

# **CO Innovative Project**

## **Electron Voting Software**

### **Project Report**

*Submitted in complete fulfilment of the requirements for the award of the degree of*

**Bachelor of Technology**

**In**

**Software Engineering**

**Submitted by:**

**Ayush Jaiswal (2K20/B8/21)**

**Nitesh Kumar (2K20/B8/70)**

Under the guidance of

**Prof Anukriti Kaushal**



## Source Code for Project

```
#include <stdlib.h>
#include<stdio.h>
#include<string.h>

void printMessage(const char *message)
{
    int lenght =0;
    int position = 0;
    lenght = (78 - strlen(message))/2;
    printf("\t\t\t");
    for(position =0 ; position < lenght ; position++)
    {
        printf(" ");
    }
    printf("%s",message);
}

void headline(const char *message)
{
    printf("\t\t\t#####
    #####");

    printf("\n\t\t\t#####                               #####");

    printf("\n\t\t\t#####                               Voting Machine
    #####");

    printf("\n\t\t\t#####                               #####");

    printf("\n\t\t\t#####
    #####");

    printf("\n\t\t\t-----\n");
```

```

    printMessage(message);
    printf("\n\t\t\t\t-----");
}

```

```

int main()
{
    int n,n1,n3,n4,n5,max,sum,pos,flag,k=0,co=0,br=0;
    char filename[10];
    char st[100][100],vote[100][100];
    char sy[100],cp[20],t[100];
    int count[100]={0};char n2,a;
    printf("\n");
    printf("\n");
    printf("\n");
    printf("\n\n\n");
    headline("CANDIDATES");
    printf("\nEnter the number of candidates :\n");
    scanf("%d",&n5);
    int i = 0,j;
    while(i<n5)
    {
        int temp=0;
        printf("\n\n\n");
        printf("=====Candidate %d=====\n",i+1);
        printf("\n\n");
        printf("Name of the candidate : \n");
        scanf("%s",st[i]);
        printf("\nEnter the Symbol of the candidate's party :\n");
        scanf(" %c",&a);
        for(j = 0; j<i; j++)

```

```

{
    if(sy[j] == a)
    {
        printf("\n\nThe symbol is already taken.\n\n");
        printf("Please re-enter the details of the candidate.\n");
        temp = 1;
        break;
    }
}
if (temp == 0)
{
    sy[i] = a;
    i++;
}
}

printf("\n\n\n");
printf("Press 1 to cast your vote or press 0 to exit the window :\n");
scanf("%d",&n1);
if(n1==0)
    exit(1);
while(n1==1)
{
printf("\n\n\n");printf("\n\n\n");
    printf("Press enter to continue\n");
    char *date = (char*)malloc(sizeof(char) *8);
    headline("VOTER DETAILS");
        printf("\nEnter the voter ID\n");
        scanf("%s",date);
        strcpy(vote[k],date);

```

```
k++;
```

```
if(strcmp(t,date)==0)
```

```
    co=-1;
```

```
for(i=0;i<k+1;i++)
```

```
{
```

```
    if(strcmp(date,vote[i])==0)
```

```
        co++;
```

```
}
```

```
if(co==1)
```

```
    flag=0;
```

```
else
```

```
    flag=1;
```

```
    co=0;
```

```
if(flag==0)
```

```
{
```

```
FILE *fp = fopen("voters.csv", "r");
```

```
if (!fp)
```

```
{
```

```
    printf("Can't open file\n");
```

```
    return 0;
```

```
}
```

```
char a[1024];
```

```
    int fcount = 0;
```

```
int entries = 0;
```

```

fgets(a, 1024, fp);
char *field = strtok(a, ",");
while(fgets(a, 1024, fp))
{
    fcount = 0;
    field = strtok(a, ",");
    if(strcmp(field,date) == 0)
    {
        while(field)
        {
            if (fcount == 0)
                printf("\nVOTER ID:\t");
            if (fcount == 1)
                printf("NAME:\t");
            if (fcount == 2)
                printf("AGE:\t");
            if (fcount==3)
                printf("SEX:\t");
            printf("%s\n", field);
            field = strtok(NULL, ",");
            fcount++;
        }
        printf("\n");
    }
}

fclose(fp);

char b;
headline("FINGERPRINT VERIFICATION");
printf("\n\n*****Place your Finger on scanner for fingerprint
verification*****\n");

