

Certificate

This is to certify that the project entitled
Telephone Billing software
is prepared under my guidance and supervision by

NAME:-

ROLL NUMBER:

CLASS:XII E

SUBJECT: COMPUTER SCIENCE

SESSION:2014 - 2015

SUBMITTED TO :- Ms.Pallavi Sharma

SIGNATURE:-

Acknowledgment

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Vinay and Aniket

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//*****
// PROJECT TELEPHONE-BILLING

#include <stdio.h>
#include <conio.h>
#include <string.h>
#include <process.h>
#include <ctype.h>
#include <dos.h>
#include <fstream.h>

// CLASS HAVING THE RECORD OF CUSTOMER
class customer
{
    char ph[10];
    char name[30];
    char add[40];
    char type;
public :
    void append();
    void display();
    void deleter();
    void modify();
    void list();
}cust;

// MAIN FUNCTION HAVING THE MAIN MENU
void main()
{
    char ch,ch1;
    while(1)
    {
        clrscr();
        gotoxy(25,5);
        cout<<"MAHANAGAR TELEPHONE NIGAM LTD.";
        cout<<" \nD - Display a Bill";
        gotoxy(25,10);
        cout<<" L - List of customers";
        gotoxy(25,14);
        cout<<" M - New customer record";
        gotoxy(25,16);
        cout<<" Q - Quit";
        gotoxy(40,18);
        ch =getch();
        ch = toupper(ch);
        switch(ch)
        {
            case ('Q') : clrscr();

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        exit(1);
    case ('D') : cust.display();
                break;
    case ('L') : cust.list();
                break;
    case ('M') :
        ch1 = 'A' ;
        while(ch1 != 'Q')
        {
            clrscr();
            gotoxy(25,5);
            cout<<"MAHANAGAR TELEPHONE NIGAM LTD.";
            gotoxy(25,9);
            cout<<" A - Append a record";
            gotoxy(25,11);
            cout<<" D - Delete a record";
            gotoxy(25,13);
            cout<<" M - Change a record";
            gotoxy(25,15);
            cout<<" Q - Quit";
            ch1 = getch();
            ch1 = toupper(ch1);
            switch(ch1)
            {
                case ('A') : cust.append();
                            break;
                case ('D') : cust.deleter();
                            break;
                case ('M') : cust.modify();
                            break;
            }
        }
    }
}
// FUNCTION TO ADD THE CUSTOMER RECORD IN THE FILE

void customer :: append()
{
    char choice;
    fstream fp;
    fp.open("tphone.dat", ios::app);
    if (!fp)
    {
        cout<<"Unable to open FILE.";
        getch();
        return;
    }
}

```

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}
while(1)
{
    clrscr();
    gotoxy(3,3);
    cout<<"Customer Record #";
    while(1)
    {
        gotoxy(3,5);
        cout<<"Name      : ";
        gotoxy(25,5);
        gets(name);
        if(strlen(name)==0)
        {
            gotoxy(2,23);
            cout<<"Name cannot be left blank\a";
        }
        else
            break;
    }
    while(1)
    {
        gotoxy(3,6);
        cout<<"Address    : ";
        gotoxy(25,6);
        gets(add);
        if (strlen(add) != 0)
            break;
    }

    while(1)
    {
        gotoxy(3,7);
        cout<<"Assigned Ph. No. : ";
        gotoxy(25,7);
        cin>>ph;
        if (ph != 0 )
            break;
        else
        {
            gotoxy(25,7);
            clrscr();
        }
    }
    // cout<<"Enter O for Office and R for residential phone";
    gotoxy(3,8);
    cout<<"catagory ( O/R ) : ";
    cin>>type;
}

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gotoxy(4,10);
cout<<"1 : Save & Exit  2 : Save & Cont.  0 : Exit without save";
gotoxy(4,11);
cout<<"? ";
cin>>choice;
switch(choice)
{
    case ('1') :    fp.write((char *) this,sizeof(cust));
                   fp.close();
                   return;
    case ('2') :    fp.write((char *) this,sizeof(cust));
                   break;
    case ('0') :    fp.close();
                   return;
    default :      fp.close();
                   return;
}
}
}
// FUNCTION TO DISPLAY THE CUSTOMER RECORD AND CALCULATE THE BILL
void customer :: display()
{
    char p[10];
    char choice;
    int found=0;
    int no;
    float bill=0.0, tax=0.0, fine=0.0, bbill=0.0, abill=0.0;
    fstream fp;
    fp.open("tphone.dat", ios::in);
    if (!fp)
    {
        cout<<"Unable to open a file";
        getch();
        fp.close();
        return;
    }
    while(choice != '0')
    {
        clrscr();
        gotoxy(3,20);
        cout<<"Please enter the Phone No. ";
        cin>>p;
        if (!strcmp(p,"0"))
            return;
        found = 0;
        fp.seekg(0);
        while (fp.read((char *)this ,sizeof(cust)))
        {
            if (found==1)
                break;
            if (!strcmp(ph,p))

