

ONLINE VOTING SYSTEM

-Linked List

A PROJECT REPORT

Submitted by

Rishi Vardhan [RA2211032010078]

Arshiya Jaleel[RA2211032010083]

Mitun M[RA2211032010090]

Under the guidance of

Dr. Praveena Akki

(Assistant Professor, Department of Networking and Communications, School of
Computing)

in partial fulfillment of the requirements for the degree of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING

with specialization in Internet Of Things



DEPARTMENT OF NETWORKING AND

COMMUNICATIONS

SRM INSTITUTE OF SCIENCE AND TECHNOLOGY,

KATTANKULATHUR- 603 203

October 2023

SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

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(Under Section 3 of UGC Act, 1956)

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Certified that 18CSP109L project report titled “**ONLINE VOTING SYSTEM-LINKED LIST**” is the bonafide work of ,“**Rishi Vardhan**
[RA2211032010078],**Arshiya Jaleel**[RA2211032010083],

Mitun M[RA2211032010090]”, who carried out the project work under my supervision. Certified further, that to the best of my knowledge the work reported herein does not form any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

DR PRAVEENA AKKI

GUIDE

Assistant Professor

Networking and Communications

**DR. ANNAPURANI PANAIYAPPAN
.K**

HEAD OF THE DEPARTMENT

Professor

Networking and Communications

INTERNAL EXAMINER

EXTERNAL EXAMINER



Annexure II

Department of Networking and Communications

SRM Institute of Science & Technology

OWN WORK DECLARATION

Degree/ Course: B.Tech/Computer Science Engineering with specialization in
Cloud Computing

Student Name : Rishi Vardhan, Arshiya Jaleel, Mitun M

Registration Number : RA2211032010078, RA2211032010083,
RA2211032010090

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RA2211032010083

RA2211032010090

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Rishi Vardhan

Arshiya Jaleel

Mitun

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ABSTRACT

The provided C language code demonstrates an online voting portal system implemented using linked lists. The system allows users to vote for their preferred candidates after validating their identity. The main features of the code are as follows:

1. **Voter Verification:** The system verifies a voter's identity based on their Aadhar ID, name, and date of birth. The voter has three attempts to enter the correct credentials, after which the system closes.
2. **Admin Panel:** An admin panel is accessible with a password, allowing administrators to view the current vote counts.
3. **Voting:** Once a voter's identity is confirmed, they can cast their vote for one of the listed candidates: BJP, TDP, Congress, DMK, or ADMK. The code maintains and updates the vote counts for each candidate.
4. **Winner Determination:** The system can determine and display the candidate with the most votes, declaring them the winner.
5. **Exit Function:** Users have the option to exit the voting portal.

The code uses a linked list to store voter information and verify their identity, ensuring that each voter can only cast one vote.

This online voting system is a simple implementation for educational purposes, showcasing user authentication, voting, and result determination.

WORKING

1. Welcome to the Online Voting Portal:

- The code begins with a welcome message, introducing users to the online voting portal. Users can initiate various actions, and the primary focus is on maintaining a secure and efficient voting process.

2. Main Logs:

- Users can select the "Main Logs" option by entering '1'. This functionality serves as the entry point for voters. It presents several options for them.

3. Voter Insertion:

- After selecting "Main Logs," voters are prompted to verify their identity. This is a crucial step to ensure that only eligible voters participate. Users are asked to provide their Aadhar ID, name, and date of birth. If this information matches the voter list, they proceed to cast their vote.

4. Voter Authentication:

- The code verifies voter identities using a linked list. Only if the provided details match the stored information can users proceed to vote. If incorrect details are entered multiple times, the portal automatically closes for security.

5. Voting:

- Once a voter's identity is confirmed, they can choose their preferred candidate from a list of options. The code updates and maintains vote counts for each

candidate, ensuring the accuracy of the voting process.

