IJIRCCE

e-ISSN: 2320-9801 | p-ISSN: 2320-9798

INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN COMPUTER & COMMUNICATION ENGINEERING

Volume 11, Issue 5, May 2023

INTERNATIONAL STANDARD SERIAL NUMBER INDIA

Impact Factor: 8.379

International Journal of Innovative Research in Computer and Communication Engineering

| e-ISSN: 2320-9801, p-ISSN: 2320-9798| www.ijircce.com | |Impact Factor: 8.379 |

|| Volume 11, Issue 5, May 2023 ||

| DOI: 10.15680/IJIRCCE.2023.1105185 |

FINGERPRINT VOTING MACHINE

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ABSTRACT: The fingerprint voting machine is an advanced system designed to revolutionize the voting process. With the aim of enhancing security, accuracy, and efficiency in elections, this machine use fingerprint recognition technology. By registering and verifying voters' unique fingerprints, it ensures that only eligible individuals can cast their votes, eliminating the possibility of fraudulent activities. This system offers a convenient and user-friendly experience, allowing voters to authenticate themselves easily and cast their votes with a simple fingerprint scan. With reduced manual processes and the ability to handle large volumes of data, the fingerprint voting machine streamlines the voting process, enhances transparency, and strengthens the democratic principles of fair and reliable elections.

KEYWORDS: LCD 16x32 ,R305/R307 Fingerprint Sensor, Arduino UNO Board, Buzzer 5V,Connecting Wires

I. INTRODUCTION

The Fingerprint Voting Machine Revolutionizing Democracy In the pursuit of efficient and secure democratic processes, the emergence of fingerprint voting machines has brought about a remarkable transformation. Traditional voting systems often face challenges such as voter impersonation, ballot tampering, and logistical difficulties. However, with the introduction of fingerprint voting machines, these concerns are being addressed in a groundbreaking manner.

A fingerprint voting machine is an innovative device that utilizes biometric technology to authenticate and verify voters' identities through their unique fingerprints. By linking each voter's fingerprint to their voter registration information, this system ensures the utmost accuracy and integrity in the voting process. The utilization of fingerprints as identification not only enhances security but also eliminates the need for physical identification cards or documents, simplifying the voting experience for all. With a fingerprint voting machine, the entire voting process becomes more streamlined and efficient. Voters simply need to place their finger on the designated fingerprint reader, and within seconds, their identity is confirmed, granting them access to cast their vote. This automated process reduces wait times and eliminates the potential for human error during the identification and verification stages. Moreover, fingerprint voting machines contribute significantly to preserving the secrecy of the vote. As the system relies solely on fingerprints, it ensures that each voter's choice remains anonymous and confidential. This key feature reinforces the fundamental principle of democratic elections, allowing individuals to express their political preferences without fear of retribution or coercion.

Furthermore, fingerprint voting machines offer accessibility benefits, accommodating individuals with visual impairments or other disabilities. The intuitive design and user-friendly interface enable all voters to participate independently and confidently, fostering inclusivity and equal opportunity. In conclusion, the advent of fingerprint voting machines marks a new era in democratic processes, revolutionizing the way we conduct elections. By combining advanced biometric technology, enhanced security, streamlined procedures, and increased accessibility, these machines pave the way for fairer, more transparent, and efficient elections that truly reflect the will of the people.