```

```

{
    clrscr();
    gotoxy(28,2);
    cout<<"MAHANAGAR TELEPHONE BILL";
    gotoxy(3,4);
    cout<<"Name      : ";
    cout<<name;
    gotoxy(35,5);
    cout<<"Address    : ";
    cout<<add;
    gotoxy(35,4);
    cout<<"Assigned Ph. No. : ";
    cout<<ph;
    gotoxy(3,5);
    cout<<"Catagory ( O/R ) : ";
    cout<<type;
    gotoxy(23,8);
    cout<<"_____";
    gotoxy(10,8);
    cout<<"No. of calls ";
    cin>>no;
        if ( no <= 150 )
            bill = 0 ;
    else
    {
        no = no - 150;
        if (toupper(type) == 'O')
            bill = no * 1.00 ;
        else
            bill = no * .80;
    }
    gotoxy(10,9);
    cout<<"Bill";
    gotoxy(70,9);
    cout<<bill;
    tax = (5*bill)/100;
        gotoxy(10,10 );
        cout<<"5% Tax";
        gotoxy(70,10);
        cout<<tax;
        gotoxy(10,11);
        cout<<"Duties";
        gotoxy(70,11);
        cout<<"100";
        int dd,mm,yy;
        struct date d; // Getting system Date
        getdate(&d);
        dd = d.da_day;

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        mm = d.da_mon;
        yy = d.da_year;
        gotoxy(10,15) ;
        cout<<"TOTAL BILL before " ;
        cout<<dd<<"/"<<mm<<"/"<<yy;
        bbill = bill+tax+100;
        gotoxy(70,15);
        cout<<bbill;
        gotoxy(10,17);
        cout<<"Late Fine";
        fine = (bbill*5)/100;
        gotoxy(70,17);
        cout<<fine;
        gotoxy(10,21);
        cout<<"TOTAL BILL after ";
        cout<<dd<<"/"<<mm<<"/"<<yy;
        abill = bbill+fine;
        gotoxy(70,21);
        cout<<abill;
        found = 1;
//         cout<<"Press a Key";
            getch();
        }
}
// cout<<"Enter 1 or 2 to cont.";
gotoxy(4,22);
cout<<"1 : Cont.  0 : Exit ";
cout<<"? ";
cin>>choice;
switch(choice)
{
    case ('1') :
        break;
    case ('0') : return;
    default : return;
}
}
fp.close();
}
// FUNCTION TO DISPLAY THE LIST OF THE CUSTOMERS
void customer :: list()
{
    clrscr();
    fstream fp;
    int r;
    fp.open("tphone.dat", ios::in);
    if (!fp)
    {
        cout<<"Unable to open";

```



```

    getch();
    fp.close();
    return;
}
gotoxy(35,2);
cout<<"List of Customers";
gotoxy(35,3);
cout<<"*****";
gotoxy(5,4);
cout<<"Name";
gotoxy(40,4);
cout<<"Phone No.";
gotoxy(65,4);
cout<<"Catagory";
gotoxy(1,5);
cout<<"*****";
r=6;
while (fp.read((char *) this, sizeof(cust)))
{
    if (r >= 21)
    {
//        cout<<"Press a key";
            getch();
            clrscr();
            gotoxy(35,2);
            cout<<"List of customers";
            gotoxy(35,3);
            cout<<"*****";
            gotoxy(5,4);
            cout<<"Name";
            gotoxy(40,4);
            cout<<"Phone No.";
            gotoxy(65,4);
            cout<<"Catagory";
            gotoxy(1,5);

cout<<"*****";
            r=6;
        }
        gotoxy(5,r);
        cout<<name;
        gotoxy(40,r);
        cout<<ph;
        gotoxy(65,r);
        if (toupper(cust.type) == 'O')
            cout<<"Office";
        else
            cout<<"Residential";
    }
}

```

```

        r++;
    }
// cout<<"Press a key";
    getch();
    fp.close();
}
// FUNCTION TO DELETE THE RECORD OF CUSTOMER FROM THE FILE

```

```

void customer :: deleter()
{
    char ch;
    char p[10];
    fstream temp,fp;
    fp.open("tphone.dat", ios::in);
    if (!fp)
    {
        cout<<"Unable to open Telephone file";
        getch();
        fp.close();
        return;
    }
    temp.open("temp.dat", ios::out);
    if (!temp)
    {
        cout<<"Unable to open Temporary file";
        getch();
        temp.close();
        return;
    }
    clrscr();
    gotoxy(5,3);
    cout<<"Enter the Phone No. to be deleted : ";
    cin>>p;
    if(!strcmp(p,"0"))
    return;
    int found=0;
    while (fp.read((char *) this, sizeof(cust)))
    {
        if (!strcmp(p,ph))
        {
            found = 1;
            gotoxy(5,5);
            cout<<"Name    "<<name;
            gotoxy(5,6);
            cout<<"Address  " <<add;
            gotoxy(5,7);
            cout<<"Catagory "<<type;
            gotoxy(6,10);

