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// PROJECT ELECTION 2020

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// INCLUDED HEADER FILES

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#include <fstream.h>

#include <string.h>

#include <stdlib.h>

#include <stdio.h>

#include <ctype.h>

#include <conio.h>

#include <dos.h>

void upper(char ar[])

{ int l=strlen(ar);

for(int i=0;i<l;i++)

{

ar[i]=toupper(ar[i]);

}

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS CLASS CONTROL ALL THE FUNCTIONS RELATED TO VOTER

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

class VOTER

{

public :

void ADD\_VOTER(void) ;

void VOTER\_INFORMATION(void) ;

void VOTER\_LIST(void) ;

void ISSUE\_VOTING\_CARD(void) ;

void RESET\_STATUS(void) ;

void DELETE\_VOTER(void) ;

void ELECTION(void);

void VOTE\_CALCULATION(void) ;

void CALCULATE(char []) ;

protected :

int DELETE\_RECORD(char []) ;

char voterno[6], name[26], address[36] ;

int status, cardstatus;

};

// \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS CLASS CONTROL ALL THE FUNCTIONS RELATED TO CANDIDATE

// \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

class CANDIDATE

{

public:

void ADD\_CANDIDATE(void) ;

void CANDIDATE\_INFORMATION(void) ;

void VOTING\_LIST(void) ;

int ADD\_VOTES(int);

void RESET\_STATUS(void) ;

void DELETE\_CANDIDATE(void) ;

protected :

int DELETE\_RECORD(int) ;

char name[26], symbol[15] ;

int votes , serialno;

};

// \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS CLASS CONTROL ALL THE FUNCTIONS RELATED ELECTION DATE

// \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

class VOTING\_DATE

{

public:

void SET\_DATE(void) ;

int VALID\_DATE(void);

void RETURN\_DATE(void) ;

private :

int dd, mm, yy;

};

// \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS CLASS CONTROL ALL THE FUNCTIONS T0 DRAW LINES,

// Boxes, ETC.

// \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

class DRAW

{

public :

void LINE\_HOR(int, int, int, char) ;

void LINE\_VER(int, int, int, char) ;

};

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// FUNCTION TO DRAW HORIZONTAL LINE

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void DRAW :: LINE\_HOR(int column1, int column2, int row, char c)

{

for ( column1; column1<=column2; column1++)

{

gotoxy(column1,row) ;

cout <<c ;

}

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// FUNCTION TO DRAW VERTICAL LINE

// \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void DRAW :: LINE\_VER(int row1, int row2, int column, char c)

{

for ( row1; row1<=row2; row1++)

{

gotoxy(column,row1) ;

cout <<c ;

}

}

// \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// FUNCTION TO ADD THE VOTERS IN VOTERS FILE

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void VOTER :: ADD\_VOTER(void)

{

char ch ;

do

{

clrscr() ;

gotoxy(27,1) ;

cout<<"\*\*\* ADDITION OF VOTERS \*\*\*" ;

int found=0 ;

char vno[6] ;

do

{

gotoxy(10,8) ;

clreol() ;

cout <<"Enter voter no. : " ;

gets(vno) ;

if (vno[0]=='0')

return ;

found=0 ;

fstream f ;

f.open("VOTER.DAT", ios::in) ;

if (f.fail())

break ;

while (f.read((char \*) this, sizeof(VOTER)))

if (!strcmpi(voterno,vno))

{

found = 1 ;

break ;

}

f.close() ;

if (found)

{

gotoxy(10,8) ;

clreol() ;

cout <<"Voter no already exist" ;

getch() ;

}

}while (found) ;

gotoxy(10,10) ;

cout <<"Enter name of the voter : ";

gets(name) ;

upper(name);

gotoxy(10,11) ;

cout <<"Enter address of the voter : " ;

gets(address) ;

upper(address);

status = 0 ;

cardstatus = 0 ;

gotoxy(8,13) ;

cout <<"Save voter record? (y/n) : " ;

ch = getche() ;

if ((ch == 'y' )||( ch == 'Y'))

{

strcpy(voterno,vno) ;

fstream f ;

f.open("VOTER.DAT", ios::app) ;

f.write((char\*)this, sizeof(VOTER)) ;

f.close() ;

