
Smart Electronic Voting Machine Using Arduino
A project by team Quarks and Sparks ⚡

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INTRODUCTION
Opening overview presenting the topic briefly

DECLARATION

We, the students of B.Tech of School of Engineering, Jawaharlal Nehru University, New Delhi, hereby declare that we have independently carried out the project titled "Smart Electronic Voting Machine" during the academic year 2022-2023.

Name and Roll Number of students

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3. Rishik Ashili
4. Abhishek Yadav

ABSTRACT

The Voting System: Rules defining expression of people's desires and achieving results. For this purpose an electronic voting machine EVM is introduced which will:

1. Replaces conventional manual voting methods.
2. Faster, efficient, reliable, and error-free compared to manual voting.

Key Features of the Proposed Machine:

- Speed: Faster than manual voting system.
- Efficiency: More efficient and streamlined process.
- Reliability: Provides accurate and reliable results.

Ease of Operation:

- User-friendly design for easy voting process.
- Voters can easily cast their votes.
- Instant display of final results by pressing a result button.

Which will Lead to:

- Enhanced voting experience with improved speed, efficiency, and accuracy.
- Simplified process for conducting elections

INTRODUCTON

TITLE

Project on Simple & Smart Electronic Voting Machine Using Arduino

OBJECTIVE

Eradicate defrauding of manual voting systems

OVERVIEW

n number of switches representing political parties

PROCESS

Voters choose their preferred candidate from the panel of buttons

DISPLAY

Final vote displayed on LCD for voter satisfaction

RESULT

Automatic calculation of the result

PROBLEM STATEMENT

"Design a Smart Electronic Voting Machinewhich should be secure without any malpractice in result.

Cost range should be in Rs.800 to 1500/-with less storage occupied, no monitoring, by using Arduino uno.

It should be easy to operate with results faster and no prone to human error."

OBJECTIVE

- To reduce manual work
- To decrease expenses
- To perform operations on EVM easily
- To make the EVM portable for easy transportation
- To save time in the voting process

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REQUIREMENTS

Approach and steps used for project implementation

REQUIREMENT ANALYSIS

- Arduino UNO
- LCD display (16x2)
- I2C Converter
- Push buttons
- Connecting cables
- Male to male jumper wires
- Breadboard






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METHODOLOGY

Approach and steps used for project implementation

METHODOLOGY

- This project focuses on developing a simple and smart electronic voting machine using Arduino.
- The Arduino serves as the main component, handling all the operations in the system.

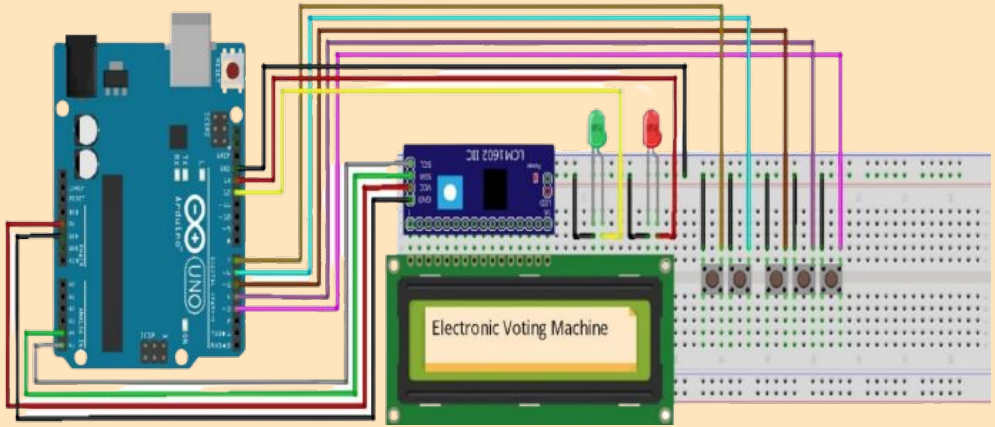
SYSTEM COMPONENTS:

Arduino Board, LCD Display (16x2), Jumper Wires (connecting wires), 12C Converter, Breadboard, Push Buttons

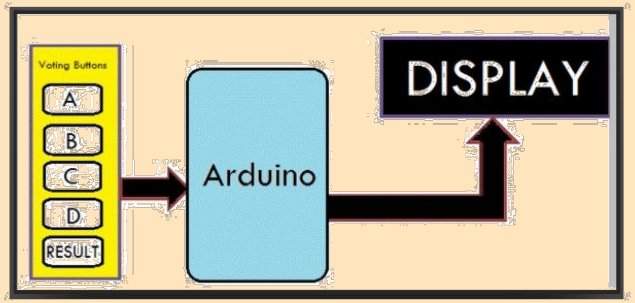
CONNECTIONS:

- Connecting push button terminals to Arduino's digital pins.
- Grounding the Arduino and connecting push button terminals to the ground supply.
- Connecting LCD display pins to the 12C converter pins.
- Connecting 12C pins to Arduino's SCL, VCC, SDA, and SCC.

CONCEPTUAL DESIGN



BLOCK DIAGRAM



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CONCLUSION

Findings and outcomes of the project analysis

CONCLUSION

1. Smart Electronic Voting Machine using Arduino offers a secure and efficient alternative to manual and traditional electronic voting systems.
2. The system ensures ease of operation, faster results, and reduced chances of errors.
3. It provides transparency and voter satisfaction through the display of final votes.
4. Further improvements and research are needed to enhance the security and privacy aspects of electronic voting systems.

THANKS