**Open Ended Project Report**

**On**

Attendance Manager

Submitted for the partial fulfilment of Bachelor of Engineering

By

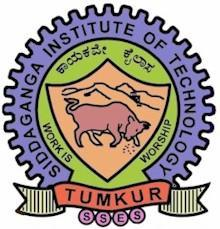
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**Under the guidance of**

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**2016-2017**

**Project Title : Attendence Manager**

Platform Used : C++(Turbo C++)

Subject : Object Oriented Programmimg Language

Description : This project reduces the complexity of the teacher updating students atendence record and digitise the modern day method of taking attendence.

Semester: 3

**IMPLEMENTATION**

#include<math.h>

#include<stdio.h>

#include<stdlib.h>

#include<iomanip.h>

#include<fstream.h>

#include<conio.h>

#include<iostream.h>

#include<string.h>

#include<dir.h>

#include<dos.h>

#include<graphics.h>

#include<time.h>

void homescreen()

{

int driver,mode;

driver=DETECT;

initgraph(&driver,&mode,"C:\\Turboc3\\bgi\\");

/\*--------------------------------------------------

|initgraph() function initialises the graphic |

|mode. It selects the best resolution and directs|

|that value to mode in variable mode.The two int |

|variables driver,mode are graphic driver and |

|graphic mode respectively.driver=DETECT means |

|we have passed the highest possible value |

|available for the detected driver. The path |

|specifies the directory path where initgraph |

|looks for the graphic drivers. |

--------------------------------------------------\*/

int a;

settextstyle(10,HORIZ\_DIR,3);

outtextxy(200,5,"WELCOME TO");

delay(1000);

outtextxy(200,120,"ATTENDANCE");

delay(1000);

outtextxy(240,220,"MANAGER");

delay(1000);

outtextxy(155,400,"Press enter to continue");

a=getch();

if(a==13)

{

cleardevice();

restorecrtmode();

}

}

class attendenceout;

class rollinfo

{

protected:

char depcode[7],subcode[8],lecno[6];

int no,year,month;

int day;

public:

void roll(void){cout<<depcode<<no;}

void dayset(void);

};

void rollinfo::dayset(void)//determines the current date

{

struct date a;

getdate(&a);

year=a.da\_year;

month=a.da\_mon;

day=a.da\_day;

cout<<day<<"."<<month<<"."<<year<<endl;

}

class attendencein:virtual public rollinfo

{

char filename[15];

char folnam[15] ;

int tot, flag[120];

public:

void input(void);

void attend(void);

void folder(void);

void file(void);

void crefilename(int);

void sinfile(int pa);

} ;

void attendencein::input(void)

{

cout<<endl<<"ATTENDENCE SHEET"<<endl;

cout<<"\n Enter the batch code and department code:(example 0607): ";

cin>>depcode ;

cout<<"\n Input subject code : ";

cin>>subcode;

cout<<"\n Input class number : ";

cin>>lecno;

cout<<"\n Total student : ";

cin>>tot ;

attend();

file();

}

void attendencein::attend(void)

{ clrscr();

dayset();

no=1;

int t=tot;//t here is total student

char a[7];

strcpy(a,depcode);

cout<<"\n(\*if absent press 'TAB' and if present press any key)\n";

getch();

folder();

cout<<"date"<<day<<"\\"<<month<<"\\"<<year<<endl ;

cout<<"\nROLL NO\t\tATTENDENCE\n";

while(no<=t)

{

cout.fill(48);

cout<<"\n"<<a<<setw(3)<<no<<"\t\t";

char c=getch();

if(c==9)//ascii value of tab

{

flag[no]=0;

textcolor(1);

cprintf("absent");

sinfile(0);

}

else if(c!=9)

{

flag[no]=1;

textcolor(0);

cprintf("present");

textcolor(7);

sinfile(1);

}

no++;

if(no==125)//maximum number of students allowed

break;

}

}

void attendencein::folder(void)//makes a seperate folder of name department code

{

strcpy(folnam,depcode);

mkdir(folnam);

strcat(folnam,"\\");

}

//idividual file setting part

void attendencein::sinfile(int pa)

{

fstream x;

char nam[10],name[20],\*tmp;

itoa(no,nam,10);

/\*

Converts an integer value no to a null-terminated

string to base 10 and stores the result in array

given by nam parameter.

\*/

strcpy(name,depcode);

strcat(name,nam);

tmp=new char[strlen(folnam)+strlen(name)+4];

strcpy(tmp,folnam);

strcat(strcat(tmp,name),".txt");

x.open(tmp,ios::app);//opens a file with name contained in tmp in append mode

x<<pa;//write to tmp file if present or absent

x.close();//disconnects tmp file

delete [] tmp;//deletes tmp

}

void attendencein::crefilename(int i)

{

if(i==1)

{

strcpy(filename,depcode);

}

else if(i==0)

{

strcpy(filename,subcode);

strcat(filename,lecno);

strcat(filename,".txt");

}

}

void attendencein::file(void)