6. Admin Panel:

- The system features an "Admin Panel" accessible through a password. This panel allows administrators to view the current vote counts for each candidate, ensuring transparency and monitoring of the election process.

7. Winner Determination:

- The code includes functionality to determine the winning candidate based on the total votes. It announces the candidate with the most votes as the winner of the election.

8. Exit Function:

- Users have the option to exit the voting portal gracefully. This function ensures a smooth and secure closure of the system.

CODE IMPLEMENTATION

```

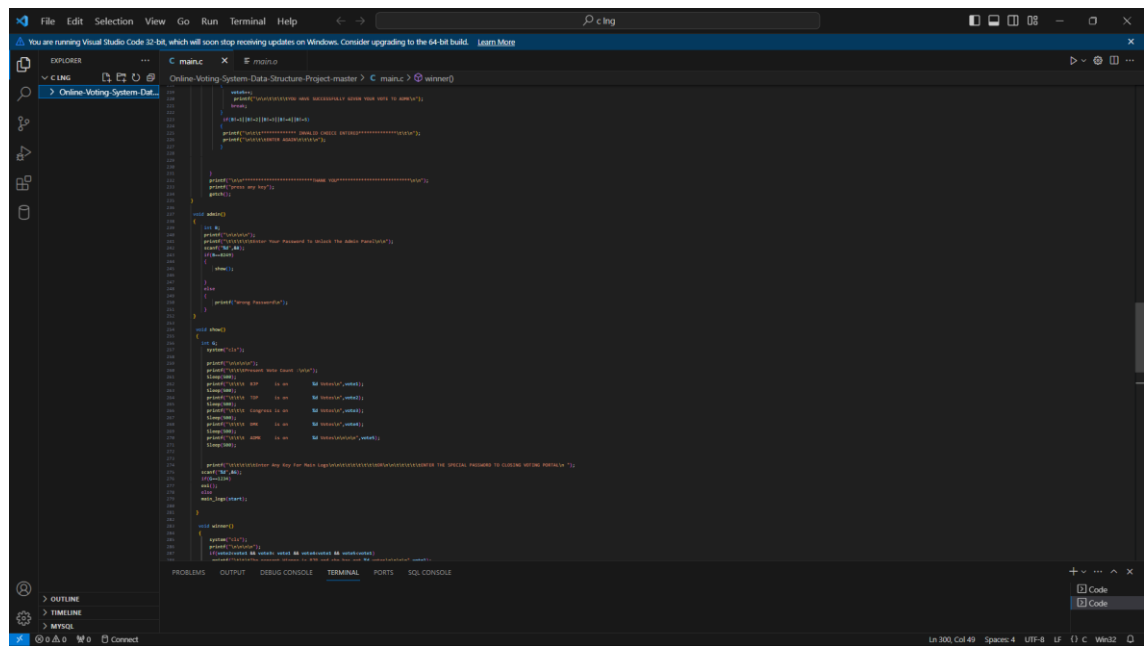
1 // You are running Visual Studio Code 32-bit, which will soon stop receiving updates on Windows. Consider upgrading to the 64-bit build. Learn More
2
3 #include <iostream>
4 #include <string>
5 #include <vector>
6 #include <map>
7 #include <algorithm>
8
9 using namespace std;
10
11 struct Voter {
12     string name;
13     int votes;
14 };
15
16 vector<Voter> voters;
17
18 void readData() {
19     int n;
20     while (cin >> n) {
21         if (n == 0) break;
22         vector<Voter> v;
23         for (int i = 0; i < n; i++) {
24             string name;
25             int votes;
26             cin >> name >> votes;
27             v.push_back({name, votes});
28         }
29         voters.push_back(v);
30     }
31 }
32
33 void display() {
34     for (int i = 0; i < voters.size(); i++) {
35         for (int j = 0; j < voters[i].size(); j++) {
