Student Name: Arjun Warty Roll Number: [redacted] Class: [redacted]

COMPUTER PROJECT

ON

T & G BUS TRANSPORT SERVICE SOFTWARE

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Submission Date: February 06, 2009

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ACKNOWLEDGEMENT

I take this opportunity to express my acknowledgement and sincere gratitude to [redacted], Computer Teacher, for his valuable suggestions and able guidance required for this project. I also take this opportunity to express my thanks to my classmates for helping me in successful completion of this project in stipulated time.

ARJUN WARTY

INTRODUCTION

The project entitled “T & G BUS TRANSPORT SERVICE” has made an effort to computerize the operations of “BUS TRASPORT SERVICE”. The programming tool used is C++. There were a lot of problems faced in the manual system, which I have tried to minimize by computerizing system, by using the OOP’s concepts and FILE HANDLING concepts which help to store the data permanently, which is retrievable any time in future. The system works in a very user friendly environment, however the user needs to be computer literate to operate on the programs. It also ensures that no unauthorized person has the access to the system by applying the password. The system will help the user in performing the major operations with lot of ease: -

I. Searching for the information.
II. Updating the information.
III. Removing the information.
IV. Generating various reports (results).

LIMITATIONS OF THE SYSTEM AND FUTURE WORK

1. Only the two people can have access the system.
2. The number of records which can be added will be of limited size of the memory.
3. Corrective measure would have been taken when error messages would be shown.
4. Searches could be only made using the product code as the primary key.
5. Deletion of records can only be done by using the item code as the primary key.
6. Input would be done by keyboard and mouse only. This program would thus be unable to support any other technologies like light pens and bar code readers.
7. It is only valid for 1 campus of the several campuses and by few minor changes we can merge all the 3 campus details.

ABOUT THE PROGRAMMING TOOLS USED (C++)

C++ is a general programming language; its core application domain in system programming is in general sense. In addition C++ is successfully used in many application areas that are not covered by this level.

C++ is a superset of C programming language. Data abstraction and encapsulation are derived from C language. To make C++ more useful and enjoyable BJARNE STROUOSTRUP, developer of this language included the concepts like Inheritance, polymorphism, data hiding etc. C++ retains the abilities of C language with the fundamental objects of the hardware's (bits, bytes etc).

C++ uses most of the OOP's concept and hence it's the closest we can get to the real world. The key concept in C++ is user defined type and provides data hiding, guaranteed initialization of data, implicit type conversion for user defined type, dynamic typing, user controlled memory management and mechanics for overloading operators.

ANALYSIS

WORKING OF THE EXISTING SYSTEM

The main headquarters of T & G BUS TRANSPORT SERVICE is in GIIS Queenstown in Singapore. It looks after 3 campuses of GIIS. This is about the Queenstown campus only. Its major working hours are from 7 to 10 in the morning and 2 to 5 in the evening. It's very hard to manage the busses, their drivers and children for the particular areas.

They mainly use the primitive ways of pen and pencils and computer documents in which the operations mentioned on page 4. They take hours to find each and every record to be updated; they also use a lot of paper which is not environment friendly; they also require lot of manpower since this work is impossible for a single person to manage as there are hundreds of student and 10 to 15 buses at least.

This work load does not allow a lot of free time, it also creates a lot of error in updating the record, searching for records etc. Since it requires many people to work the salaries of the people are reduced and distributed accordingly. This results in the reduction of profit.

There are many more problems faced personally and professionally due to pressure of the job and many other reasons.

INPUTS AND OUTPUTS

Note: -The inputs given below are important ones and there are many other basic inputs too.

In the present software we have to input the following:-

1. Input of the basic details of the bus, student and merged details in the main menu in a particular format.
2. The total number of busses used and for which area
3. The fees to be paid for a particular area.

OPERATION TO BE PERFORMED

The person should be able to perform the following operations with ease and should be able to link the bus details and the student details together.

1. Adding records to the file.
2. Showing the record in the file.
3. Searching for records in the file.
4. Updating the records in the file.
5. Deleting the records in the file.

Note:-The two files bus detail and student detail contain the given operations where as the File main is a combination of the two files student detail and bus detail.

BENEFITS OF THE NEW SYSTEM

1. The new system would give the direct reference to the student's details and driver's details increasing the user friendliness of the system.
2. It would easily detect and change the details in all the places with a change at one place i.e. change in student detail will reflect in main detail also.
3. The new system will have the password access, thus ensuring the security of the system.
4. The system will show wrong details of the bus or student if the inputs are wrong but they can be changed using update function.

Note:-There are many other benefits which are practical based and are hard to discuss example time management, amount of fees etc.

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DETAILS OF THE PROGRAM:-

HEADER FILES:-

1. #include<iostream.h>.
2. #include<conio.h>.
3. #include<fstream.h>.
4. #include<string.h>.
5. #include<stdio.h>.
6. #include<dos.h>.
7. #include<stdlib.h>.
8. #include<ctype.h>.
9. #include<iomanip.h>.

CLASSES, FILES AND FUNCTIONS:-

The classes are:-

1. Studet.
2. Busdet.

The function are:-

1. Class studet
   a. getd () --> To input the student details.
   b. putd () --> To show the inputted details of the student.
2. Class busdet
   a. getd () --> To input the bus and drivers details.
   b. putd () --> To show the inputted details.
3. void main

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DETAILS OF THE PROCEDURE

FILES	*METHOD NAME*	*DESCRIPTION*	*PARAMETERS*	*RETURN VALUE*
Student.dat and Bus.dat	Add records()	To add records in the file.	Nil	Nil
	Show records()	To show the records in the file.	Nil	Nil
	Remove records()	To remove record in the file.	Variable of char (Roll no, Bus no)	Nil
	Update records()	To update the records in the file.	Variable of char (Roll no, Bus no)	Nil
	Search records()	To search for records in the file.	Variable of char (Roll no, Bus no)	Integer
Route.dat	Create route()	To create a route based on the details in stud.dat and bus.dat	Nil	Nil
	Show route()	To show the routes and the details of the bus	Nil	Nil