```

```

        cout<<"Delete this record (Y/N) ";
        cin>>ch;
        if (toupper(ch) == 'N')
            temp.write((char *) this,sizeof(cust));
    }
    else
        temp.write((char *) this,sizeof(cust));
    }
    fp.close();
    temp.close();
    if (toupper(ch) == 'N')
        return;
    if (!found)
    {
        cout<<"\n\nTelephone no. not found";
        getch();
        return;
    }
    fp.open("tphone.dat", ios::out);
    temp.open("temp.dat", ios::in);
    while (temp.read((char *) this, sizeof(cust)))
        fp.write((char *) this, sizeof(cust));
    fp.close();
    temp.close();
}
// FUNCTION TO MODIFY THE RECORD OF CUSTOMER FROM THE FILE
void customer :: modify()
{
    char ch;
    char p[10];
    fstream temp,fp;
    fp.open("tphone.dat", ios::in);
    if (!fp)
    {
        cout<<"Unable to open Telephone file";
        getch();
        fp.close();
        return;
    }
    temp.open("temp.dat", ios::out);
    if (!temp)
    {
        cout<<"Unable to open Temporary file";
        getch();
        temp.close();
        return;
    }
    clrscr();

```

```

gotoxy(5,3);
cout<<"Enter the Phone No. to be Modify : ";
cin>>p;
if(!strcmp(ph,"0"))
return;
int found=0;
while (fp.read((char *) this, sizeof(cust)))
{
if (!strcmp(p,ph))
{
found = 1;
gotoxy(5,5);
cout<<"Name    "<<name;
gotoxy(5,6);
cout<<"Address  " <<add;
gotoxy(5,7);
cout<<"Catagory  "<<type;
gotoxy(6,10);
cout<<"Modify this record (Y/N) ";
cin>>ch;
if (toupper(ch) == 'Y')
{
gotoxy(3,13);
cout<<"Customer Record #";
// cout<<"Enter the customer record";
while(1)
{gotoxy(3,15);
cout<<"Name      : ";
gets(name);
if (strlen(name) != 0)
break;
}
gotoxy(3,16);
cout<<"Address    : ";
gets(add);
while(1)
{gotoxy(3,17);
cout<<"Assigned Ph. No. : ";
cin>>ph;
if (ph != 0 )
break;
}
}
// cout<<"Enter O for Office and R for residential phone";
gotoxy(3,18);
cout<<"catagory ( O/R ) : ";
cin>>type;
}
}
}

```

```
temp.write((char *) this, sizeof(cust));
}
fp.close();
temp.close();
if (toupper(ch) == 'N')
return;
if (!found)
{
cout<<"\n\nTelephone no. not found";
getch();
return;
}
fp.open("tphone.dat", ios::out);
temp.open("temp.dat", ios::in);
while (temp.read((char *) this, sizeof(cust)))
fp.write((char *) this, sizeof(cust));
fp.close();
temp.close(); }
```

/*OUTPUT

MAHANAGAR TELEPHONE NIGAM LTD.

D - Display a Bill

L - List of customers

M - New customer record

Q - Quit

M

MAHANAGAR TELEPHONE NIGAM LTD.

A - Append a record

D - Delete a record

M - Change a record

Q - Quit

A

Customer Record #

Name : SURAJA

Address : 3/B DHUALA KUAN

Assigned Ph. No. : 22222222

catagory (O/R) : R

1 : Save & Exit 2 : Save & Cont. 0 : Exit without save

? 1

MAHANAGAR TELEPHONE NIGAM LTD.

A - Append a record

D - Delete a record

M - Change a record

Q - Quit

Q

D - Display a Bill

L - List of customers

M - New customer record

Q - Quit

L

List of

Customers

Name	Phone No.	Catagory
1	3242342	Office
ASHOKA	123455	Office
ASHIMA	333333	Office
SURAJA	2222222	Residential

MAHANAGAR TELEPHONE NIGAM LTD.

D - Display a Bill

L - List of customers

M - New customer record

Q - Quit

D

Please enter the Phone no: 333333

MAHANAGAR TELEPHONE BILL

Name : ASHIMA Assigned Ph. No. : 333333
Category (O/R) : O Address : 34/56 B RAJOURI GARDEN

No. of calls 230_____	
Bill	80
5% Tax	4
Duties	100
TOTAL BILL before 7/2/2015	184
Late Fine	9.2
TOTAL BILL after 7/2/2015	193.2

1 : Cont. 0 : Exit ?

0

*/