**LIBRARY MANAGEMENT SYSTEM CODE :**

\*Password : technoholics

#include<windows.h>

#include<stdio.h>

#include<conio.h>

#include <stdlib.h>

#include<string.h>

#include<ctype.h>

#include<dos.h>

#include<time.h>

#define RETURNTIME 15

char catagories[][15]={"Computer","Electronics","Electrical","Civil","Mechanical"};

void returnfunc(void);

void mainmenu(void);

void addbooks(void);

void deletebooks(void);

void editbooks(void);

void searchbooks(void);

void issuebooks(void);

void viewbooks(void);

void closeapplication(void);

int getdata();

int checkid(int);

int t(void);

void Password();

void issuerecord();

void loaderanim();

FILE \*fp,\*ft,\*fs;

COORD coord = {0, 0};

int s;

char findbook;

char password[15]={"technoholics"};

void gotoxy (int x, int y)

{

coord.X = x; coord.Y = y;

SetConsoleCursorPosition(GetStdHandle(STD\_OUTPUT\_HANDLE), coord);

}

struct meroDate

{

int mm,dd,yy;

};

struct books

{

int id;

char stname[20];

char name[20];

char Author[20];

int quantity;

float Price;

int count;

int rackno;

char \*cat;

struct meroDate issued;

struct meroDate duedate;

};

struct books a;

int main()

{

Password();

getch();

return 0;

}

void mainmenu()

{

system("cls");

int i;

gotoxy(20,3);

printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2 MAIN MENU \xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

gotoxy(20,5);

printf("\xDB\xDB\xDB\xDB\xB2 1. Add Books ");

gotoxy(20,7);

printf("\xDB\xDB\xDB\xDB\xB2 2. Delete books");

gotoxy(20,9);

printf("\xDB\xDB\xDB\xDB\xB2 3. Search Books");

gotoxy(20,11);

printf("\xDB\xDB\xDB\xDB\xB2 4. Issue Books");

gotoxy(20,13);

printf("\xDB\xDB\xDB\xDB\xB2 5. View Book list");

gotoxy(20,15);

printf("\xDB\xDB\xDB\xDB\xB2 6. Edit Book's Record");

gotoxy(20,17);

printf("\xDB\xDB\xDB\xDB\xB2 7. Close Application");

gotoxy(20,19);

printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

gotoxy(20,20);

t();

gotoxy(20,21);

printf("Enter your choice:");

switch(getch())

{

case '1':

addbooks();

break;

case '2':

deletebooks();

break;

case '3':

searchbooks();

break;

case '4':

issuebooks();

break;

case '5':

viewbooks();

break;

case '6':

editbooks();

break;

case '7':

{

system("cls");

gotoxy(16,3);

printf("\t\*\*\*\*\*\*\*Library Management System\*\*\*\*\*\*\*");

gotoxy(16,5);

printf("\t\*\*\*\*\*\*\*Mini Project in C\*\*\*\*\*\*\*");

gotoxy(16,7);

printf("\t\*\*\*\*\*\*\*Technoholics Team\*\*\*\*\*\*\*");

}

default:

{

gotoxy(10,23);

printf("\aWrong Entry!!Please re-entered correct option");

if(getch())

mainmenu();

}

}

}

void addbooks(void)

{

system("cls");

int i;

gotoxy(20,5);

printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2SELECT CATEGOIES\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

gotoxy(20,7);

printf("\xDB\xDB\xDB\xDB\xB2 1. Computer");

gotoxy(20,9);

printf("\xDB\xDB\xDB\xDB\xB2 2. Electronics");

gotoxy(20,11);

printf("\xDB\xDB\xDB\xDB\xB2 3. Electrical");

gotoxy(20,13);

printf("\xDB\xDB\xDB\xDB\xB2 4. Civil");

gotoxy(20,15);

printf("\xDB\xDB\xDB\xDB\xB2 5. Mechanical");

gotoxy(20,17);

printf("\xDB\xDB\xDB\xDB\xB2 6. Back to main menu");

gotoxy(20,21);

printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

gotoxy(20,22);

printf("Enter your choice:");

scanf("%d",&s);

if(s==7)

mainmenu() ;

system("cls");

fp=fopen("Bibek.dat","ab+");

if(getdata()==1)

