



ONLINE BUS TICKET MANAGEMENT SYSTEM

By

SYED MOSTOFA TANVEER

ID- 162-35-1634

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**Department of Software Engineering
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DAFFODIL INTERNATIONAL UNIVERSITY

Declaration of Project

Author Full Name: Syed Mostofa Tanveer

Date of Birth: 23 August 1996

Title of Project: Online Bus Ticket Management System

Academic Session: 2017

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Certified by:

Signature

162-35-1634

Student ID

Date: 17 April 2017

Signature of Supervisor

DR.ASRAF ALI

Name of Supervisor

Date: 17 April 2017

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LIST OF FIGURES

```
"C:\Users\User\Documents\c project.exe"

=====
                        Bus Ticket Management System
=====
Press<1> Insert bus
Press<2> View All Bus
Press<3> Find Bus
Press<4> Book Ticket
Press<5> View All Transections
Press<0> Exit
Enter Your Choice ::
```

```
"C:\Users\User\Documents\c project.exe"

=====
Press<1> Insert bus
Press<2> View All Bus
Press<3> Find Bus
Press<4> Book Ticket
Press<5> View All Transections
Press<0> Exit
Enter Your Choice :: 1
Enter bus code: 242
Enter bus name: HANIF
Enter Date: 17-04-2017
Enter Ticket Price: 600
To: jessore
From: dhaka
Record insert Successful
```

```
"C:\Users\User\Documents\c project.exe"

=====
Press<1> Insert bus
Press<2> View All Bus
Press<3> Find Bus
Press<4> Book Ticket
Press<5> View All Transections
Press<0> Exit
■
Enter Your Choice :: 2

1 hanif 12-04-2017 comilla dhaka 600
123 hanif 12-04-17 shylet dhaka 1000
22 hanif 13-04-2017 comilla dhaka 600
242 HANIF 17-04-2017 jessore dhaka 600
```

```
"C:\Users\User\Documents\c project.exe"

Press<2> View All Bus
Press<3> Find Bus
Press<4> Book Ticket
Press<5> View All Transections
Press<0> Exit

Enter Your Choice :: 3
Enter Bus code :242

Record Found

Code ::242
bus name ::HANIF
bus date ::17-04-2017
To ::jessore
Form ::dhaka
price of ticket ::600
```

```
"C:\Users\User\Documents\c project.exe"

mobile number :+8801788771772

Total number of tickets :3

ENJOY Journey

name : shanto
mobile Number : 1788771772
bus name : HANIF
To ::jessore
Form ::dhaka
Total seats : 3
cost per tickets : 600
Total Amount : 1800

Record insert successfully to the old record file

=====
```

```
"C:\Users\User\Documents\c project.exe"

Bus Ticket Management System

=====

Press<1> Insert bus
Press<2> View All Bus
Press<3> Find Bus
Press<4> Book Ticket
Press<5> View All Transections
Press<0> Exit

Enter Your Choice :: 5
shanto 1788771772 3 1800 hanif comilla dhaka 600
rimi 123456789 2 2000 hanif shylet dhaka 1000
shanto 1788771772 2 1200 hanif comilla dhaka 600
shanto 1788771772 3 1800 HANIF jessore dhaka 600
```

LIST OF ABBREVIATIONS

- 1. Swe - Software Engineering**
- 2. DIU- Daffodil International University**

LIST OF SYMBOLS

- 1. *- pointer to a variable (*a)**
- 2. &- Returns the address of a variable**
- 3. size of()-Returns the size of a variable**
- 4. = - Simple assignment operator. Assigns values from right side operands to left side operand**
- 5. ! - Called Logical NOT Operator. It is used to reverse the logical state of its operand. If a condition is true, then Logical NOT operator will make it false.**
- 6. == - Checks if the values of two operands are equal or not. If yes, then the condition becomes true.**
- 7. != - Checks if the values of two operands are equal or not. If the values are not equal, then the condition becomes true.**
- 8. > - Checks if the value of left operand is greater than the value of right operand. If yes, then the condition becomes true.**
- 9. < - Checks if the value of left operand is less than the value of right operand. If yes, then the condition becomes true.**
- 10. >= - Checks if the value of left operand is greater than or equal to the value of right operand. If yes, then the condition becomes true.**
- 11. <= - Checks if the value of left operand is less than or equal to the value of right operand. If yes, then the condition becomes true.**
- 12. += Adds two operands.**
- 13. -= Subtracts second operand from the first.**
- 14. *= Multiplies both operands.**
- 15. /= Divides numerator by de-numerator.**
- 16. %= Modulus Operator and remainder of after an integer division.**
- 17. ++ = Increment operator increases the integer value by one.**
- 18. -- = Decrement operator decreases the integer value by one.**

ABSTRACT

General Outline: In this project the online bus ticket management system & the other entire task on the bus system application can be done through Menu based program. The other tasks are as following: – (Here all this things is can done only by administrator user)

1. In this project we can insert the bus ticket documents
2. We can track the root
3. We can find the option for different bus services
4. We can select the bus service name
5. We can select the travelling date & time
6. We can select the cost per ticket

Objective of the project:

1. This project is password protected thus prevents illegal use.
2. Only administrator users can change in stored data.
3. The local users can complete registration without password and get their ticket.
4. In this project all the possible features are included.