}

gotoxy(8,15) ;

cout <<"Add more? (y/n) : " ;

ch = getche() ;

}while((ch == 'y')||(ch == 'Y'));

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// FUNCTION T0 DISPLAY THE VOTER'S LIST

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void VOTER :: VOTER\_LIST(void)

{

clrscr() ;

int row=5, found=0, flag=0 ;

char ch ;

gotoxy(29,1) ;

cout<<"\*\*\* LIST OF VOTERS \*\*\*" ;

gotoxy(1,3) ;

cout <<"VOTE NO. VOTER NAME VOTER ADDRESS CARD ISSUED" ;

gotoxy(1,4) ;

cout <<"~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ ";

fstream f ;

f.open("VOTER.DAT", ios::in) ;

while (f.read((char \*) this, sizeof(VOTER)))

{

flag = 0 ;

found = 1 ;

gotoxy(1,row) ;

cout <<voterno ;

gotoxy(11,row) ;

cout <<name ;

gotoxy(29,row);

cout<<address ;

gotoxy(65,row) ;

if (cardstatus)

cout <<"Yes" ;

else

cout <<"No" ;

if( row == 23 )

{

flag = 1 ;

row=5;

gotoxy(1,25) ;

cout <<"Press any key to continue or Press <ESC> to exit" ;

ch = getch() ;

if (ch == 27)

break ;

clrscr() ;

gotoxy(29,1) ;

cout<<"\*\*\* LIST OF VOTERS \*\*\*" ;

gotoxy(1,3) ;

cout <<"VOTE NO. VOTER NAME VOTER ADDRESS CARD ISSUED" ;

gotoxy(1,4) ;

cout<<" ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ ~ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~";

}

else

row++ ;

}

if (!found)

{

gotoxy(5,10) ;

cout <<"Records not found" ;

}

if (!flag)

{

gotoxy(1,25) ;

cout <<"Press any key to continue..." ;

getch() ;

}

f.close() ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// FUNCTION TO DISPLAY THE VOTER INFORMATION

// \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void VOTER :: VOTER\_INFORMATION(void)

{

clrscr() ;

gotoxy(27,1) ;

cout<<"\*\*\* VOTER INFORMATION \*\*\*" ;

char vno[6] ;

gotoxy(5,5) ;

cout <<"Enter Voter no. or Press <ENTER> to see list : " ;

gets(vno) ;

if (vno[0] == '0')

return ;

if (strlen(vno) == 0)

{

VOTER\_LIST() ;

return ;

}

int found=0 ;

fstream f ;

f.open("VOTER.DAT", ios::in);

while (f.read((char \*) this, sizeof(VOTER)))

{

if (!strcmpi(vno,voterno))

{

found = 1 ;

gotoxy(10,8) ;

cout <<"Voter no. : " <<voterno ;

gotoxy( 10,10) ;

cout <<"Voter name : " <<name ;

gotoxy(10,11) ;

cout <<"Voter address : " <<address ;

gotoxy(10,13) ;

if (cardstatus)

cout <<"Voting card issued :Yes" ;

else

cout <<"Voting card issued : No" ;

gotoxy(10,14) ;

if (status)

cout <<"Vote given : Yes" ;

else

cout <<"Vote given : No" ;

break ;

}

}

f.close() ;

if (!found)

{

gotoxy(5,20) ;

cout <<"Voting no. not found" ;

}

gotoxy(5,24) ;

cout <<"Press any key to continue..." ;

getch() ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// FUNCTION TO RESET ALL THE STATUS IN THE VOTER'S FILE

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void VOTER :: RESET\_STATUS(void)

{

fstream file ;

file.open("VOTER.DAT", ios::in) ;

if (file.fail())

return ;

fstream temp ;

temp.open("temp.dat", ios::out) ;

while (file.read((char \*) this, sizeof(VOTER)))

{

status = 0 ;

temp.write((char \*) this, sizeof(VOTER)) ;