{

a.cat=catagories[s-1];

fseek(fp,0,SEEK\_END);

fwrite(&a,sizeof(a),1,fp);

fclose(fp);

gotoxy(21,14);

printf("The record is sucessfully saved");

gotoxy(21,15);

printf("Save any more?(Y / N):");

if(getch()=='n')

mainmenu();

else

system("cls");

addbooks();

}

}

void deletebooks()

{

system("cls");

int d;

char another='y';

while(another=='y')

{

system("cls");

gotoxy(10,5);

printf("Enter the Book ID to delete:");

scanf("%d",&d);

fp=fopen("Bibek.dat","rb+");

rewind(fp);

while(fread(&a,sizeof(a),1,fp)==1)

{

if(a.id==d)

{

gotoxy(10,7);

printf("The book record is available");

gotoxy(10,8);

printf("Book name is %s",a.name);

gotoxy(10,9);

printf("Rack No. is %d",a.rackno);

findbook='t';

}

}

if(findbook!='t')

{

gotoxy(10,10);

printf("No record is found modify the search");

if(getch())

mainmenu();

}

if(findbook=='t' )

{

gotoxy(10,9);

printf("Do you want to delete it?(Y/N):");

if(getch()=='y')

{

ft=fopen("test.dat","wb+");

rewind(fp);

while(fread(&a,sizeof(a),1,fp)==1)

{

if(a.id!=d)

{

fseek(ft,0,SEEK\_CUR);

fwrite(&a,sizeof(a),1,ft);

}

}

fclose(ft);

fclose(fp);

remove("Bibek.dat");

rename("test.dat","Bibek.dat");

fp=fopen("Bibek.dat","rb+");

if(findbook=='t')

{

gotoxy(10,10);

printf("The record is sucessfully deleted");

gotoxy(10,11);

printf("Delete another record?(Y/N)");

}

}

else

mainmenu();

fflush(stdin);

another=getch();

}

}

gotoxy(10,15);

mainmenu();

}

void searchbooks()

{

system("cls");

int d;

printf("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Search Books\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

gotoxy(20,10);

printf("\xDB\xDB\xDB\xB2 1. Search By ID");

gotoxy(20,14);

printf("\xDB\xDB\xDB\xB2 2. Search By Name");

gotoxy( 15,20);

printf("Enter Your Choice");

fp=fopen("Bibek.dat","rb+");

rewind(fp);

switch(getch())

{

case '1':

{

system("cls");

gotoxy(25,4);

printf("\*\*\*\*Search Books By Id\*\*\*\*");

gotoxy(20,5);

printf("Enter the book id:");

scanf("%d",&d);

gotoxy(20,7);

printf("Searching........");

while(fread(&a,sizeof(a),1,fp)==1)

{

if(a.id==d)

{

Sleep(2);

gotoxy(20,7);

printf("The Book is available");

gotoxy(20,8);

printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

gotoxy(20,9);

printf("\xB2 ID:%d",a.id);gotoxy(47,9);printf("\xB2");

gotoxy(20,10);

printf("\xB2 Name:%s",a.name);gotoxy(47,10);printf("\xB2");

gotoxy(20,11);

printf("\xB2 Author:%s ",a.Author);gotoxy(47,11);printf("\xB2");

gotoxy(20,12);

printf("\xB2 Qantity:%d ",a.quantity);gotoxy(47,12);printf("\xB2"); gotoxy(47,11);printf("\xB2");

gotoxy(20,13);

printf("\xB2 Price:Rs.%.2f",a.Price);gotoxy(47,13);printf("\xB2");

gotoxy(20,14);

printf("\xB2 Rack No:%d ",a.rackno);gotoxy(47,14);printf("\xB2");

gotoxy(20,15);

printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

findbook='t';

}

}

if(findbook!='t')

{

gotoxy(20,8);

printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

gotoxy(20,9);printf("\xB2"); gotoxy(38,9);printf("\xB2");

gotoxy(20,10);

printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

gotoxy(22,9);printf("\aNo Record Found");