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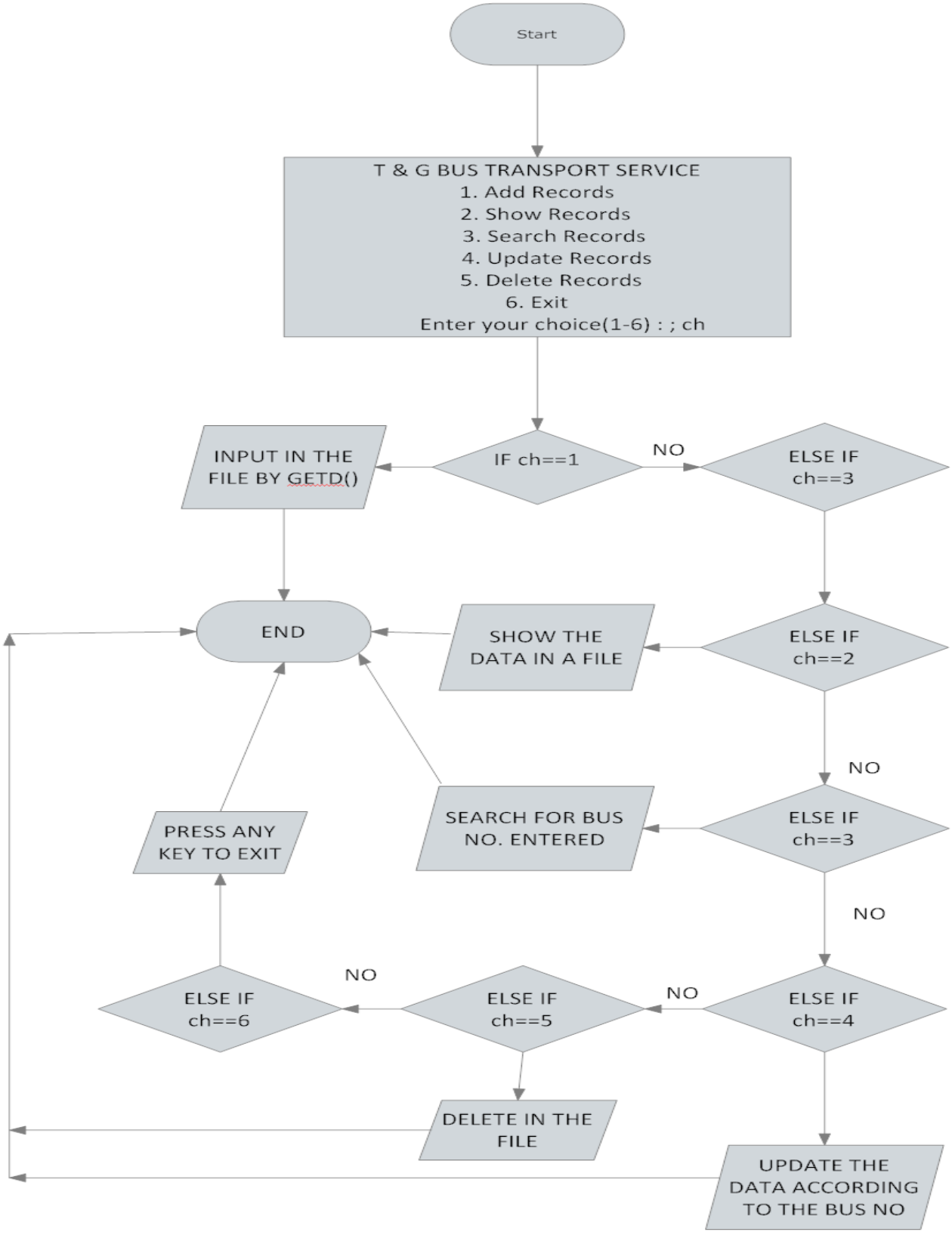
1. **FOWCHARTS FOR PROGRAM BUS DETAILS.**



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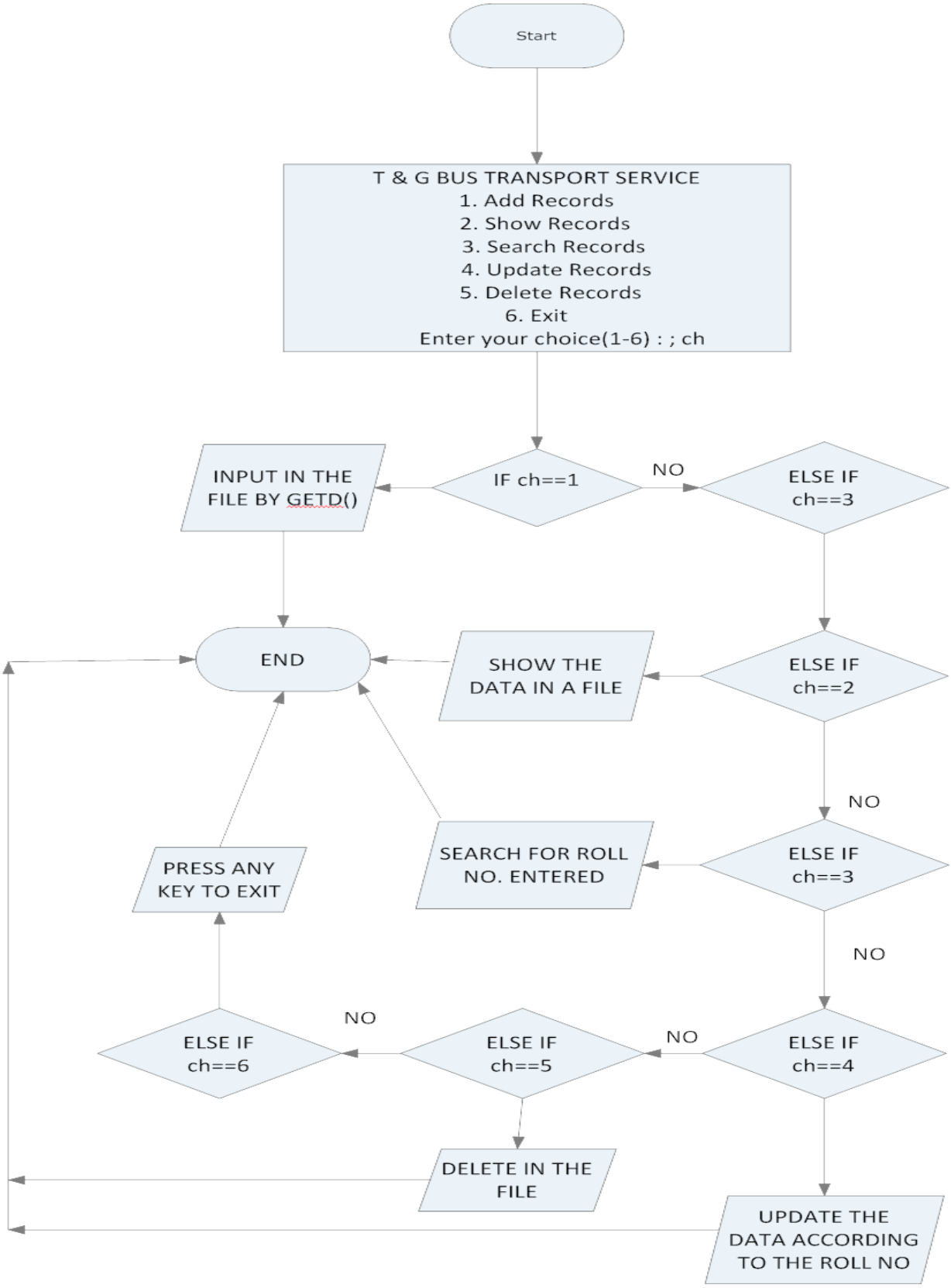
1. FLOWCHARTS FOR PROGRAM STUDENT DETAILS.