}

file.close() ;

temp.close() ;

file.open("VOTER.DAT", ios::out) ;

temp.open("temp.dat", ios::in) ;

while (temp.read((char \*) this, sizeof(VOTER)))

file.write((char \*) this, sizeof(VOTER)) ;

file.close() ;

temp.close() ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// FUNCTION TO ISSUE THE VOTING CARDS TO THE VOTERS

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void VOTER :: ISSUE\_VOTING\_CARD(void)

{

clrscr() ;

gotoxy(27,1) ;

cout<<"\*\*\* ISSUE VOTING CARD \*\*\*";

char vno[6] ;

gotoxy(5,5) ;

cout <<"Enter Vote no. or Press <ENTER> to exit :" ;

gets(vno) ;

if (strlen(vno) == 0)

return ;

int found=0, count=0;

fstream f ;

f.open("VOTER.DAT", ios::in) ;

while (f.read((char \*) this, sizeof(VOTER)))

{

count++ ;

if (!strcmpi(vno,voterno))

{

found = 1 ;

if (cardstatus == 1)

{

gotoxy(5,10) ;

cout <<"Voting card allready issued" ;

getch();

return ;

}

break;

}

}

f.close() ;

if (found)

{

int i=0 ;

f.open("VOTER.DAT", ios::in);

fstream temp ;

temp.open("temp.dat", ios::out) ;

while (f.read((char \*) this, sizeof(VOTER)))

{

i++ ;

if (count == i)

{

cardstatus = 1 ;

gotoxy(10,10);

cout<<"Voter card issued";

temp.write((char \*) this, sizeof(VOTER)) ;

}

else

temp.write((char \*) this, sizeof(VOTER)) ;

}

f.close() ;

temp.close();

f.open("VOTER.DAT", ios::out) ;

temp.open("temp.dat", ios::in) ;

while (temp.read((char \*) this, sizeof(VOTER)))

f.write((char \*) this, sizeof(VOTER)) ;

f.close() ;

temp.close() ;

}

else

{

gotoxy(5,20) ;

cout <<"Vote no. not found" ;

}

gotoxy(5,24) ;

cout <<"Press any key to continue..." ;

getch();

}

// \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// FUNCTION TO GIVE VOTES BY THE VOTERS

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void VOTER :: ELECTION(void)

{

clrscr() ;

gotoxy(32,1) ;

cout<<"\*\*\* ELECTION \*\*\*";

fstream f ;

f.open("ELEDATE.DAT", ios::in) ;

if (f.fail())

{

gotoxy(5,20) ;

cout <<"Election date is not set." ;

getch();

return ;

}

f.close() ;

VOTING\_DATE voting\_date ;

gotoxy(5,3) ;

cout <<"Election Date : ";

voting\_date.RETURN\_DATE() ;

if (!voting\_date.VALID\_DATE())

{

gotoxy(8,20) ;

cout <<"Sorry! Today is not an election date" ;

getch() ;

return ;

}

char ch, vno[6] ;

do

{

gotoxy(5,8) ;

clreol() ;

cout <<"Enter Voter no. or Press <ENTER> to exit : " ;

gets(vno) ;

if (strlen(vno) == 0)

return ;

int count=0, found=0, valid=1 ;

f.open("VOTER.DAT", ios::in);

while (f.read((char \*) this, sizeof(VOTER)))

{

count++ ;

if (!strcmpi(vno,voterno))

{

found = 1 ;

break ;

}

}

f.close() ;

if (found)

{

if (cardstatus == 0)

{

valid = 0 ;

gotoxy(5,20) ;

cout <<"Voting card not issued" ;

getch();

}

if (status == 1)

{

valid=0;

gotoxy(5,20) ;

cout <<"Vote already given" ;

getch();

}

if (valid)

{

int i=0 ;

f.open("VOTER.DAT", ios::in) ;

fstream temp ;

temp.open("temp.dat", ios::out) ;

while (f.read((char \*) this, sizeof(VOTER)))

{

i++ ;

if (count == i)

{

status = 1 ;

gotoxy(5,20);

cout<<"Vote allowed";

temp.write((char \*) this, sizeof(VOTER)) ;

}

else

temp.write((char \*) this, sizeof(VOTER)) ;

