate to the system with human.
- Buzzer alert will get if any abnormal activities like second time vot attempt.

BLOCK DIAGRAM:



ADVANTAGES:

- The person can register vote properly .
- The system will not allow for multiple vote also unverified vote.
- Simple logic for register peoples vote.
- Voters can cast their votes in nearest polling booth.

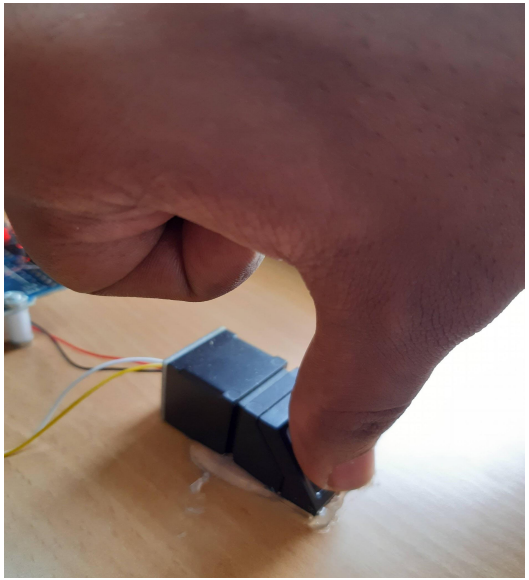
HARDWARE REQUIREMENTS:

- ARDUINO UNO
- Fingerprint sensor.
- GSM Modem
- UART Protocol
- Power supply unit
- 4X4 Keypad Matrix
- LCD display

SOFTWARE REQUIREMENTS:

- Embedded C
- Arduino IDE
- ISIS professional

SAMPLE OUTPUT:



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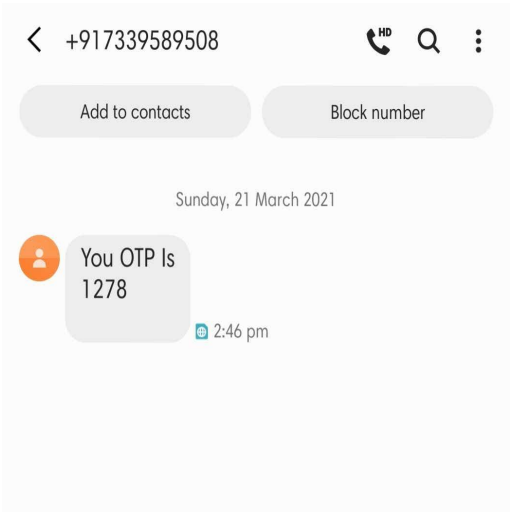

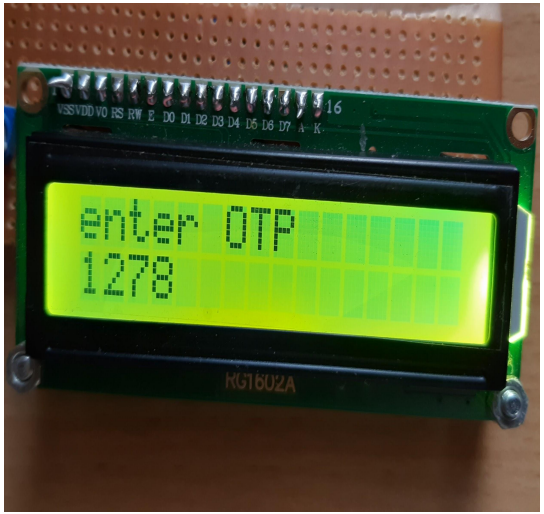

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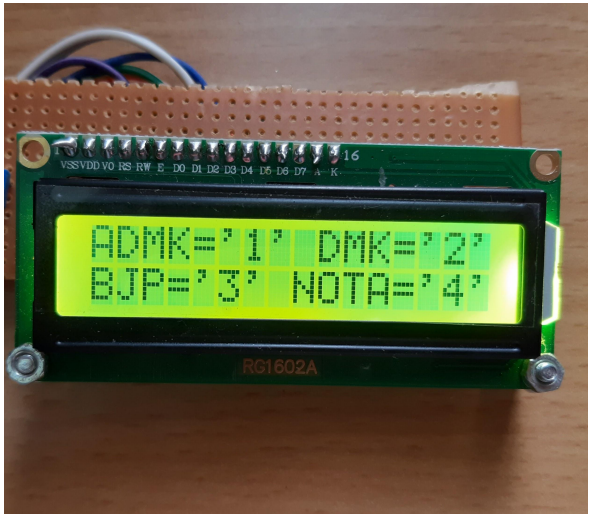

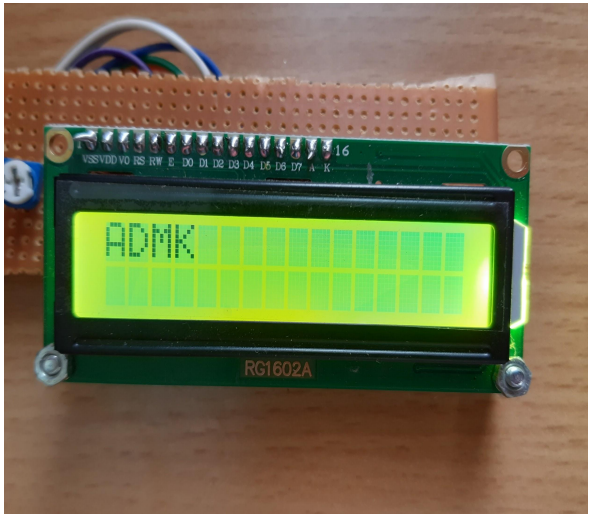

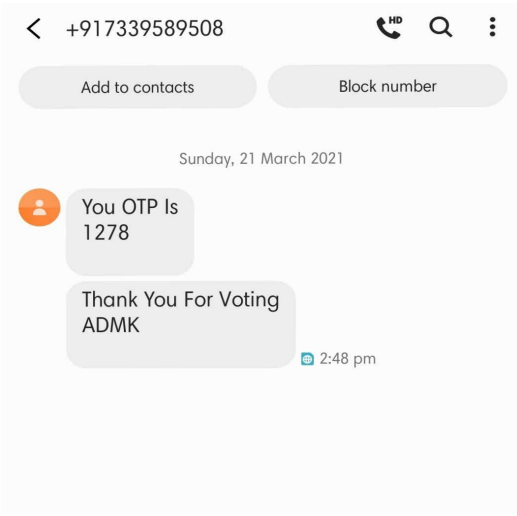

SAMPLE OUTPUT Contd...

DEMO:

DEMO Contd...

DEMO Contd...

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THANKING YOU