36             cout << voters[i][j].name << " " << voters[i][j].votes << " ";
37             if (j % 10 == 9) cout << "\n";
38         }
39     }
40 }
41
42 int main() {
43     readData();
44     display();
45     winner();
46     return 0;
47 }
48
49 void winner() {
50     map<string, int> mp;
51     for (int i = 0; i < voters.size(); i++) {
52         for (int j = 0; j < voters[i].size(); j++) {
53             mp[voters[i][j].name] += voters[i][j].votes;
54         }
55     }
56     string winnerName;
57     int maxVotes = 0;
58     for (auto it : mp) {
59         if (it.second > maxVotes) {
60             maxVotes = it.second;
61             winnerName = it.first;
62         }
63     }
64     cout << "Winner: " << winnerName << endl;
65 }

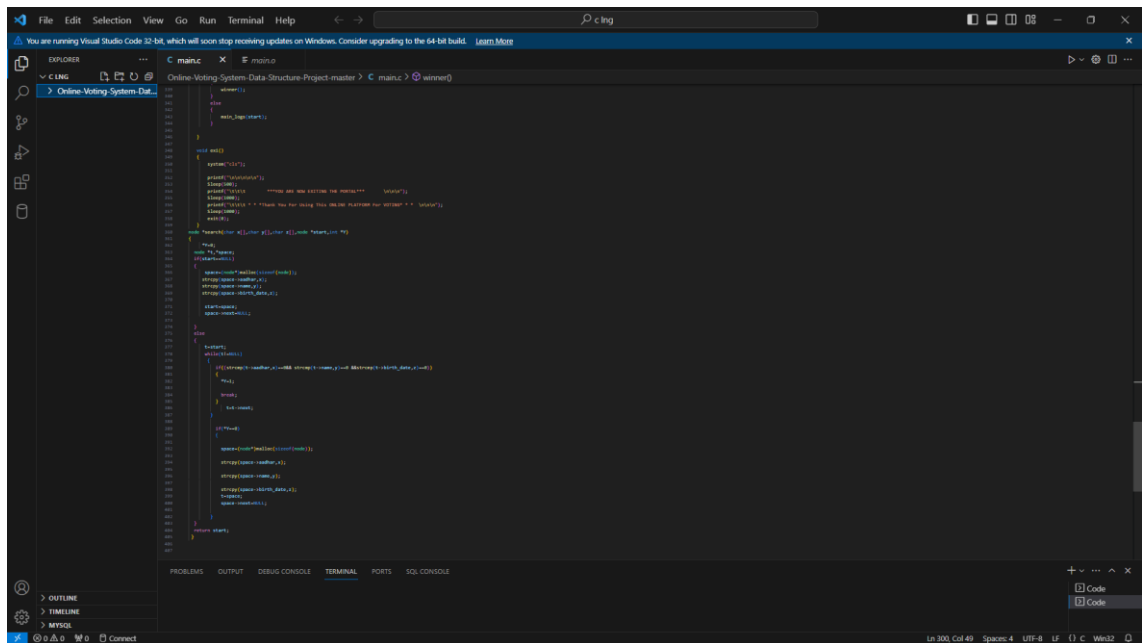
```

```

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22         vector<Voter> v;
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24             string name;
25             int votes;
26             cin >> name >> votes;
27             v.push_back({name, votes});
28         }
29         voters.push_back(v);
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53             mp[voters[i][j].name] += voters[i][j].votes;
54         }
55     }
56     string winnerName;
57     int maxVotes = 0;
58     for (auto it : mp) {
59         if (it.second > maxVotes) {
60             maxVotes = it.second;
61             winnerName = it.first;
62         }
63     }
64     cout << "Winner: " << winnerName << endl;
65 }