}

f.close() ;

temp.close() ;

f.open("VOTER.DAT", ios::out) ;

temp.open("temp.dat", ios::in) ;

while (temp.read((char \*) this, sizeof(VOTER)))

f.write((char \*) this, sizeof(VOTER)) ;

f.close() ;

temp.close() ;

gotoxy(5,20) ;

cout <<"Vote given" ;

}

}

else

{

gotoxy(5,20) ;

cout <<"Voter no. not found" ;

getch();

}

gotoxy(5,20) ;

clreol() ;

cout <<"More? (y/n) :" ;

ch = getche();

gotoxy(5,20) ;

clreol();

}while ((ch == 'y')||(ch == 'Y'));

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// FUNCTION TO DELETE VOTER RECORD FOR THE GIVEN VOTER NAME

// \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

int VOTER :: DELETE\_RECORD(char vno[6])

{

fstream file ;

file.open("VOTER.DAT", ios::in) ;

fstream temp ;

temp.open("temp.dat", ios::out) ;

int found=0 ;

while (file.read((char \*)this, sizeof(VOTER)))

{

if (!strcmpi(voterno,vno))

found = 1 ;

else

temp.write((char \*) this, sizeof(VOTER)) ;

}

file.close() ;

temp.close() ;

if (!found)

return 0 ;

file.open("VOTER.DAT", ios::out) ;

temp.open("temp.dat", ios::in) ;

while (temp.read((char \*) this, sizeof(VOTER)))

file.write((char \*) this, sizeof(VOTER)) ;

file.close() ;

temp.close();

return 1;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// FUNCTION TO GIVE THE VOTER NAME TO DELETE VOTER RECORD

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void VOTER :: DELETE\_VOTER(void)

{

clrscr() ;

gotoxy(27,1) ;

cout<<"\*\*\* DELETION 0F VOTER \*\*\*";

char vno[6] ;

gotoxy(5,5) ;

clreol() ;

cout <<"Enter Voter no. or Press <ENTER> to exit : " ;

gets(vno) ;

if (strlen(vno) == 0)

return ;

gotoxy(5,20) ;

if (!DELETE\_RECORD(vno))

cout <<"Voter no. not found" ;

else

cout <<"Voter record deleted" ;

getch();

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// FUNCTION TO CALCULATE THE VOTES GIVEN BY THE VOTERS

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void VOTER :: VOTE\_CALCULATION(void)

{

clrscr() ;

CANDIDATE candidate;

int sno, valid=0, found=0;

fstream f ;

f.open("VOTER.DAT", ios::in) ;

while (f.read((char \*) this, sizeof(VOTER)))

{

if(status)

{

found = 1 ;

gotoxy(3,21) ;

clreol() ;

cout <<"Voter no. :" <<voterno ;

candidate.VOTING\_LIST();

do

{

valid = 1 ;

gotoxy(3,23) ;

clreol() ;

cout <<"Vote in the favour of : (Enter S.No.) " ;

cin >>sno;

if (!candidate.ADD\_VOTES(sno))

{

valid = 0 ;

gotoxy(3,23) ;

clreol() ;

cout <<"S.No. not found" ;

getch() ;

}

}while (!valid);

}

}

if(!found)

{

gotoxy(1,23) ;

clreol() ;

cout <<"No voter has given vote." ;

getch() ;

return ;

}

candidate.VOTING\_LIST();

gotoxy(1,21) ;

clreol() ;

gotoxy(3,23) ;

clreol() ;

cout <<"Vote Calculation Complete." ;

candidate.RESET\_STATUS() ;

getch() ;

}

// \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// FUNCTION TO DISPLAY THE CANDIDATE INFORMATION

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void CANDIDATE :: CANDIDATE\_INFORMATION(void)

{

clrscr() ;

int row=5, found=0 ;

char ch;

gotoxy(27,1) ;

cout<<"\*\*\* LIST OF CANDIDATES \*\*\*" ;

gotoxy(1,3) ;

cout <<"S.NO. CANDIDATE NAME SYMBOL" ;

gotoxy(1,4) ;

cout<<"~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~`~~~~~~~~~" ;

fstream f ;

f.open("CAN.DA ", ios::in);

while (f.read((char \*) this, sizeof(CANDIDATE)))