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PROGRAM

1. PROGRAM FOR STUDENT DETAILS

```
#include<fstream.h>
#include<dos.h>
#include<conio.h>
#include<stdio.h>
#include<string.h>
#include<stdlib.h>
int search(int);
void update(int);
void del(int);
int i=6;
class studet
{
public :
char Name[100];
char Area[100];
int RNo;
long int PhNo;
char Time[10];
float Fee;
        void getd()
{
textcolor(LIGHTRED);
cprintf("\n Enter the Students Roll No.:");
cin>>RNo;
cprintf("\n Enter the Students name :");
gets(Name);
cprintf("\n Enter the Area :");
gets(Area);
cprintf("\n Enter the Pick Up Time :");
gets(Time);
cprintf("\n Enter the Studens Contact Number");
cin>>PhNo;
cprintf("\n Enter the Students Fees");

          cin>>Fee;
```

```
textcolor(WHITE);
}
        void putd()
{
gotoxy(4,i);
cout<<RNo;
gotoxy(14,i);
cout<<Name;
gotoxy(38,i);
cout<<Area;
gotoxy(55,i);
cout<<Time;
gotoxy(64,i);
cout<<PhNo;
gotoxy(76,i);
cout<<Fee;
i++;
}
}s1;
void main()
{
char answer='y';
while(answer=='y')
{
clrscr();
gotoxy(28,2);
cout<<"T & G BUS TRANSPORT SERVICE";
int ch;
gotoxy(28,5);
textcolor(LIGHTRED);
cprintf("1. Add Records");
gotoxy(28,6);
textcolor(LIGHTCYAN);
cprintf("2. Show Records");
gotoxy(28,7);
textcolor(LIGHTBLUE);

cprintf("3. Search Records");
gotoxy(28,8);
textcolor(LIGHTGREEN);
```

```
cprintf("4. Update Records");
gotoxy(28,9);
textcolor(LIGHTMAGENTA);
cprintf("5. Delete Records");
gotoxy(28,10);
textcolor(LIGHTGRAY);
cprintf("6. Exit");
textcolor(WHITE);
cout<<"\n\t\t\t Enter your choice(1-6) : ";
cin>>ch;
clrscr();
if(ch==1)
{
gotoxy(28,2);
cout<<"T & G BUS TRANSPORT SERVICE"<<endl;
fstream f1;
f1.open("stud.dat",ios::app);
char ans='y';
while(ans=='y')
{
s1.getd();
f1.write((char*)&s1,sizeof(s1));
textcolor(YELLOW);
cout<<"\n\t\t\t";
cprintf("S A V I N G.....W A I T");
delay(2000);

cout<<"\n\t\t\t";
cprintf("S A V E D    S U C C E S S F U L L Y");
cout<<"\n\nDo you wish to add more records(y/n)"<<endl;
cin>>ans;
}
textcolor(WHITE);
f1.close();

}
else if(ch==2)
{
gotoxy(28,2);
cout<<"T & G BUS TRANSPORT SERVICE"<<endl;
```

```
fstream f2;
f2.open("stud.dat",ios::in);
cout<<"\--------------------------------------------------------------------------------";
textcolor(CYAN);
cout<<"\n";
gotoxy(1,4);
cprintf("Roll No.");
gotoxy(14,4);
cprintf("Students Name");
gotoxy(38,4);
cprintf("Area");
gotoxy(56,4);
cprintf("Time");
gotoxy(64,4);
cprintf("Ph.No.");
gotoxy(75,4);
cprintf("Fees");
textcolor(WHITE);
cout<<"\n--------------------------------------------------------------------------------"<<endl;
while(f2.read((char*)&s1,sizeof(s1)))
{
s1.putd();
}
cout<<"\n--------------------------------------------------------------------------------";
f2.close();
}
else if(ch==3)
{
gotoxy(28,2);
cout<<"T & G BUS TRANSPORT SERVICE";
int b;
gotoxy(2,5);

cout<<" Enter the Roll No. to be searched : ";
cin>>b;
int x=search(b);
if(x==0)
{
gotoxy(25,6);
cprintf("The Roll No. does not exist");
```

```
}
textcolor(WHITE);
}
else if(ch==4)
{
gotoxy(28,2);
cout<<"T & G BUS TRANSPORT SERVICE";
int c;
cout<<"\n\t\t\t Enter the Roll No to be searched : ";
cin>>c;
update(c);
textcolor(WHITE);
}

else if(ch==5)
{
gotoxy(28,2);
cout<<"T & G BUS TRANSPORT SERVICE";
int r;
cout<<"\n\t\t\t Enter the Roll No. to be removed : ";
cin>>r;
del(r);
textcolor(WHITE);
}
else if(ch==6)
{
gotoxy(28,2);
cout<<"T & G BUS TRANSPORT SERVICE";
cout<<"\n\n\t\t\t";
textcolor(LIGHTRED+BLINK);

cprintf("Press any key to Exit...");
getch();
exit(0);
}
else
{
cout<<"\n\t\t\t Invalid Choice";
}
cout<<"\n\n\n\t\t\t Wish to go back to the main menu : "<<endl;
```

```
cin>>answer;
}
getch();
}

int search(int b)   //TO SEARCH IN THE FILE
{
fstream f1;
int h=0;
f1.open("stud.dat",ios::in);
textcolor(YELLOW);
cprintf("S C A N N I N G.....W A I T");
cout<<endl;
delay(1000);
while(f1.read((char*)&s1,sizeof(s1)))
{
if(s1.RNo == b)
{
textcolor(GREEN+BLINK);
cprintf("Record Found.....");
cout<<"\nThe Details are : \n\n";
textcolor(WHITE);
cprintf("Students Roll No.      ---->");
cout<<s1.RNo<<endl;
cprintf("Students name         ---->");
cout<<s1.Name<<endl;
cprintf("Area                  ---->");
cout<<s1.Area<<endl;

cprintf("Pick Up Time          ---->");
cout<<s1.Time<<endl;
cprintf("Studens Contact Number ---->");
cout<<s1.PhNo<<endl;
cprintf("Students Fees         ---->");
cout<<s1.Fee<<endl;
return 1;
}
}
f1.close();
return 0;
```

```
}

void update(int c)  //TO UPDATE IN THE FILE
{
int p=0;
fstream f5,f4;
f5.open("stud.dat",ios::in);
if(!f5)
cout<<"\n\t\t\t file cannot be opened";
textcolor(YELLOW);
cprintf("S C A N N I N G.....W A I T");
delay(1000);
f4.open("temp.dat",ios::out);
while(f5.read((char*)&s1,sizeof(s1)))
{
if(s1.RNo==c)
{
p=1;
cout<<"\n\t\t\t";
textcolor(GREEN+BLINK);
cprintf("Record Found...");
cout<<"\n\t\t\t What do you wish to update : ";
cout<<"\n\t\t\t 1. Time.:\n\t\t\t 2. Contact No : \n\t\t\t 3. Area \n\t\t\t 4.Fees"<<endl;
int upch;
cin>>upch;
if(upch==1)

{
cout<<"\n\t\t\tEnter the new Time for :  ";
cin>>s1.Time;
}
else if(upch==2)
{
cout<<"\n\t\t\t Enter the new Contact No : ";
cin>>s1.PhNo;
}
else if(upch==3)
{
cout<<"\n\t\t\t Enter the new Area : ";
cin>>s1.Area;
```

```
}
else if(upch==4)
{
cout<<"\n\t\t\t Enter the new Fees : ";
cin>>s1.Fee;
}

f4.write((char*)&s1,sizeof(s1));
}
else
{
f4.write((char*)&s1,sizeof(s1));
}
}
if(p==0)
{
cout<<"\n\t\t\t";
textcolor(RED + BLINK);
cprintf("The Record does not Exist ");
}
else
{
textcolor(GREEN + BLINK);
cprintf("U P D A T E D   S U C C E S S F U L L Y");

delay(1000);
}
f5.close();
f4.close();
remove("stud.dat");
rename("temp.dat","stud.dat");
}
void del(int b)  //TO DELETE IN THE FILE
{
fstream f6,f7;
f6.open("stud.dat",ios::in);
f7.open("temp.dat",ios::out);
int h=0;
textcolor(YELLOW);
cprintf("S C A N N I N G.....W A I T");
```