```

```

printf("Fingerprint matched with stored database\n");
printf("Green light blinks then press 'Y' \n");
printf("Fingerprints not recognized \n");
printf("Red light blinks then press 'N' \n");
scanf("%s", &b);
if(b=='N')
{
    printf("\a\a\a\aVoter's id is not present in this locality");
    return 0;
}

```

```

printf("\n\n\n");printf("\n\n\n");
printf("Press any key to continue.....\n");

```

```

printf("Cast your vote by selecting the symbol of your representative\n");
    headline("CASTING THE VOTE");
    printf("\n");printf("\n");printf("\n");
    printf("Enter the symbol of candidate you want to cast vote :\n");
    for(i=0;i<n5;i++)
    {
        printf("%d.  %s (%c)\n",i+1,st[i],sy[i]);
    }

    int fl=0;
    scanf(" %c",&n2);
    for(i=0;i<n5;i++)
    {

        if(n2==sy[i])
        {

```

```

                                fl=1;

        break;
    }
else
    fl=0;
}

if(fl==1)

{

for(i=0;i<n5;i++)
{

if(n2==sy[i])
    count[i]++;

}

printf("\aThank You ! Your vote has been
casted.\n");printf("\n\n\n");printf("\n\n\n");
printf("Press any key to continue\n");
}
else{

    strcpy(t,date);
    printf("\n\n\n");
    printf("\aNo such symbol enter the correct Symbol\n");
    printf("The details are to be re-entered.\n");
    printf("\n\n\n");
    printf("Press any key to continue\n");
}

```



```
        continue;
    }
}
```

```
headline("MENU");
```

```
while(n1==1)
```

```
{
    printf("\n");printf("\n");printf("\n");
```

```
    printf("Enter your choice \n1. Election's Results\n2. Difference of votes between
    candidates\n3. Finish your own voting\n4. EXIT the Poll \n");
```

```
    scanf("%d",&n);
```

```
    if(n==1)
```

```
    {
        headline("Results");
        printf("\n\n\n");
        printf("The Result according to the situation now : \n");
        printf("\n\n\n");
        for(i=0;i<n5;i++)
        {
```

```
            printf(" %s( %c): %d\n",st[i],sy[i],count[i]);
        }
```

```
    }
```

```
    else if(n==2)
```

```
    {
        headline("Difference");
        printf("\n\n\n");
        for(i=0;i<n5;i++)
```

```

{

    printf("%d.  %s (%c)\n",i+1,st[i],sy[i]);
}

    printf("Enter the order number of candidate for which you want to calculate
the difference : \n");

    scanf("%d%d",&n3,&n4);
    if(count[n3-1]==count[n4-1])
        printf("It's a Tie between both the candidates\n");
    printf("\n\n\n");
    printf("The difference between %s and %s is %d",st[n3-1],st[n4-1],count[n3-
1]-count[n4-1]);
}
else if(n==3)
{
    break;
}
else if(n>4)
{
    printf("\aWRONG OPTION ENTERED TRY AGAIN");
}
else
    n1=0;
}
}

else
    printf("\a\a\a\a\a Voter has already casted his Vote ");
    printf("\n\n\n");
    printf("press any key to continue\n");

```

```

}
headline(" FINAL RESULTS");
for(i=0; i<n5; i++)
{
    sprintf(filename, "file%d.apk", i+1);
    FILE * fP;

    if(fP == NULL)
    {
        printf("Unable to create file.\n");
        exit(EXIT_FAILURE);
    }
    fP = fopen(filename, "w");
    printf("\nCandicate : %s",st[i]);

    fprintf(fP,"candidate:%s\n",st[i]);

    printf("\t Symbol : %c",sy[i]);
    fprintf(fP,"symbol:%c\n",sy[i]);

    printf("\t Votes : %d\n",count[i]);
    fprintf(fP,"votes:%d\n",count[i]);

    fclose(fP);
}
}