{

found = 1 ;

gotoxy(1,row);

cout<<serialno;

gotoxy(8,row) ;

cout <<name ;

gotoxy(40,row) ;

cout <<symbol ;

row++;

if (!found)

{

gotoxy(5,10) ;

cout <<"Records not found ";

}

f.close() ;

}

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// FUNCTION TO ADD CANDIDATE RECORD IN THE CANDIDATE FILE

// \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void CANDIDATE :: ADD\_CANDIDATE(void)

{

char ch;

int sno;

do

{

int count=0 ;

fstream f ;

f.open("CAN.DAT", ios::in) ;

while (f.read((char \*) this, sizeof(CANDIDATE)))

count++ ;

f.close() ;

sno=count;

if (count >= 15)

{

cout <<"No. of Candidates are 15, no more candidates can be added." ;

getch();

return ;

}

clrscr() ;

sno++;

serialno=sno;

gotoxy(25,1) ;

cout<<"\*\*\* ADDITION OF CANDIDATES \*\*\*" ;

gotoxy(10,8) ;

cout<< "S.No:";

cout<<serialno;

gotoxy(10,12);

cout <<"Enter name of the Candidate : " ;

gets(name) ;

upper(name);

gotoxy(10,14) ;

cout <<"Enter symbol name : " ;

gets(symbol) ;

upper(symbol);

votes = 0 ;

gotoxy(10,16) ;

cout <<"Save Candidate record? (y/n) : " ;

ch = getche() ;

if ((ch == 'y')||( ch == 'Y'))

{

fstream f ;

f.open("CAN.DAT", ios::app) ;

f.write((char \*)this, sizeof(CANDIDATE)) ;

f.close() ;

}

gotoxy(10,18) ;

cout <<"Add more? (y/n) :" ;

ch = getche() ;

}while ((ch== 'y' )||(ch == 'Y'));

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// FUNCTION TO RESET VOTES RECEIVED BY CANDIDATE TO ZERO

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void CANDIDATE :: RESET\_STATUS(void)

{

fstream file ;

file.open("CAN.DAT", ios::in) ;

if (file.fail())

return ;

fstream temp ;

temp.open("temp.dat", ios::out) ;

file.seekg(0,ios::beg) ;

while (!file.eof())

{

file.read((char \*) this, sizeof(CANDIDATE)) ;

if (file.eof())

break ;

votes = 0 ;

temp.write((char \*) this, sizeof(CANDIDATE)) ;

}

file.close() ;

temp.close() ;

file.open("CAN.DAT", ios::out) ;

temp.open("temp.dat", ios::in) ;

temp.seekg(0,ios::beg) ;

while (!temp.eof())

{

temp.read((char \*) this, sizeof(CANDIDATE)) ;

if (temp.eof())

break ;

file.write((char \*) this,sizeof(CANDIDATE));

}

file.close() ;

temp.close() ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// FUNCTION TO DISPLAY THE LIST OF THE VOTES RECEIVED BY

// CANDIDATE

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void CANDIDATE :: VOTING\_LIST(void)

{

int row=5 ;

gotoxy(28,1) ;

cout<<"\*\*\* VOTE CALCULATION \*\*\*" ;

gotoxy(1,3) ;

cout <<"S.NO CANDIDATE NAME SYMBOL VOTES";

gotoxy(1,4) ;

cout<<"~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~";

fstream f;

f.open("CAN.DAT", ios::in) ;

while (f.read((char \*) this, sizeof(CANDIDATE)))

{

gotoxy(2,row) ;

cout <<serialno ;

gotoxy(10,row);

cout<<name;

gotoxy(40,row) ;

cout <<symbol ;

gotoxy(60,row) ;

cout<<votes ;

row++ ;

}

f.close() ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// FUNCTION TO ADD VOTES IN THE FAVOUR OF GIVEN CANDIDATE

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

int CANDIDATE :: ADD\_VOTES(int sno)

{

fstream file ;

file.open("CAN.DAT", ios::in);

fstream temp ;

temp.open("temp.dat", ios::out);

int i=0, found=0 ;

while (file.read((char \*) this, sizeof(CANDIDATE)))

{

i++ ;

if (file.eof())

break;

if (sno == serialno)