}

gotoxy(20,17);

printf("Try another search?(Y/N)");

if(getch()=='y')

searchbooks();

else

mainmenu();

break;

}

case '2':

{

char s[15];

system("cls");

gotoxy(25,4);

printf("\*\*\*\*Search Books By Name\*\*\*\*");

gotoxy(20,5);

printf("Enter Book Name:");

scanf("%s",s);

int d=0;

while(fread(&a,sizeof(a),1,fp)==1)

{

if(strcmp(a.name,(s))==0)

{

gotoxy(20,7);

printf("The Book is available");

gotoxy(20,8);

printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

gotoxy(20,9);

printf("\xB2 ID:%d",a.id);gotoxy(47,9);printf("\xB2");

gotoxy(20,10);

printf("\xB2 Name:%s",a.name);gotoxy(47,10);printf("\xB2");

gotoxy(20,11);

printf("\xB2 Author:%s",a.Author);gotoxy(47,11);printf("\xB2");

gotoxy(20,12);

printf("\xB2 Qantity:%d",a.quantity);gotoxy(47,12);printf("\xB2");

gotoxy(20,13);

printf("\xB2 Price:Rs.%.2f",a.Price);gotoxy(47,13);printf("\xB2");

gotoxy(20,14);

printf("\xB2 Rack No:%d ",a.rackno);gotoxy(47,14);printf("\xB2");

gotoxy(20,15);

printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

d++;

}

}

if(d==0)

{

gotoxy(20,8);

printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

gotoxy(20,9);printf("\xB2"); gotoxy(38,9);printf("\xB2");

gotoxy(20,10);

printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

gotoxy(22,9);printf("\aNo Record Found");

}

gotoxy(20,17);

printf("Try another search?(Y/N)");

if(getch()=='y')

searchbooks();

else

mainmenu();

break;

}

default :

getch();

searchbooks();

}

fclose(fp);

}

void issuebooks(void)

{

int t;

system("cls");

printf("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*ISSUE SECTION\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

gotoxy(10,5);

printf("\xDB\xDB\xDB\xDb\xB2 1. Issue a Book");

gotoxy(10,7);

printf("\xDB\xDB\xDB\xDb\xB2 2. View Issued Book");

gotoxy(10,9);

printf("\xDB\xDB\xDB\xDb\xB2 3. Search Issued Book");

gotoxy(10,11);

printf("\xDB\xDB\xDB\xDb\xB2 4. Remove Issued Book");

gotoxy(10,14);

printf("Enter a Choice:");

switch(getch())

{

case '1':

{

system("cls");

int c=0;

char another='y';

while(another=='y')

{

system("cls");

gotoxy(15,4);

printf("\*\*\*Issue Book section\*\*\*");

gotoxy(10,6);

printf("Enter the Book Id:");

scanf("%d",&t);

fp=fopen("Bibek.dat","rb");

fs=fopen("Issue.dat","ab+");

if(checkid(t)==0)

{

gotoxy(10,8);

printf("The book record is available");

gotoxy(10,9);

printf("There are %d unissued books in library ",a.quantity);

gotoxy(10,10);

printf("The name of book is %s",a.name);

gotoxy(10,11);

printf("Enter student name:");

scanf("%s",a.stname);

gotoxy(10,13);

printf("The BOOK of ID %d is issued",a.id);

fseek(fs,sizeof(a),SEEK\_END);

fwrite(&a,sizeof(a),1,fs);

fclose(fs);

c=1;

}

if(c==0)

{

gotoxy(10,11);

printf("No record found");

}

gotoxy(10,15);

printf("Issue any more(Y/N):");

fflush(stdin);

another=getche();

fclose(fp);

}

break;

}

case '2':

{

system("cls");

int j=4;

printf("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Issued book list\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n");

gotoxy(2,2);

printf("STUDENT NAME CATEGORY ID BOOK NAME");

fs=fopen("Issue.dat","rb");

while(fread(&a,sizeof(a),1,fs)==1)