```





RESULTS

***** WELCOME TO THE ONLINE VOTING PORTAL *****

*****Please Enter One(1) for logging vote main Logs*****

1. FOR VOTE ENTRY
2. FOR ADMIN PANEL
3. FOR WINNER

IF YOUR CREDENTIALS MATCHES WITH THOSE IN THE VOTER LIST THEN ONLY YOU CAN GIVE YOUR VOTE OTHERWISE YOU CAN NO

*****So Plz Enter*****

Please

Enter your AADHAR ID number 2490
Enter Your NAME K.Rishi Vardhan
Enter Your BIRTH DATE in dd-mm-yyyy format 08-07-2004

Please

Enter your AADHAR ID number 2490
Enter Your NAME K.Rishi Vardhan
Enter Your BIRTH DATE in dd-mm-yyyy format 08-07-2004

Your AADHAR ID or NAME or DATE OF BIRTH is wrong

Plz Re-Enter

Press any key to continue . . .

IF AADHAR ID, YOUR NAME AND YOUR DATE OF BIRTH MATCHES THEN YOU CAN GIVE YOUR VOTE OTHERWISE NOT

ID YOU DO WRONG 3 TIMES, THE PORTAL WILL BE CLOSED AUTOMATICALLY

Please

Enter your AADHAR ID number 10004
Enter Your NAME Suhitha
Enter Your BIRTH DATE in dd-mm-yyyy format 22-01-2006

```

* * * * * LIST OF CANDIDATES * * * * *

NAME      & THEIR RESPECTIVE      SYMBOL

1.BJP      1.lotus
2.TDP      2.cycle
3.Congress  3.Hand
4.DMK      4.Sun
5.ADMK      5.Plant

Plzz,
Enter Your Choice
2

```

```

* * * * * LIST OF CANDIDATES * * * * *

NAME      & THEIR RESPECTIVE      SYMBOL

1.BJP      1.lotus
2.TDP      2.cycle
3.Congress  3.Hand
4.DMK      4.Sun
5.ADMK      5.Plant

Plzz,
Enter Your Choice
2

YOU HAVE SUCCESSFULLY GIVEN YOUR VOTE TO TDP

*****THANK YOU*****

press any key

```


The present Winner is TDP and she has got 1 votes

Enter Any Key for Main Log

1. FOR VOTE ENTRY
2. FOR ADMIN PANEL
3. FOR WINNER

IF YOUR CREDENTIALS MATCHES WITH THOSE IN THE VOTER LIST THEN ONLY YOU CAN GIVE YOUR VOTE OTHERWISE YOU CAN NO

T

*****So Plz Enter*****

2

Enter Your Password To Unlock The Admin Panel

8249

Present Vote Count :

BJP	is on	0 Votes
TDP	is on	1 Votes
Congress	is on	0 Votes
DMK	is on	0 Votes
ADMK	is on	0 Votes

Enter Any Key For Main Logs

OR

ENTER THE SPECIAL PASSWORD TO CLOSING VOTING PORTAL

CONCLUSION

The provided C code showcases a basic implementation of an online voting system with voter authentication, voting, result determination, and administrative features. While this code serves as a simple educational example, it can be expanded upon to create a more comprehensive and secure online voting platform for various applications.

FUTURE APPLICATION

The code provided, which implements a basic online voting portal, can serve as a foundation for more advanced and secure online voting systems with a wide range of potential future applications. Here are some future applications and use cases for this code:

1. Elections and Voting Systems:

- The code can be extended and enhanced to create online voting systems for various types of elections, including national, regional, or organizational elections. It could be used for government elections, student council elections, or corporate board elections.

2. Student Council Elections:

- Educational institutions can utilize this code to conduct student council elections, making the voting process more convenient and accessible for students.

3. Corporate Decision-Making:

- Companies can implement online voting systems for making important decisions or selecting representatives. Shareholders can cast their votes electronically in annual general meetings.

4. Board of Directors Elections:

- Organizations and nonprofits can use the code for board of directors' elections, allowing members to vote for their preferred candidates remotely.

5. Opinion Polls and Surveys:

- The code can be repurposed to conduct opinion polls and surveys on various topics, providing valuable data for market research, public opinion, and decision-making.