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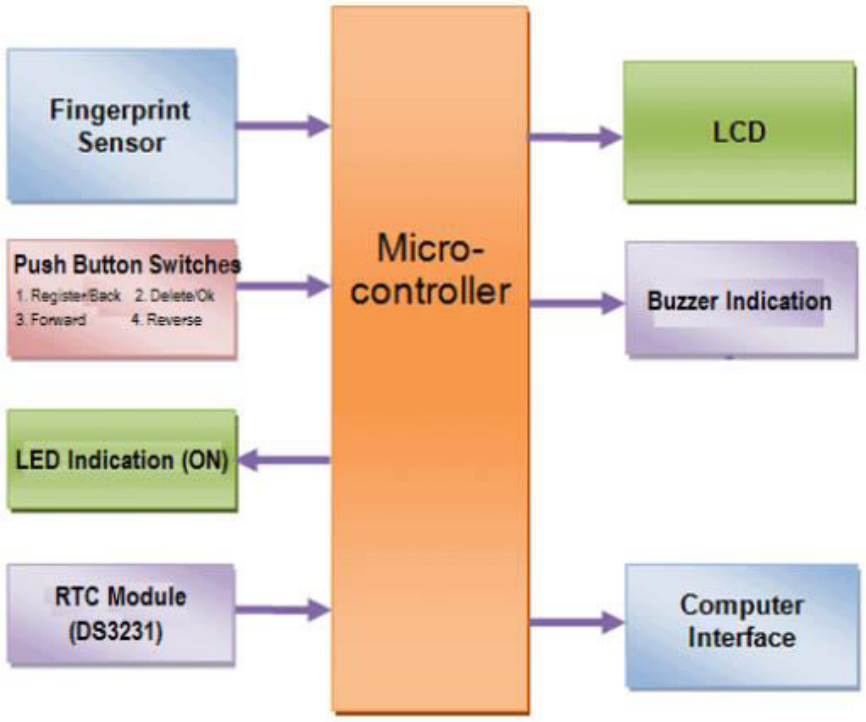
II. RELATED WORK

A. BasicBlockDiagram:



A. Mainlythisblockdiagramconsistsofthefollowingessentialblocks.

- Arduino UNO Board Operating Voltage (logic level) 5 V
- R305/R307 Fingerprint Sensor
- DS3231/DS1307 RTC Module
- 16x2 LCD Display
- Potentiometer 10K
- Buzzer 5V
- LED 5mm Any Color
- EEPROM 512 bytes (ATmega168) or 1 KB (ATmega328)
- Connecting Wires

III.PROPOSED ALGORITHM

B. DesignConsiderations:

- StarttheProcess
- Ultrasonic wavesemitting from Ultrasonic transmitter
- Ultrasonic wavesreceived from Ultrasonic receiver
- Travellingtimecounted bysensor
- If Travellingtimeisin between average value,commandsendingtoARDUINO
- Continuetheprocess,whenevertheinterruptionoccurs.