{

gotoxy(2,j);

printf("%s",a.stname);

gotoxy(18,j);

printf("%s",a.cat);

gotoxy(30,j);

printf("%d",a.id);

gotoxy(36,j);

printf("%s",a.name);

gotoxy(50,25);

j++;

}

fclose(fs);

gotoxy(1,25);

returnfunc();

}

break;

case '3':

{

system("cls");

gotoxy(10,6);

printf("Enter Book ID:");

int p,c=0;

char another='y';

while(another=='y')

{

scanf("%d",&p);

fs=fopen("Issue.dat","rb");

while(fread(&a,sizeof(a),1,fs)==1)

{

if(a.id==p)

{

issuerecord();

gotoxy(10,12);

printf("Press any key.......");

getch();

issuerecord();

c=1;

}

}

fflush(stdin);

fclose(fs);

if(c==0)

{

gotoxy(10,8);

printf("No Record Found");

}

gotoxy(10,13);

printf("Try Another Search?(Y/N)");

another=getch();

}

}

break;

case '4':

{

system("cls");

int b;

FILE \*fg;

char another='y';

while(another=='y')

{

gotoxy(10,5);

printf("Enter book id to remove:");

scanf("%d",&b);

fs=fopen("Issue.dat","rb+");

while(fread(&a,sizeof(a),1,fs)==1)

{

if(a.id==b)

{

issuerecord();

findbook='t';

}

if(findbook=='t')

{

gotoxy(10,12);

printf("Do You Want to Remove it?(Y/N)");

if(getch()=='y')

{

fg=fopen("record.dat","wb+");

rewind(fs);

while(fread(&a,sizeof(a),1,fs)==1)

{

if(a.id!=b)

{

fseek(fs,0,SEEK\_CUR);

fwrite(&a,sizeof(a),1,fg);

}

}

fclose(fs);

fclose(fg);

remove("Issue.dat");

rename("record.dat","Issue.dat");

gotoxy(10,14);

printf("The issued book is removed from list");

}

}

if(findbook!='t')

{

gotoxy(10,15);

printf("No Record Found");

}

}

gotoxy(10,16);

printf("Delete any more?(Y/N)");

another=getch();

}

}

default:

gotoxy(10,18);

printf("\aWrong Entry!!");

getch();

issuebooks();

break;

}

gotoxy(1,30);

returnfunc();

}

void viewbooks(void)

{

int i=0,j;

system("cls");

gotoxy(1,1);

printf("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Book List\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

gotoxy(2,2);

printf(" CATEGORY ID BOOK NAME AUTHOR QTY PRICE RackNo ");

j=4;

fp=fopen("Bibek.dat","rb");

while(fread(&a,sizeof(a),1,fp)==1)

{

gotoxy(3,j);

printf("%s",a.cat);

gotoxy(16,j);

printf("%d",a.id);

gotoxy(22,j);

printf("%s",a.name);

gotoxy(36,j);

printf("%s",a.Author);

gotoxy(50,j);

printf("%d",a.quantity);

gotoxy(57,j);

printf("%.2f",a.Price);

gotoxy(69,j);

printf("%d",a.rackno);

printf("\n\n");

j++;

i=i+a.quantity;

}

gotoxy(3,25);

printf("Total Books =%d",i);

fclose(fp);

gotoxy(35,25);

returnfunc();

}

void editbooks(void)

{

system("cls");

int c=0;

int d,e;

gotoxy(20,4);

printf("\*\*\*\*Edit Books Section\*\*\*\*");

char another='y';

while(another=='y')

{

system("cls");

gotoxy(15,6);

printf("Enter Book Id to be edited:");

scanf("%d",&d);

fp=fopen("Bibek.dat","rb+");

while(fread(&a,sizeof(a),1,fp)==1)

{

if(checkid(d)==0)