```



```
C:\Users\ayush\Desktop\Projects\EVM.exe

-----
FINGERPRINT VERIFICATION
-----

*****Place your Finger on scanner for fingerprint verification*****
Fingerprint matched with stored database
Green light blinks then press 'Y'
Fingerprints not recognized
Red light blinks then press 'N'
Y

Press any key to continue.....
Cast your vote by selecting the symbol of your representative

#####
#####
#####          Voting Machine          #####
#####
#####
#####
#####
-----
CASTING THE VOTE
-----
```

```
C:\Users\ayush\Desktop\Projects\EVM.exe

-----
CASTING THE VOTE
-----

Enter the symbol of candidate you want to cast vote :
1. Ayush (@)
2. Nitesh ($)
@
Thank You ! Your vote has been casted.

Press any key to continue

#####
#####
#####          Voting Machine          #####
#####
#####
#####
#####
-----
MENU
-----

Enter your choice
1. Election's Results
2. Difference of votes between candidates
3. Finish your own voting
4. EXIT the Poll
--
```

```
C:\Users\ayush\Desktop\Projects\EVM.exe

Press enter to continue

#####
#####
#####          Voting Machine          #####
#####
#####
#####
#####
-----
VOTER DETAILS
-----

Enter the voter ID
12349

VOTER ID:      12349
NAME:  Shruti
AGE:   19
SEX:   FEMALE

#####
#####
#####          Voting Machine          #####
#####
#####
#####
#####
-----
FINGERPRINT VERIFICATION
-----

*****Place your Finger on scanner for fingerprint verification*****
Fingerprint matched with stored database
Green light blinks then press 'Y'
Fingerprints not recognized
Red light blinks then press 'N'
Y
```

```
C:\Users\ayush\Desktop\Projects\EVM.exe
-----
FINGERPRINT VERIFICATION
-----
*****Place your Finger on scanner for fingerprint verification*****
Fingerprint matched with stored database
Green light blinks then press 'Y'
Fingerprints not recognized
Red light blinks then press 'N'
Y

Press any key to continue.....
Cast your vote by selecting the symbol of your representative
#####
##### Voting Machine #####
#####
#####
-----
CASTING THE VOTE
-----

Enter the symbol of candidate you want to cast vote :
1. Ayush (@)
2. Nitesh ($)
@
Thank You ! Your vote has been casted.
```

```
C:\Users\ayush\Desktop\Projects\EVM.exe
Enter your choice
1. Election's Results
2. Difference of votes between candidates
3. Finish your own voting
4. EXIT the Poll
1
#####
##### Voting Machine #####
#####
#####
-----
Results
-----

The Result according to the situation now :

Ayush( @): 3
Nitesh( $): 2

Enter your choice
1. Election's Results
2. Difference of votes between candidates
3. Finish your own voting
4. EXIT the Poll
```

```
C:\Users\ayush\Desktop\Projects\EVM.exe
1. Election's Results
2. Difference of votes between candidates
3. Finish your own voting
4. EXIT the Poll
2
#####
##### Voting Machine #####
#####
#####
-----
Difference
-----

1. Ayush (@)
2. Nitesh ($)
Enter the order number of candidate for which you want to calculate the difference :
1
2

The difference between Ayush and Nitesh is 1

Enter your choice
1. Election's Results
2. Difference of votes between candidates
3. Finish your own voting
4. EXIT the Poll
--
```

If Voter has casted vote:

```
C:\Users\ayush\Desktop\Projects\EVM.exe

Press enter to continue

#####
#####              Voting Machine              #####
#####
#####
#####-----#####
#####              VOTER DETAILS              #####
#####-----#####

Enter the voter ID
12345
Voter has already casted his Vote

press any key to continue

Press enter to continue

#####
#####              Voting Machine              #####
#####
#####
#####-----#####
#####              VOTER DETAILS              #####
#####-----#####

Enter the voter ID
```

```
C:\Users\ayush\Desktop\Projects\EVM.exe

Press enter to continue

#####
#####              Voting Machine              #####
#####
#####
#####-----#####
#####              VOTER DETAILS              #####
#####-----#####

Enter the voter ID
12347

VOTER ID:      12347
NAME:   Ishan
AGE:    18
SEX:    MALE

#####
#####              Voting Machine              #####
#####
#####
#####-----#####
#####              FINGERPRINT VERIFICATION      #####
#####-----#####

*****Place your Finger on scanner for fingerprint verification*****
Fingerprint matched with stored database
Green light blinks then press 'Y'
Fingerprints not recognized
Red light blinks then press 'N'
```

Fingerprint is not matched then:

```
C:\Users\ayush\Desktop\Projects\EVM.exe

#####
#####              Voting Machine              #####
#####
#####
#####-----#####
#####              VOTER DETAILS              #####
#####-----#####

Enter the voter ID
12347

VOTER ID:      12347
NAME:   Ishan
AGE:    18
SEX:    MALE

#####
#####              Voting Machine              #####
#####
#####
#####-----#####
#####              FINGERPRINT VERIFICATION      #####
#####-----#####

*****Place your Finger on scanner for fingerprint verification*****
Fingerprint matched with stored database
Green light blinks then press 'Y'
Fingerprints not recognized
Red light blinks then press 'N'
N
Voter's id is not present in this locality
-----
```