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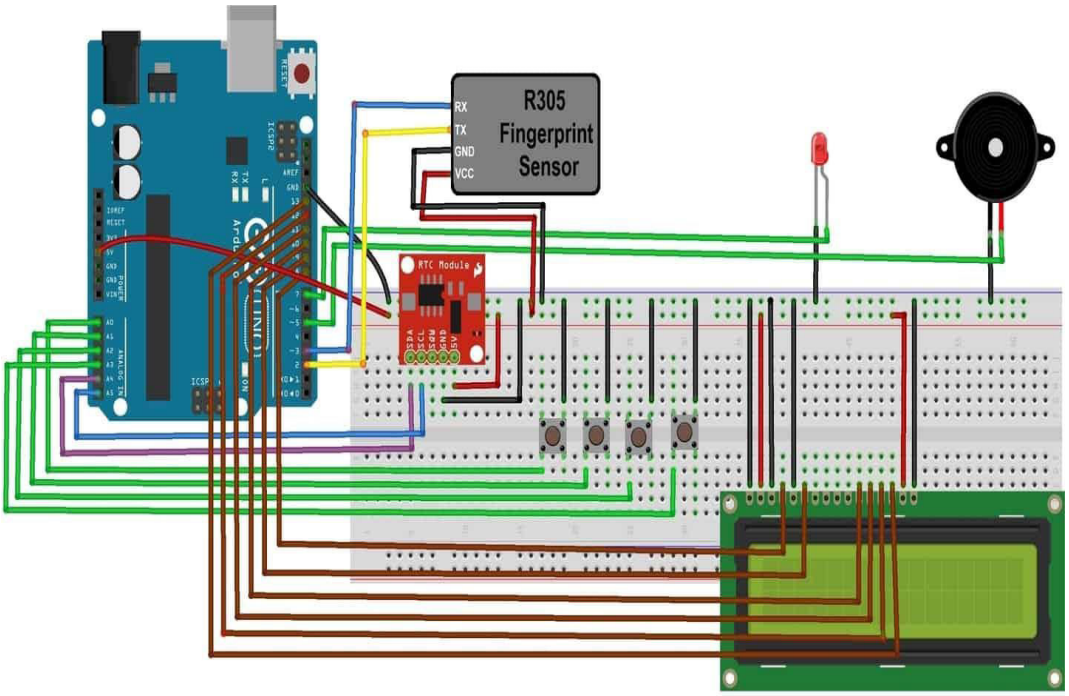
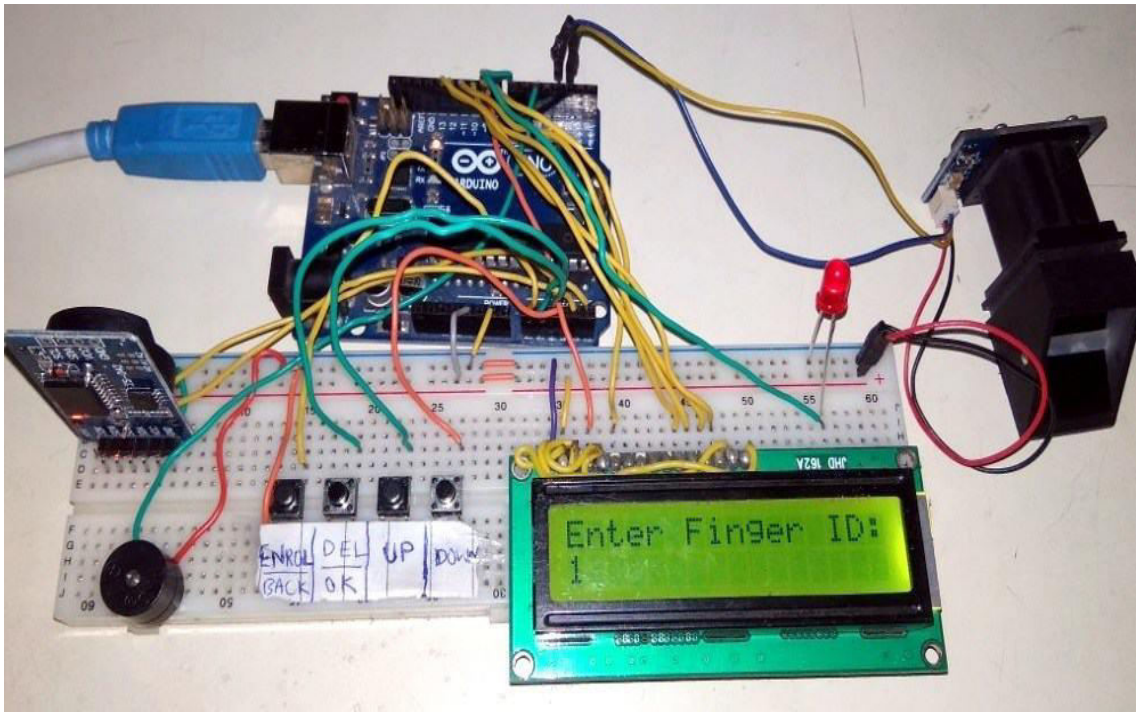
IV.PROPOSE CIRCUIT

C. CIRCUITDIAGRAM:



V. OUTPUT RESULTS

AFTER CONNECTIONS THE DEVICE WILL SHOW THIS OUTPUT



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VI. CONCLUSION

fingerprint voting machines offer a secure and efficient solution for electoral processes. By authenticating voters using biometric data, they prevent fraud and ensure the integrity of the system. Their user-friendly design promotes inclusivity and streamlines the voting process, reducing waiting times. Additionally, they provide comprehensive records for analysis and monitoring of electoral trends. Fingerprint voting machines have the potential to revolutionize elections, fostering trust and transparency in democratic systems.

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INNO SPACE
SJIF Scientific Journal Impact Factor

Impact Factor: 8.379

doi cross ref

ISSN INTERNATIONAL STANDARD SERIAL NUMBER INDIA

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