Purpose:

Purpose of this project is to let users freely book their tickets and choose between different options online.

Front end & back end:

This project uses only front end (C) language.

Advantages:-

1. User can easily book or buy their tickets from anywhere in the country just having internet connection only.
2. They can also track the routes
3. They can find the options for different bus services
4. They can choose between AC or Non-AC services
5. They can select seat numbers
6. They can plan for the travel date & times
7. They can choose the best ticket within reasonable price.
8. Once any data will be recorded for any specific user, can be reused while drawing another ticket from the software.

Future enhance:

1. In future this system can be used to book any transport internationally.
2. Users might get their tickets delivered to their home.
3. Payments systems might upgrade to Credit/Debit card system.
4. Geo-tagging might be used in future for positional tagging.

CHAPTER 1

INTRODUCTION

1.1 Background: From the invention of various transport systems, the use of tickets started. From then, users go to different counters to buy their tickets. People had to go long way to purchase their tickets from the counters. After that, with the invention of internet, engineers started finding a way to minimize this problem and to find a better as well as easier solution. What if, there would be a system to buy tickets from sitting in the room & clicking on the mobile or computer. That would certainly reduce the perturbation in our hectic life. To bring that theme in reality, a software is designed named ONLINE BUS TICKET MANAGEMENT SYSTEM. It is very user-friendly, easily available and with authentic price.

1.2 Motivation of the Project: The motivations of this project are as follows:

- a. It will save valuable times.
- b. Tickets can be booked from anywhere in the country.
- c. Tickets can be booked through mobile or computer.
- d. No need to go to bus counters for tickets.
- e. User friendly software.
- f. Privacy protected through legal authority.

1.3 Project Objectives:

- a. In this project we can insert the bus ticket documents
- b. We can track the root
- c. We can find the option for different bus services
- d. We can select the bus service name
- e. We can select the travelling date & time
- f. We can select the cost per ticket
- g. This project is password protected thus prevents illegal use.
- h. Only administrator users can change in stored data.
- i. The local users can complete registration without password and get their ticket.
- j. In this project all the possible features are included.

CHAPTER 2

PROJECT METHODOLOGY

2.1 Structure: All the elements of this project is inserted in a specific place, named Structure. In this project the structure is working as **struct Book**.

2.2 Switch case: In this project switch case is used to select between options. Like, if we press 1, then the system will enter into “Insert Bus”; if we press 2, then the system will enter into “View All Bus”; if we press 3, then the system will enter into “Find Bus”; if we press 4, then the system will enter into “Book Ticket”; if we press 5,

then the system will enter into “All Transections”; if we press 0, then the system will exit.

2.3 File: When the program is terminated, the entire data is lost in C programming. If you want to keep large volume of data, it is time consuming to enter the entire data. But, if file is created, these information can be accessed using few commands. While working with file, we need to declare a pointer of type file. This declaration is needed for communication between file and program. As like as **FILE *fp , FILE *ufp**. In this project the file is working as “**r**”(opining for reading), “**r+**”(opining for both reading and writing)