{

dayset();

fstream k;//File-to-Memory/Memory-to-File link of strem name k

crefilename(0);

k.open(filename,ios::out);

k<<"\tATTENDENCE SHEET\n\t----------------\n\n";

k<<"\ndate"<<day<<"\\"<<month<<"\\"<<year<<endl ;

k<<"\nBatch Code and Departmental Code : ";

k<<depcode;

k<<"\nSubject Code : ";

k<<subcode;

k<<"\nCLASS NO : ";

k<<lecno;

k<<"\n\nROLL NO\t\t\tATTENDENCE\n";

int i=1;

while(i<=(no-1))

{

k.fill(48);

k<<"\n"<<depcode<<setw(3)<<i<<"\t\t\t";

if(flag[i]==0)

k<<"absent";

else

k<<"present";

i++;

}

k.close();

}

class attendenceout:virtual attendencein,virtual rollinfo

{ int no;

public:

char filename[12];

int outputfile(void);

int outstfile(void);

void output(void);

void getdata(void);

void getrollno(void){cout<<"\n\ninput the roll no of student: ";

cin>>no; }

void classdata(void);

void studentdata(void);

};

void attendenceout::output(void)

{while(1)

{

cout<<"\nENTER UR OPTION\n";

cout<<"TO SHOW CLASS DATA(press enter)\nTO SHOW STUDENT DATA(press space)\nTO back press ESC\n";

char i;

i=getch();

if(i==13)//ascii value of enter

classdata();

else if(i==32)//ascii value of space

studentdata();

else if(i==27)

break;

}

}

void attendenceout::classdata(void)

{

getdata();

outputfile();

}

void attendenceout::getdata(void)

{

clrscr();

cout<<"\n Enter the batch code and department code: \n\n";

cout<<"\n BATCHCODE and DEPARTMENTAL CODE : ";

cin>>depcode;

cout<<"\n Input subject code : ";

cin>>subcode;

cout<<"\n Input class number : ";

cin>>lecno;

}

void attendenceout::studentdata(void)

{

getdata();

getrollno();

outstfile();

}

int attendenceout::outputfile(void)

{int i=0;

char p;

fstream u;

strcpy(filename,subcode);

strcat(filename,lecno);

strcat(filename,".txt");

u.open(filename,ios::in);

if(!u)

{

cout<<"file error"<<filename;

return 0;

}

clrscr();

cout<<"\n\nTHE CLASS PATICIPATION SHEET IS BELOW :\n\n\n" ;

while(u)

{ if(i==660)

{

i=0;

getch();

clrscr();

}

delay(50);

u.get(p);

cout<<p;

i++;

}

u.close();

getch();

return 0;

}

int attendenceout::outstfile(void)

{

crefilename(1);

ifstream st;

int ab=0,cl=0,pre=0;

char nam[10],name[20],file[20],ch;

itoa(no,nam,10);

strcpy(file,depcode);

strcat(file,"\\");

strcpy(name,depcode);

strcat(name,nam);

strcat(file,name);

strcat(file,".txt") ;

st.open(file);

while(st)

{st.get(ch);

if(ch==48)

ab++;

if(ch==49)

pre++;

}

st.close();

cl=ab+pre;

float per=(pre\*100/cl) ;

cout<<"\nStudent data\n\n" ;

cout<<"TOTAL CLASS :";

delay(150) ;

cout<<cl<<"\n";

cout<<"PRESENT :";

delay(150);

cout<<pre<<"\n";

cout<<"ABSENT :";

delay(150);

cout<<ab<<"\n";

cout<<"ATTENDANCE PERCENTAGE:";

delay(250);

cout<<per<<endl;

if(per>85)cout<<"STUDENT STATUS: ELIGIBLE\n";

else cout<<"STUDENT STATUS:NOT ELIGIBLE\n";

return 0;

}

void animate\_circle()

{

int x,y,i;

int g=DETECT,d;

initgraph(&g,&d,"C:\\Turboc3\\bgi\\");

cleardevice();//similar to clrscr

x=getmaxx()/2;//we are trying to get half the maximum horizontal width of the sceen

y=getmaxy()/2;

settextstyle(TRIPLEX\_FONT, HORIZ\_DIR, 5);

setbkcolor(rand());//we are selecting a random background color

setcolor(3);

/\*

this is going to choose any color between 0 to 4

0 stands for black

1 stands for blue

2 stands for green

3 stands for sand

4 stands for red

\*/

outtextxy(x-100,y-20,"THANKYOU");//we are specifying the x and y coordinates which is to be printed

while (!kbhit())//if the user does not hit any key in the keyboard

{

setcolor(rand());

for (int k=140;k<190;k++)

circle(x,y,k);

setcolor(rand());

for (int l=210;l<230;l++)

circle(x,y,l);

delay(200);

}

getch();

cleardevice();

closegraph();

restorecrtmode();

}

int main()

{homescreen();

textbackground(3);

rollinfo d;

d.dayset();

attendencein a;

char option;

int i=0;

clrscr();

while(1)

{

clrscr();

flushall();

textcolor(4);

d.dayset();

cout<<"press ESC......QUIT\n1.......INPUT\n2.......OUTPUT\n\n\n";

option=getch();

clrscr();

if(option==49)

{

a.input();

i=1;

}

else if(option==50)

{

attendenceout b;

b.output();

}

else if(option==27)

{animate\_circle();

break;

}

}

getch();

return 0;

}