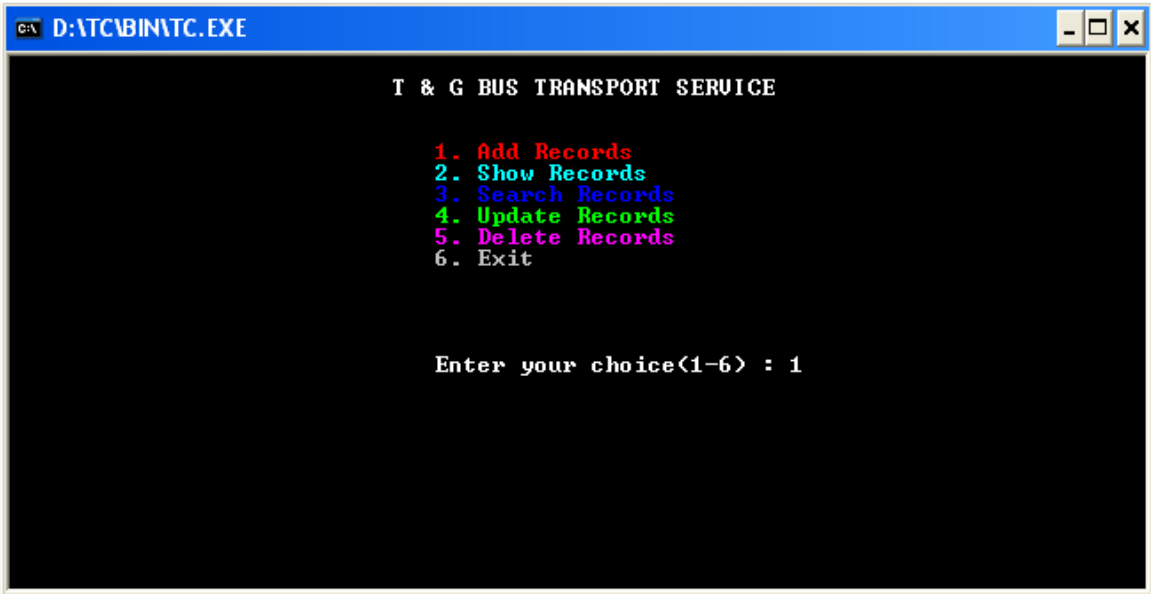
```
delay(1000);
while(f6.read((char*)&s1,sizeof(s1)))
{
if(s1.RNo != b)
{
f7.write((char*)&s1,sizeof(s1));
}
else
{
h=1;
}
}
if(h==0)
{
cout<<"\n\t\t\t";
textcolor(RED + BLINK);
cprintf("The Record does not Exist ");
}
else
{
cout<<"\n\t\t\t";
textcolor(GREEN + BLINK);

cprintf("Record deleted successfully....");
}
f6.close();
f7.close();
remove("stud.dat");
rename("temp.dat","stud.dat");
}
```

Student Name: Arjun Warty Roll Number: [redacted] Class: [redacted]

OUTPUT:

MAIN MENU



ADDING RECORDS

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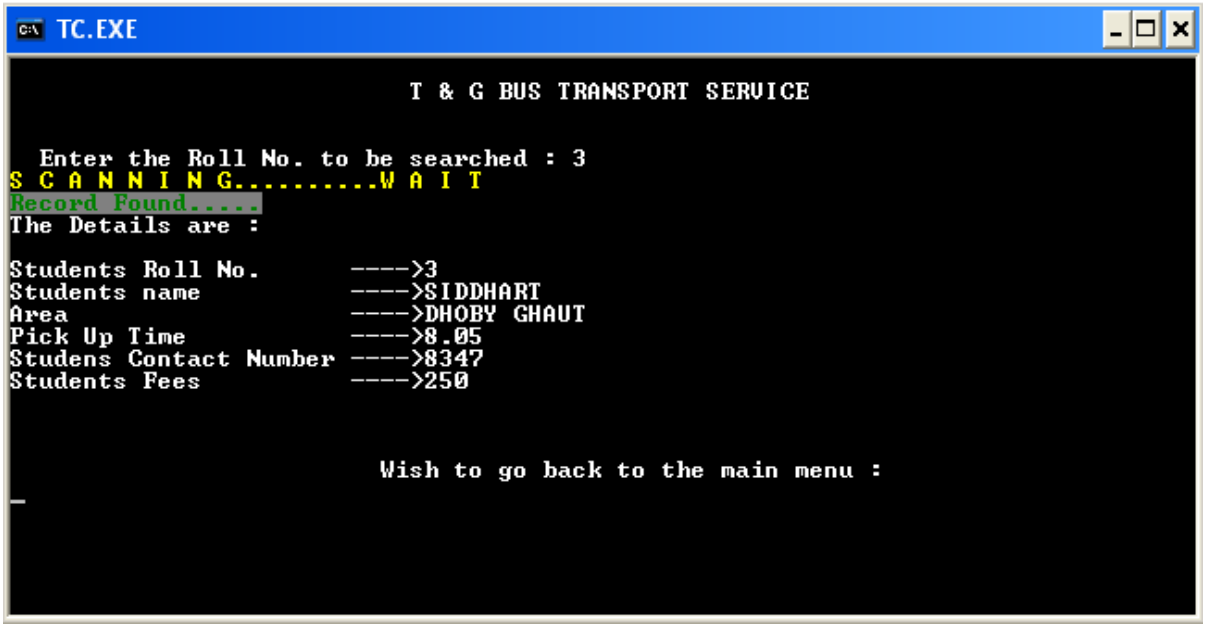
SHOW FUNCTIONS

SEARCH FUNCTION



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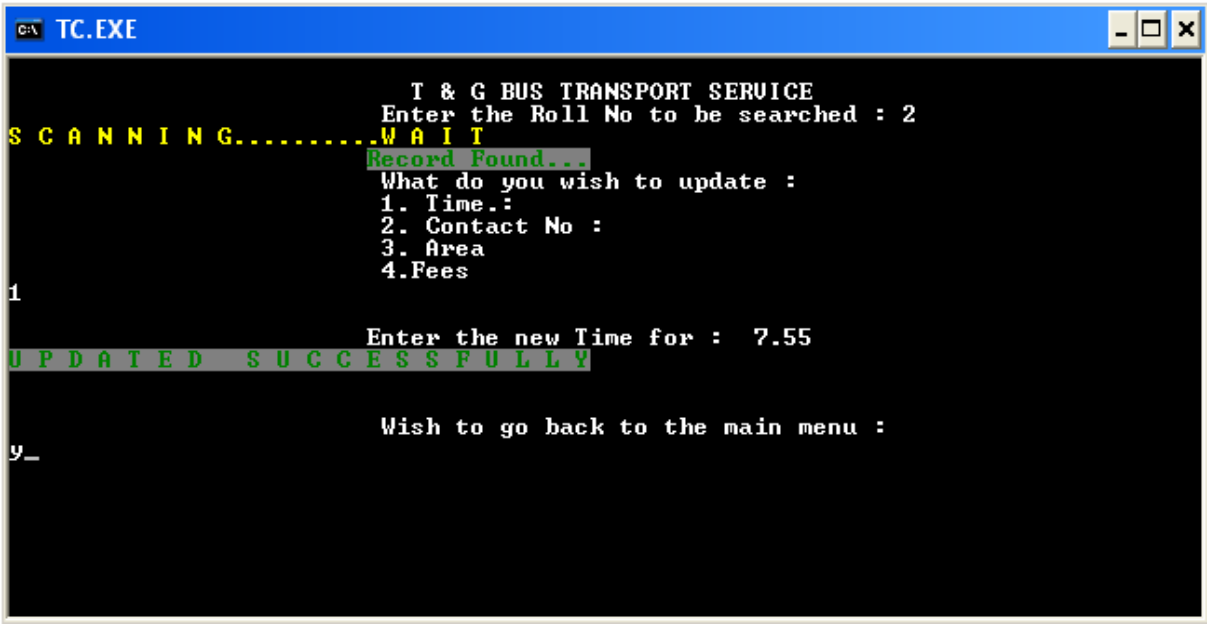
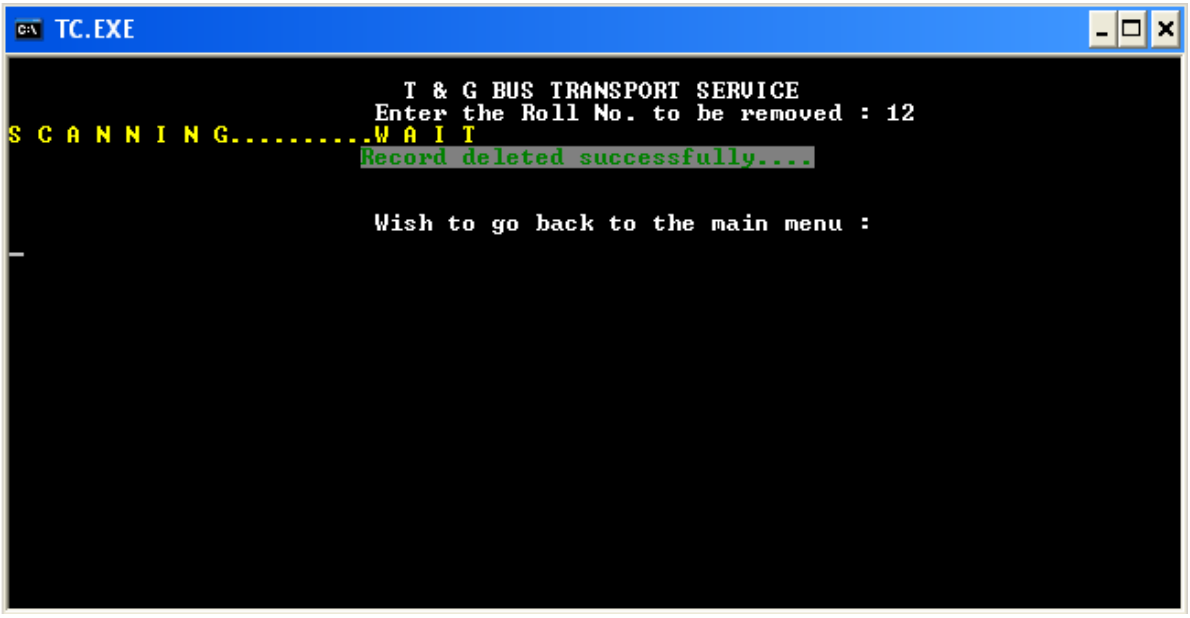
UPDATE FUNCTION