{

gotoxy(15,7);

printf("The book is availble");

gotoxy(15,8);

printf("The Book ID:%d",a.id);

gotoxy(15,9);

printf("Enter new name:");scanf("%s",a.name);

gotoxy(15,10);

printf("Enter new Author:");scanf("%s",a.Author);

gotoxy(15,11);

printf("Enter new quantity:");scanf("%d",&a.quantity);

gotoxy(15,12);

printf("Enter new price:");scanf("%f",&a.Price);

gotoxy(15,13);

printf("Enter new rackno:");scanf("%d",&a.rackno);

gotoxy(15,14);

printf("The record is modified");

fseek(fp,ftell(fp)-sizeof(a),0);

fwrite(&a,sizeof(a),1,fp);

fclose(fp);

c=1;

}

if(c==0)

{

gotoxy(15,9);

printf("No record found");

}

}

gotoxy(15,16);

printf("Modify another Record?(Y/N)");

fflush(stdin);

another=getch() ;

}

returnfunc();

}

void returnfunc(void)

{

{

printf(" Press ENTER to return to main menu");

}

a:

if(getch()==13)

mainmenu();

else

goto a;

}

int getdata()

{

int t;

gotoxy(20,3);printf("Enter the Information Below");

gotoxy(20,4);printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

gotoxy(20,5);

printf("\xB2");gotoxy(46,5);printf("\xB2");

gotoxy(20,6);

printf("\xB2");gotoxy(46,6);printf("\xB2");

gotoxy(20,7);

printf("\xB2");gotoxy(46,7);printf("\xB2");

gotoxy(20,8);

printf("\xB2");gotoxy(46,8);printf("\xB2");

gotoxy(20,9);

printf("\xB2");gotoxy(46,9);printf("\xB2");

gotoxy(20,10);

printf("\xB2");gotoxy(46,10);printf("\xB2");

gotoxy(20,11);

printf("\xB2");gotoxy(46,11);printf("\xB2");

gotoxy(20,12);

printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

gotoxy(21,5);

printf("Category:");

gotoxy(31,5);

printf("%s",catagories[s-1]);

gotoxy(21,6);

printf("Book ID:\t");

gotoxy(30,6);

scanf("%d",&t);

if(checkid(t) == 0)

{

gotoxy(21,13);

printf("\aThe book id already exists\a");

getch();

mainmenu();

return 0;

}

a.id=t;

gotoxy(21,7);

printf("Book Name:");gotoxy(33,7);

scanf("%s",a.name);

gotoxy(21,8);

printf("Author:");gotoxy(30,8);

scanf("%s",a.Author);

gotoxy(21,9);

printf("Quantity:");gotoxy(31,9);

scanf("%d",&a.quantity);

gotoxy(21,10);

printf("Price:");gotoxy(28,10);

scanf("%f",&a.Price);

gotoxy(21,11);

printf("Rack No:");gotoxy(30,11);

scanf("%d",&a.rackno);

return 1;

}

int checkid(int t)

{

rewind(fp);

while(fread(&a,sizeof(a),1,fp)==1)

if(a.id==t)

return 0;

return 1;

}

int t(void)

{

time\_t t;

time(&t);

printf("Date and time:%s\n",ctime(&t));

return 0 ;

}

void Password(void) //for password option

{

system("cls");

char d[25]="Password Protected";

char ch,pass[10];

int i=0,j;

gotoxy(10,4);

for(j=0;j<20;j++)

{

Sleep(50);

printf("\*");

}

for(j=0;j<20;j++)

{

Sleep(50);

printf("%c",d[j]);

}

for(j=0;j<20;j++)

{

Sleep(50);

printf("\*");

}

gotoxy(10,10);

gotoxy(15,7);

printf("Enter Password:");

while(ch!=13)

{

ch=getch();

if(ch!=13 && ch!=8){

putch('\*');

pass[i] = ch;

i++;

}

}

pass[i] = '\0';

if(strcmp(pass,password)==0)

{

gotoxy(15,9);

printf("Password match");

gotoxy(17,10);

printf("Press any key to countinue.....");

getch();

mainmenu();

}

else

{

gotoxy(15,16);

printf("\aWarning!! Incorrect Password");

getch();

Password();

}

}

void issuerecord()

{

system("cls");

gotoxy(10,8);

printf("The Book has taken by Mr. %s",a.stname);

}