Voting Management System in C

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Problem Definition

- The Voting Management System in C automates the voting process.

- It allows voters to cast their votes securely, prevents multiple voting by the same person, and displays real-time results.

- This project demonstrates structured programming, file handling, and use of arrays and loops in C.
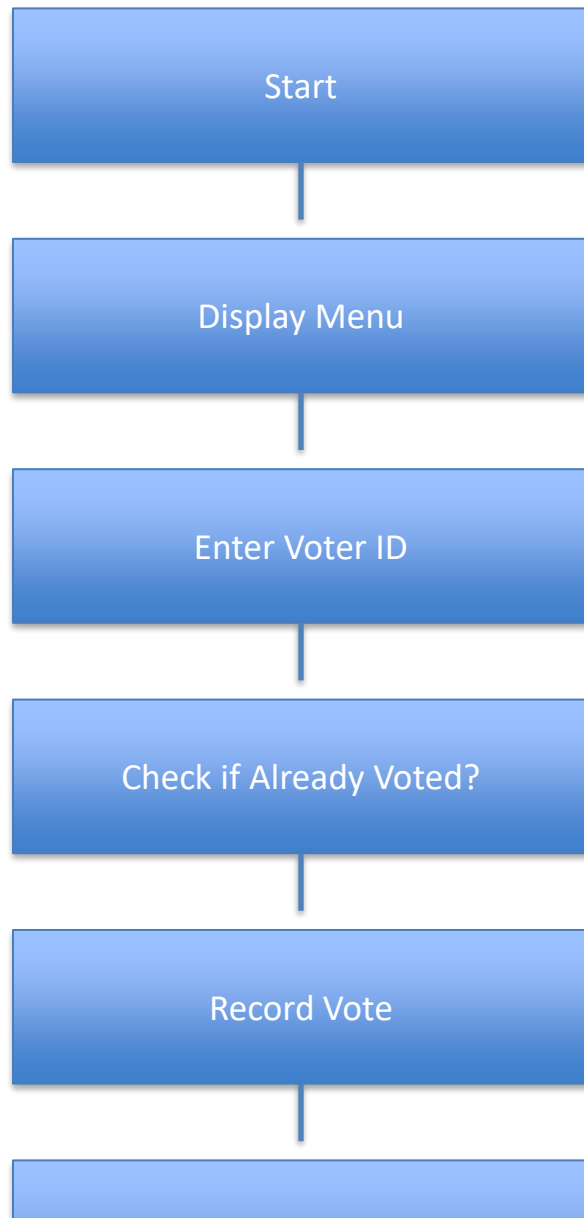
Objectives

- - To automate the voting process using C programming
- - To prevent duplicate votes
- - To store votes and display results in real-time
- - To gain understanding of structures and file handling

Algorithm

- Algorithm for Vote Casting:
- 1. Start
- 2. Display candidate list
- 3. Input voter ID and choice
- 4. Check if voter has already voted
- 5. If not, record vote
- 6. Mark voter as voted
- 7. Stop

Flowchart – Voting Process

```
┌─────────────────────────┐
│         Start           │
└─────────────────────────┘
             │
┌─────────────────────────┐
│      Display Menu        │
└─────────────────────────┘
             │
┌─────────────────────────┐
│      Enter Voter ID      │
└─────────────────────────┘
             │
┌─────────────────────────┐
│  Check if Already Voted? │
└─────────────────────────┘
             │
┌─────────────────────────┐
│      Record Vote         │
└─────────────────────────┘
             │
┌─────────────────────────┐
│                          │
```

Sample Output

- ==== Welcome to the Voting System ====

- 1. Cast Vote
- 2. Show Result
- 3. Exit

- Enter Voter ID: 5
- Candidates:
- 1. Sambhav

File / Folder Structure

- VotingProject/

- |

- ├── main.c   // Main program file

- ├── voting.h   // Header file with structure definitions

- ├── voting.c   // Contains functions (castVote, showResult)

- └── votes.dat   // Data file created during runtime

Team Contributions

- Sambhav Parihar:
- - Designed voting logic and program structure
- - Created algorithms and flowcharts

- Chahat Sangwan:
- - Handled output design, testing, and presentation formatting

Appendix – C Code Snippet

- #include <stdio.h>

- #include <string.h>

- struct Candidate { char name[50]; int votes; };

- int main() {

-    struct Candidate c[4] = { {"Sambhav",0}, {"Jashan",0}, {"Chahat",0}, {"Raghav",0} };

-    int choice;

-    printf("1. Cast Vote\n2. Show Results\n3.

Conclusion

- The Voting Management System in C successfully automates voting operations.

- It ensures fairness, accuracy, and simplicity for users.

- The project provided deep understanding of file handling, loops, and structures.

- It is a practical application of C programming in real-life scenarios.

Thank You