DELETING FUNCTION



2. PROGRAM FOR BUS DETAILS

```
#include<fstream.h>
#include<dos.h>
#include<conio.h>
#include<stdio.h>
#include<string.h>
#include<stdlib.h>
int search(int);
void update(char[]);
void del(int);
int i=6;
class busdet
{
public :
int BusNo;
char DName[20];
char Area[20];
int Cap;
long int DPhNo;
int srno;
int total;
void getd()
{
clrscr();
textcolor(CYAN);
cprintf("\n Enter the Bus No..");
cin>>BusNo;
cprintf("\n Enter the Drivers name",CYAN);
gets(DName);
cprintf("\n Enter the Drivers Contact Number",CYAN);
cin>>DPhNo;
cprintf("\n Enter the Area for the bus",CYAN);
gets(Area);
cprintf("\n Enter the Capacity of the bus",CYAN);
cin>>Cap;
textcolor(WHITE);

getch();
}
```

```
void putd()
{
cout<<"\n ";
gotoxy(5,i);
cout<<BusNo;
gotoxy(18,i);
cout<<DName;
gotoxy(37,i);
cout<<DPhNo;
gotoxy(55,i);
cout<<Area;
gotoxy(69,i);
cout<<Cap;
i++;
}

}s1;

class mains
{
public :
int drBusNo;
char drName[20];
char stuname[20];
long int stuphno;
char stutime[10];
float stufee;
char Area[20];
int Cap;
long int drPhNo;
void putd()
{
name\tStudent Ph.No.\tCapacity";
cout<<"\nEnter the BusNo :" <<drBusNo;
cout<<"\nEnter the Driver Name : "<<drName;

cout<<"\nEnter the Area : "<<Area;
cout<<"\nEnter the Driver PhNo :" <<drPhNo;
cout<<"\nEnter the Student Name : "<<stuname;
cout<<"\nEnter the Student PhNo : "<<stuphno;
```

```
cout<<"\nEnter the Capcity : "<<Cap;
cout<<"\nEnter the Student fees : "<<stufee;
cout<<"\nEnter the Pick up Time : "<<stutime;
}

}m1;

class studet
{
public :
char Name[20];
char Area[20];
int RNo;
long int PhNo;
char Time[10];
float Fee;
}stu1;
void createbus()
{
fstream f1,f2,f3;
f1.open("bus.dat",ios::in);
f2.open("stud.dat",ios::in);
f3.open("route.dat",ios::out);
studet s2[20];
busdet b2[20];
int i=1;
while(f2.read((char*)&stu1,sizeof(stu1)))
{
s2[i] = stu1;
i++;
}
f2.close();
int j=1;

while(f1.read((char*)&s1,sizeof(s1)))
{
b2[j] = s1;
j++;
}
for(int x=1;x<=i-1;x++)
```

```
{
for(int y=1;y<=j-1;y++)
{
if(strcmp(b2[x].Area,s2[y].Area)==0)
{
m1.drBusNo=b2[x].BusNo;
strcpy(m1.drName,b2[x].DName);
strcpy(m1.stuname,s2[y].Name);
strcpy(m1.Area,b2[x].Area);
m1.Cap=b2[x].Cap;
m1.drPhNo=b2[x].DPhNo;
m1.stuphno=s2[y].PhNo;
m1.stufee=s2[y].Fee;
strcpy(m1.stutime,s2[y].Time);
f3.write((char*)&m1,sizeof(m1));
}
}
}
f1.close();
f3.close();
}
void findroute()   //TO CREATE THE ROUTE FOR A FOLDER
{
int z=0;
char rou[20];
cout<<"\n Enter the route ";
cin>>rou;
fstream f9;
f9.open("route.dat",ios::in);
cout<<"\n \t\t\t DETAILS OF BUS ROUTE :- "<<strupr(rou);
cout<<"\n\tNAME\t    PHONE\t    PICK TIME\t";

cout<<"\n\n-----------------------------------------------------";
mains m2;
while(f9.read((char*)&m1,sizeof(m1)))
{
if(strcmpi(m1.Area,rou)==0)
{
m2=m1;
cout<<"\n\t  "<<m1.stuname<<"\t      "<<m1.stuphno<<"\t     "<<m1.stutime;
```

```
z++;
}
}
cout<<"\n\n-----------------------------------------------------------";
cout<<"\n\tBUSNO :"<<m2.drBusNo<<"\tDRIVER NAME :
"<<strupr(m2.drName)<<"\tDRIVER PH : "<<m2.drPhNo;
cout<<"\n\tSTRENGTH : "<<z<<"\tCAPACITY : "<<m2.Cap;
f9.close();
}
void main()
{
gotoxy(20,2);
cout<<"T & G BUS TRANSPORT SERVICE";
gotoxy(25,3);
textcolor(GREEN);
cprintf(" 1. THE BUS DETAILS");
gotoxy(25,4);
textcolor(BLUE);
cprintf(" 2. THE ROUTE DETAILS");
int copt;
cout<<"Please enter your choice";
cin>>copt;
if(copt==2)
{
int opt;
gotoxy(28,4);
textcolor(MAGENTA);
cprintf(" 1. TO CREATE A BUS FILE");
gotoxy(28,5);

textcolor(LIGHTCYAN);
cprintf(" 2. TO FIND THE ROUTE OF THE BUS");
cout<<"Enter your choice";
cin>>opt;
clrscr()
if(opt==1)
{
createbus();
}
else if(opt==2)
```

```
{
findroute();
}
}
else if(copt==1)
{
char answer='y';
while(answer=='y')
{
clrscr();
int ch;
gotoxy(30,5);textcolor(LIGHTRED);
cprintf(" 1. Add Records");
gotoxy(30,6);
textcolor(LIGHTCYAN);
cprintf(" 2. Show Records");
gotoxy(30,7);
textcolor(LIGHTBLUE);
cprintf(" 3. Search Records");
gotoxy(30,8);
textcolor(LIGHTGREEN);
cprintf(" 4. Update Records");
gotoxy(30,9);