{

found = 1;

votes++;

}

temp.write((char \*) this, sizeof(CANDIDATE)) ;

}

file.close() ;

temp.close() ;

if (!found)

return 0 ;

file.open("CAN.DAT", ios::out);

temp.open("temp.dat", ios::in);

while (!temp.eof())

{

temp.read((char \*) this, sizeof(CANDIDATE)) ;

if(temp.eof())

break;

file.write((char \*) this, sizeof(CANDIDATE)) ;

}

file.close() ;

temp.close() ;

return 1;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// FUNCTION TO DELETE RECORD OF THE GIVEN CANDIDATE

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

int CANDIDATE :: DELETE\_RECORD(int sno)

{

fstream file ;

file.open("CAN.DAT", ios::in) ;

fstream temp ;

temp.open("temp.dat", ios::out) ;

int found=0, count=0 ;

while (file.read((char\*)this, sizeof(CANDIDATE)))

{

count++ ;

if (sno == count)

found = 1 ;

else

temp.write((char \*) this, sizeof(CANDIDATE)) ;

}

file.close() ;

temp.close() ;

if (!found)

return 0 ;

file.open("CAN.DAT", ios::out) ;

temp.open("temp.dat", ios::in) ;

while (temp.read((char \*) this, sizeof(CANDIDATE)))

file.write((char \*) this, sizeof(CANDIDATE)) ;

file.close() ;

temp.close() ;

return 1 ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// FUNCTION TO GIVE CANDIDATE S.NO. TO DELETE RECORD

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void CANDIDATE :: DELETE\_CANDIDATE(void)

{

clrscr() ;

fstream f ;

f.open("CAN.DAT", ios::in) ;

if (f.fail())

{

gotoxy(5,5) ;

cout <<"Candidates not found" ;

getch() ;

return ;

}

f.close() ;

CANDIDATE\_INFORMATION();

int sno ;

gotoxy(3,23) ;

cout <<"Enter S.No. of the Candidate to be deleted :" ;

cin >>sno ;

if (!DELETE\_RECORD(sno))

{

gotoxy(3,23) ;

clreol() ;

cout<<"S.No not found";

getch();

return;

}

gotoxy(3,23) ;

clreol() ;

cout <<"Record Deleted" ;

getch() ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*

// FUNCTION TO RETURN THE ELECTION DATE

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void VOTING\_DATE :: RETURN\_DATE(void)

{

fstream f ;

f.open("ELEDATE.DAT", ios::in) ;

f.read((char\*) this, sizeof(VOTING\_DATE)) ;

f.close() ;

cout <<dd<<'/'<<mm<<'/'<<yy;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// FUNCTION TO RETURN THE VALIDITY OF THE TODAY DATE

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

int VOTING\_DATE :: VALID\_DATE(void)

{

fstream f ;

f.open("ELEDATE.DAT", ios::in) ;

f.read((char \*) this, sizeof(VOTING\_DATE)) ;

f.close() ;

int d1, m1, y1, valid=1;

struct date d;

getdate(&d);

d1 = d.da\_day;

m1 = d.da\_mon ;

y1 = d.da\_year;

if((d1!=dd )||( m1!=mm )||( y1!=yy))

valid = 0 ;

return valid ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// FUNCTION TO SET THE DATE FOR THE NEW ELECTION

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void VOTING\_DATE :: SET\_DATE(void)

{

clrscr() ;

int d1, m1, y1, d2, m2, y2;

struct date d;

getdate(&d);

d1 = d.da\_day;

m1 = d.da\_mon;

y1 = d.da\_year;

gotoxy(26,1) ;

cout<<"\*\*\* SET NEW VOTING DATE \*\*\*" ;

gotoxy(8,8) ;

cout <<"Enter new Voting date (dd mm yyyy) : " ;

cin >>d2 >>m2 >>y2 ;

if ((y2<y1)||(y2==y1 && m2<m1)||(y2==y1 && m2==m1 && d2<d1))

{

gotoxy(5,20) ;

cout <<"Invalid Date" ;

getch();

return ;