textcolor(LIGHTMAGENTA);
cprintf(" 5. Delete Records");
gotoxy(30,10);
textcolor(LIGHTGRAY);

gotoxy(30,10);
cprintf(" 6. Exit");
textcolor(WHITE);
gotoxy(30,15);
cprintf(" Enter your choice(1-6) : ");
cin>>ch;
textcolor(WHITE);
clrscr();
if(ch==1)
{
fstream f1;
f1.open("bus.dat",ios::app);
```

```
char ans='y';
while(ans=='y')
{
s1.getd();
f1.write((char*)&s1,sizeof(s1));
cout<<"\n\t\t\t";
textcolor(YELLOW+BLINK);
cprintf("S A V I N G.....W A I T");
delay(1000);
cout<<"\n\t\t\t";
textcolor(LIGHTGREEN);
cprintf("S A V E D    S U C C E S S F U L L Y");
cout<<"\n";
textcolor(LIGHTRED);
cprintf("Do you wish to add more records(y/n)");
cin>>ans;
}
textcolor(WHITE);
f1.close();
}
else if(ch==2)
{
fstream f2;
fstream f10;
f10.open("buscopy.dat",ios::out);

f2.open("bus.dat",ios::in);
cout<<"--------------------------------------------------------------------------------";
textbackground(BLACK);
textcolor(LIGHTGREEN);
gotoxy(3,2);
cprintf("BusNo");
gotoxy(14,2);
cprintf("Driver Name");
gotoxy(32,2);
cprintf("Drivers Ph.No.");
gotoxy(54,2);
cprintf("Area");
gotoxy(66,2);
cprintf("Capacity");
```

```
cout<<"\n--------------------------------------------------------------------------------";
while(f2.read((char*)&s1,sizeof(s1)))
{
s1.putd();
}
cout<<"\n--------------------------------------------------------------------------------";
i=6;
f2.close();
}
else if(ch==3)
{
int b;
textcolor(LIGHTMAGENTA);
cout<<"\n\t\t\t";
cprintf("Enter the Bus No. to be searched : ");
cin>>b;
int x=search(b);
if(x==0)
{
cout<<"\n\t\t\t";
textcolor(RED+BLINK);
delay(500);
cprintf("The Bus No. does not exist");

}
textcolor(WHITE);
}
else if(ch==4)
{
char name1[20];
textcolor(LIGHTMAGENTA);
cout<<"\n\t\t\t";
cprintf("Enter the name to be searched : ");
cin>>name1;
update(name1);
textcolor(WHITE);
}
else if(ch==5)
{
int b;
```

```
textcolor(LIGHTMAGENTA);
cout<<"\n\t\t\t";
cprintf("Enter the Bus no. to be removed : ");
cin>>b;
del(b);
textcolor(WHITE);
}
else if(ch==6)
{
cout<<"\n\t\t\tPress any key to Exit...";
getch();
exit(0);
}
else
{
cout<<"\n\t\t\t Invalid Choice";
}
textcolor(LIGHTGRAY);
cout<<"\n\n\n\t\t\t";
cprintf("Wish to go back to the main menu : ");
cout<<endl;

cin>>answer;
}
}
getch();
}
int search(int b)   //TO SEARCH THE DATA IN THE FILE
{
fstream f1;
int h=0;
f1.open("bus.dat",ios::in);
textcolor(YELLOW+BLINK);
cprintf("S C A N N I N G.....W A I T");
delay(1000);
while(f1.read((char*)&s1,sizeof(s1)))
{
if(s1.BusNo==b)
{
cout<<"\n\t\t\t";
```

```
textcolor(GREEN+BLINK);
cprintf("Record Found.....");
cout<<"\n\t\t\tThe Details are : \n";
s1.putd();
return 1;
}
}
f1.close();
return 0;
}
void update(char name1[20])    // TO UPDATE THE DATA IN THE FILE
{
int p=0;
fstream f5,f4;
f5.open("bus.dat",ios::in);
if(!f5)
cout<<"\n\t\t\t file cannot be opened";
textcolor(YELLOW+BLINK);
cprintf("S C A N N I N G.....W A I T");

delay(1000);
f4.open("temp.dat",ios::out);
while(f5.read((char*)&s1,sizeof(s1)))
{     cout<<s1.DName<<"\nSTRLEN = "<<strlen(s1.DName);
if(strcmpi(s1.DName,name1)==0)
{
p=1;
cout<<"\n\t\t\t";
textcolor(GREEN);
cprintf("Record Found...");
cout<<"\n\t\t\t What do you wish to update : ";
cout<<"\n\t\t\t 1. Bus No.:\n\t\t\t 2. Capacity: \n\t\t\t 3. Area"<<endl;
int upch;
cin>>upch;
if(upch==1)
{
cout<<"\n\t\t\tEnter the new Bus No. for :  "<<s1.DName;
cin>>s1.BusNo;
}
else if(upch==2)
```

```
{
cout<<"\n\t\t\t Enter the new Capacity : ";
cin>>s1.Cap;
}
else if(upch==3)
{
cout<<"\n\t\t\t Enter the new Area : ";
gets(s1.Area);
}
f4.write((char*)&s1,sizeof(s1));
}
else
{
f4.write((char*)&s1,sizeof(s1));
}
}
if(p==0)

{
cout<<"\n\t\t\t";
textcolor(RED + BLINK);
cprintf("The Record does not Exist ");
}
else
{
textcolor(YELLOW);
cprintf("U P D A T E D   S U C C E S S F U L L Y");
delay(1000);
}
f5.close();
f4.close();
remove("bus.dat");
rename("temp.dat","bus.dat");
}
void del(int b)    // TO DELETE THE DATA FROM THE FILE
{
fstream f6,f7;
f6.open("bus.dat",ios::in);
f7.open("temp.dat",ios::out);
int h=0;
```