}

dd = d2 ;

mm=m2;

yy=y2;

fstream f ;

f.open("ELEDATE.DAT", ios::out) ;

f.write((char \*) this, sizeof(VOTING\_DATE)) ;

f.close() ;

f.open("ELEDATE.DAT", ios::in) ;

f.read((char \*) this, sizeof(VOTING\_DATE)) ;

f.close() ;

VOTER voter ;

voter.RESET\_STATUS() ;

CANDIDATE candidate ;

candidate.RESET\_STATUS() ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// MAIN FUNCTION DISPLAYING MENU AND CALLS OTHER FUNCTIONS

// \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void main(void)

{

char ch, ch1, c=22, yes ;

VOTER voter ;

CANDIDATE candidate ;

VOTING\_DATE voting\_date ;

DRAW draw ;

while(1)

{

clrscr() ;

draw.LINE\_HOR(2,79,2,219) ;

draw.LINE\_HOR(2,79,24,219) ;

draw.LINE\_VER(2,24,2,219);

draw.LINE\_VER(2,24,79,219) ;

gotoxy(32,8);

cout <<"ELECTION 2020";

gotoxy(31,9) ;

for (int i=1; i<=15; i++)

cout <<c ;

gotoxy(30,11) ;

cout <<"1: ISSUE VOTING CARDS" ;

gotoxy(30, 12) ;

cout <<"2: ELECTION" ;

gotoxy(30,13) ;

cout <<"3: ADD VOTERS" ;

gotoxy(30,14) ;

cout <<"4: ADD CANDIDATES" ;

gotoxy(30,15) ;

cout<<"5: CALCULATING VOTES" ;

gotoxy(30,16) ;

cout <<"6: OPTIONS";

gotoxy(30,17) ;

cout <<"0: QUIT" ;

gotoxy(30,19) ;

cout <<"Enter your choice:" ;

ch = getch();

if (c == '0')

{

clrscr();

gotoxy(31,2) ;

cout<<"ELECTION 2020" ;

gotoxy(31,4) ;

cout<<"\n\n\n\n\n\t\t\t\tMADE BY : " ;

cout<<"\n\t\T MADHUR NARANG" ;

cout<<"\n\n\t\t DELHI INTERNATIONAL PUBLIC SCHOOL" ;

break;

}

else

if (ch == '1')

voter.ISSUE\_VOTING\_CARD() ;

else

if (ch == '2')

voter.ELECTION();

else

if (ch == '3')

voter.ADD\_VOTER() ;

else

if (ch == '4')

candidate .ADD\_CANDIDATE() ;

else

if (ch == '5')

voter.VOTE\_CALCULATION() ;

else

if (ch == '6')

{

while(1)

{

clrscr() ;

draw.LINE\_HOR(2,79,2,178);

draw.LINE\_HOR(2,79,24,178) ;

draw.LINE\_VER(2,24,2,178) ;

draw.LINE\_VER(2,24,79,178) ;

gotoxy(38,9) ;

cout <<"OPTIONS";

gotoxy(37,10) ;

for (int i=1; i<=9; i++)

cout <<c ;

gotoxy(30,12) ;

cout <<"1: SET ELECTION DATE" ;

gotoxy(30,13) ;

cout <<"2: VOTER INFORMATION" ;

gotoxy(30, 14) ;

cout <<"3: CANDIDATE INFORMATION" ;

gotoxy(30,15) ;

cout <<"4: DELETE VOTER" ;

gotoxy(30,16) ;

cout <<"5: DELETE CANDIDATE" ;

gotoxy(30,17) ;

cout <<"0: EXIT" ;

gotoxy(30,19) ;

cout <<"Enter your choice:" ;

ch1 = getch() ;

if (ch1 == '0')

break ;

else

if (ch1 == '1')

voting\_date.SET\_DATE() ;

else

if (ch1 == '2')

voter.VOTER\_INFORMATION() ;

else

if (ch1 == '3')

{

candidate.CANDIDATE\_INFORMATION() ;

gotoxy(1,25) ;

cout <<"Press any key to continue..." ;

getch() ;

}

else

if (ch1 == '4')

voter.DELETE\_VOTER() ;

else

if (ch1 == '5')

candidate.DELETE\_CANDIDATE();

}

}

}

}