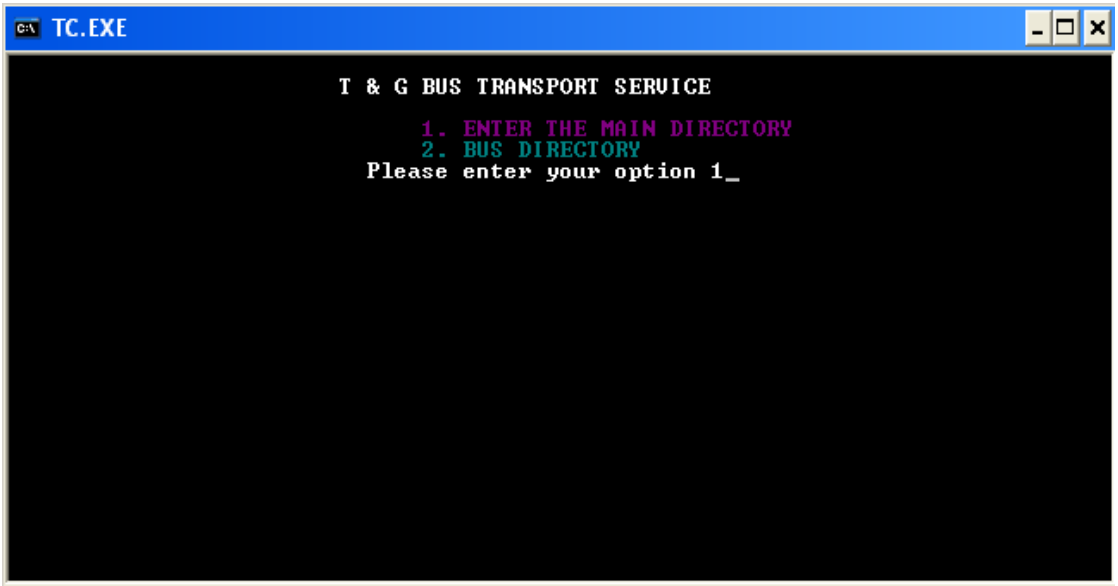
```
textcolor(YELLOW+BLINK);
cprintf("S C A N N I N G.....W A I T");
delay(1000);
while(f6.read((char*)&s1,sizeof(s1)))
{
if(s1.BusNo!=b)
{
f7.write((char*)&s1,sizeof(s1));
}
else
{
h=1;
}
}
if(h==0)

{
cout<<"\n\t\t\t";
textcolor(RED + BLINK);
cprintf("The Record does not Exist ");
}
else
{
cout<<"\n\t\t\t";
textcolor(GREEN);
cprintf("Record deleted successfully....");
}
f6.close();
f7.close();
remove("bus.dat");
rename("temp.dat","bus.dat");
}
```

Student Name: Arjun Warty Roll Number: [redacted] Class: [redacted]

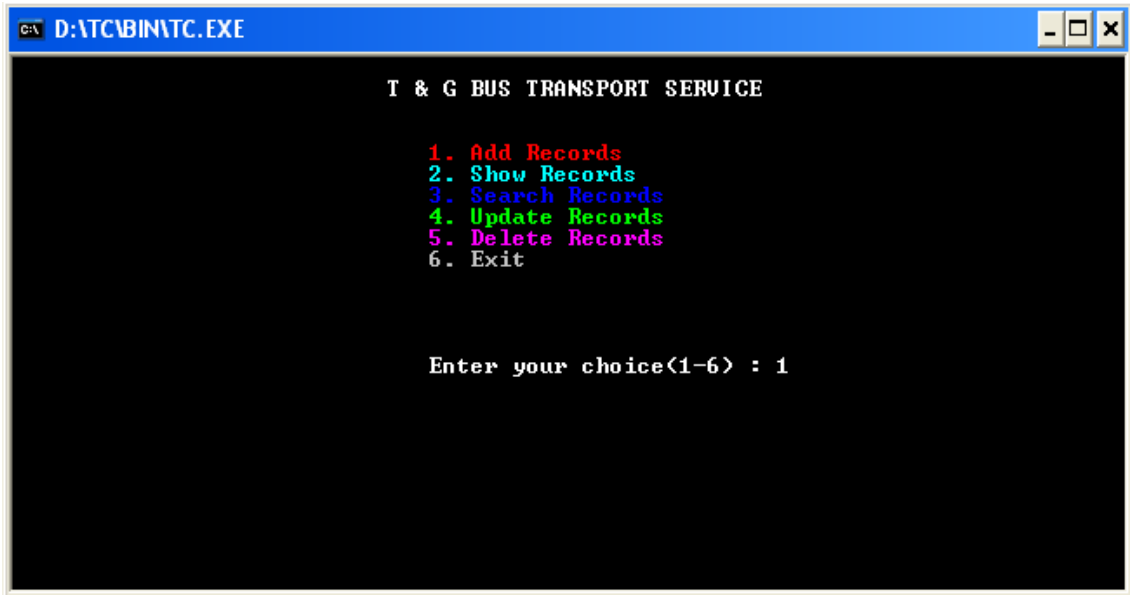
OUTPUT:

MAIN MENU

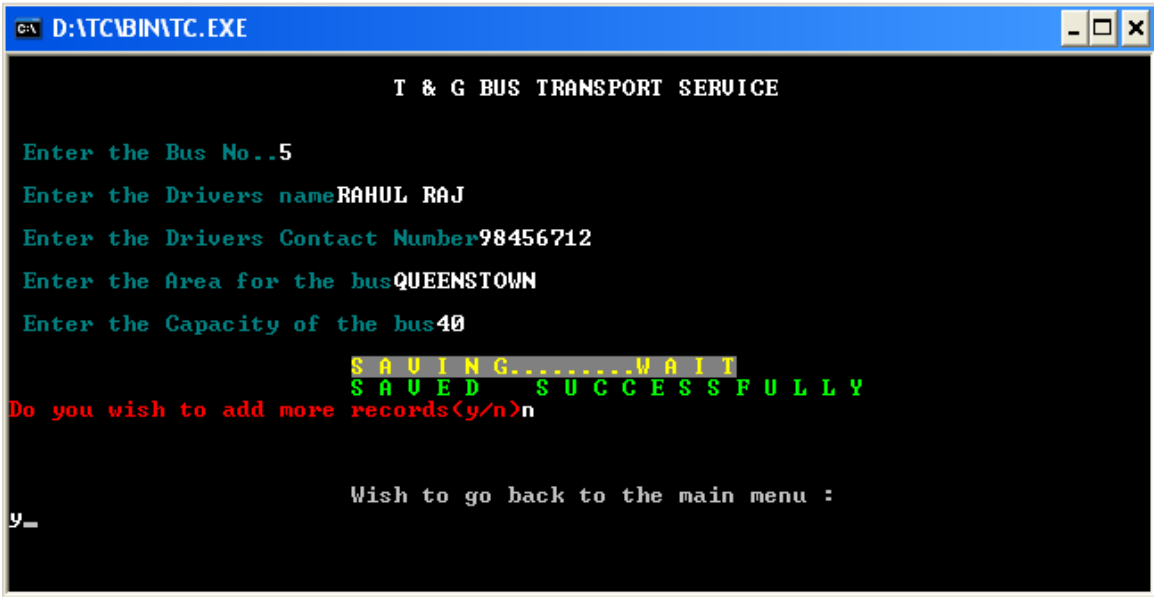


Student Name: Arjun Warty Roll Number: [redacted] Class: [redacted]

BUS DETAILS

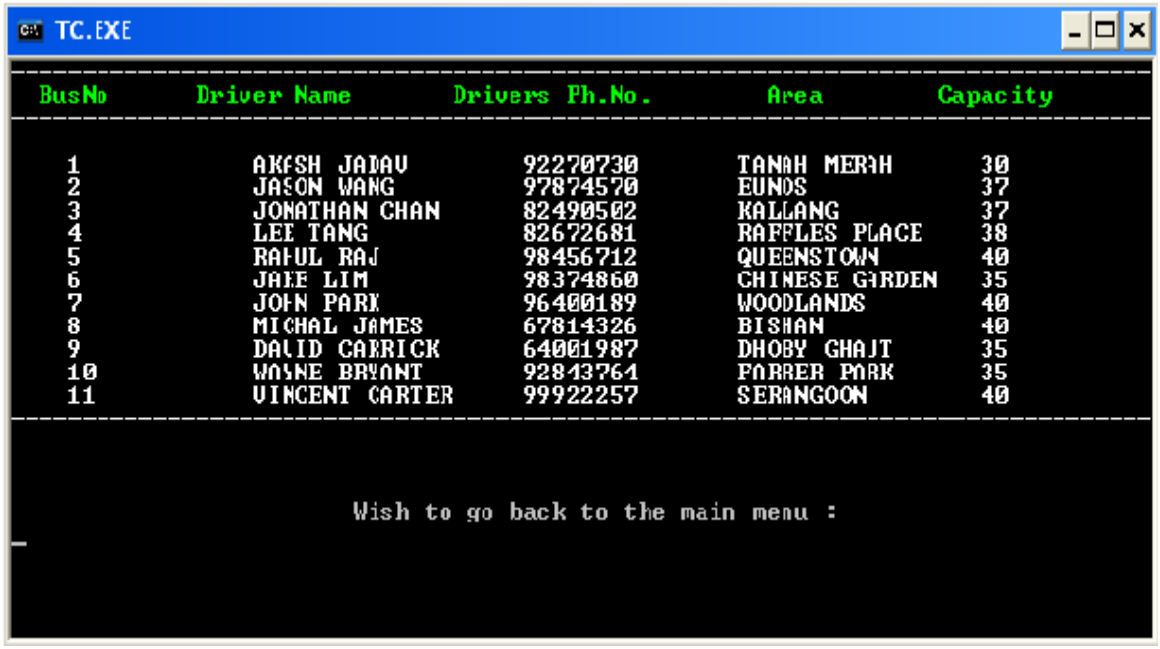


INPUTING THE RECORDS

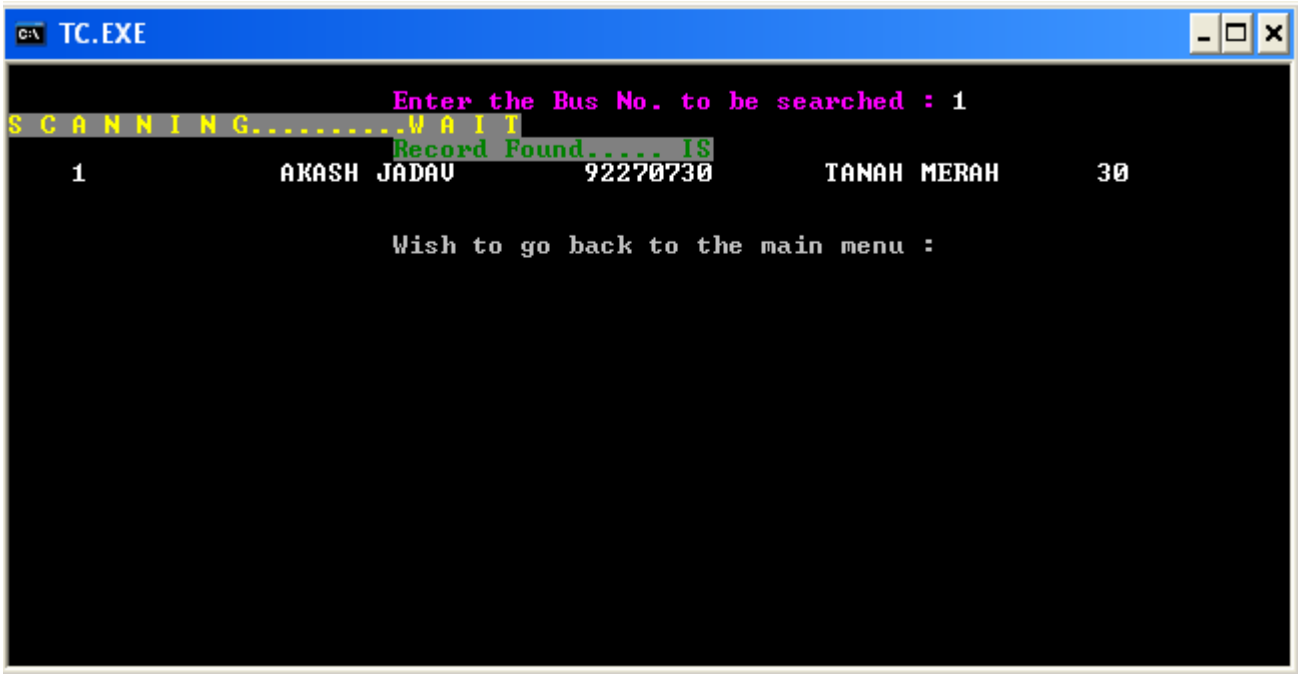


Student Name: Arjun Warty Roll Number: [redacted] Class: [redacted]

SHOW FUNCTION

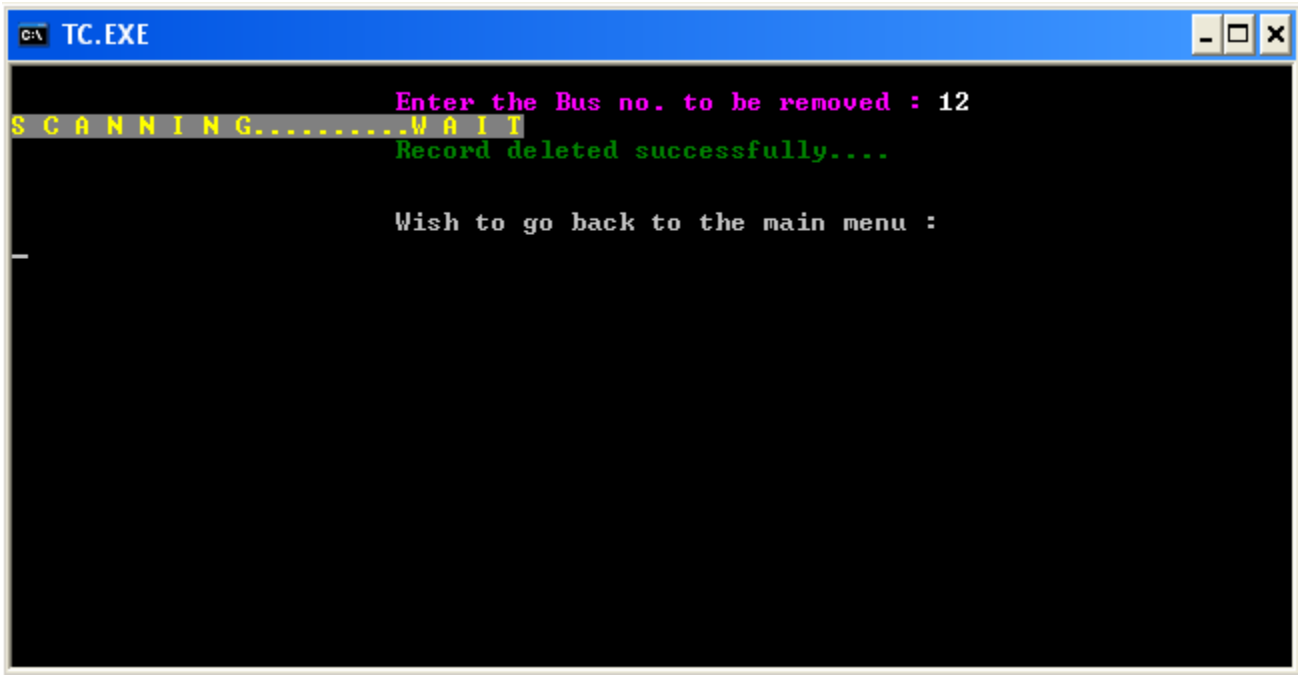


SEARCH FUNCTION



Student Name: Arjun Warty Roll Number: [redacted] Class: [redacted]

DELETE FUNCTION



ROUTE DETAILS