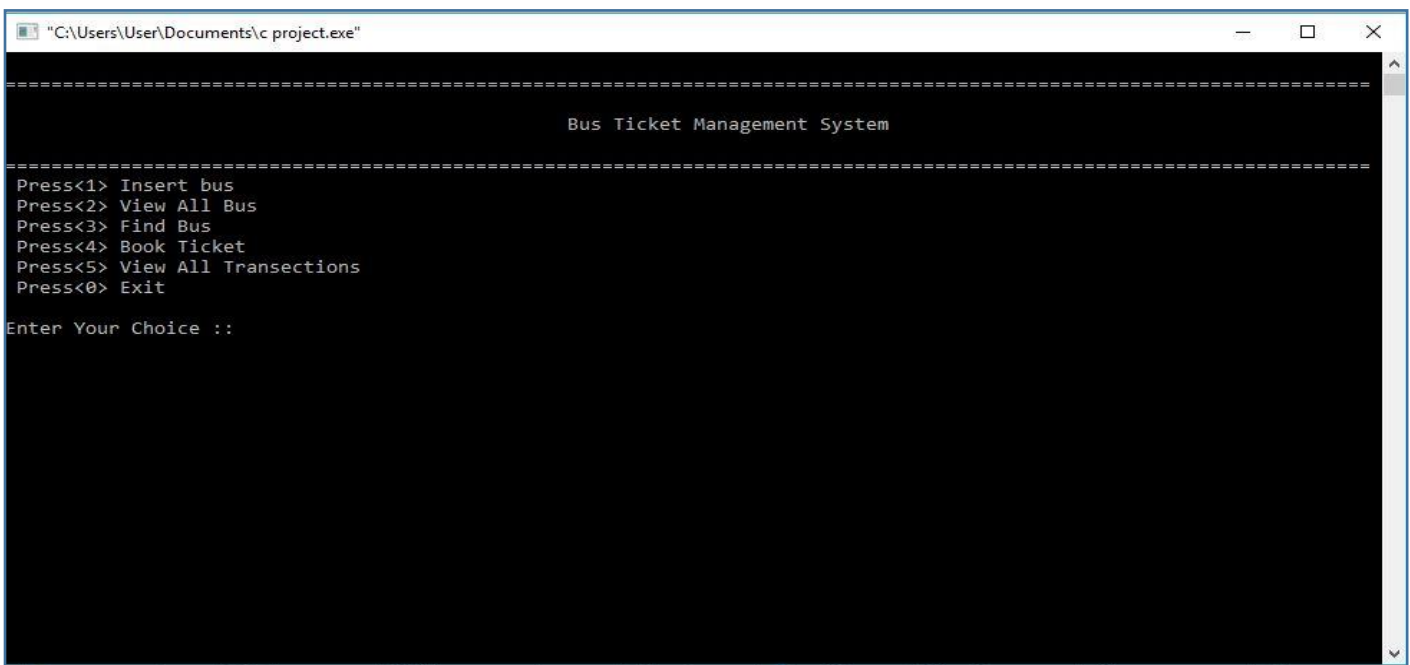
2.4 Pointer: A pointer is a variable which contains the address in memory of another variable. We can have a pointer to any variable type. The unary or monadic operator & gives the “address of a variable”. The indirection or dereference operator * gives the “contents of an object pointed to by a pointer”. In this project the pointer is working as ***fp , *ufp** .

2.5 Function: A function is a group of statements that together perform a task. Every C program has at least one function, which is main(), and all the most trivial programs can define additional functions. You can divide up your code into separate functions. In this project the function is working as **main() , void**.

2.6 While Loop: In most computer programming languages, a while loop is a control flow statement that allows code to be executed repeatedly based on a given Boolean condition. The while loop can be thought of as a repeating if statement. In this project the loop is working as **while loop**.

CHAPTER 3

RESULT AND DISCUSSION



```
"C:\Users\User\Documents\c project.exe"

=====
Bus Ticket Management System
=====
Press<1> Insert bus
Press<2> View All Bus
Press<3> Find Bus
Press<4> Book Ticket
Press<5> View All Transections
Press<0> Exit
Enter Your Choice ::
```

In this project, this is the output of main function. User can press 1 to 0 for enter options.

```
"C:\Users\User\Documents\c project.exe"

=====
Press<1> Insert bus
Press<2> View All Bus
Press<3> Find Bus
Press<4> Book Ticket
Press<5> View All Transections
Press<0> Exit

Enter Your Choice :: 1
Enter bus code: 242
Enter bus name: HANIF
Enter Date: 17-04-2017
Enter Ticket Price: 600
To: jessore
Form: dhaka
Record insert Successful
```

When user pressed 1 and inserted information. This is the output.

```
"C:\Users\User\Documents\c project.exe"

Press<1> Insert bus
Press<2> View All Bus
Press<3> Find Bus
Press<4> Book Ticket
Press<5> View All Transections
Press<0> Exit

Enter Your Choice :: 2

1 hanif 12-04-2017 comilla dhaka 600
123 hanif 12-04-17 shylet dhaka 1000
22 hanif 13-04-2017 comilla dhaka 600
242 HANIF 17-04-2017 jessore dhaka 600
```

When user pressed 2. The system will show all buses which are inserted. This is the output.

```
"C:\Users\User\Documents\c project.exe"

Press<2> View All Bus
Press<3> Find Bus
Press<4> Book Ticket
Press<5> View All Transections
Press<0> Exit

Enter Your Choice :: 3
Enter Bus code :242

Record Found

      Code ::242
      bus name ::HANIF
      bus date ::17-04-2017
      To ::jessore
      Form ::dhaka
      price of ticket ::600
```

When user pressed 3. And entered the bus code user can easily find the bus record. This is the output.

```
"C:\Users\User\Documents\c project.exe"

mobile number :+8801788771772

Total number of tickets :3

ENJOY Journey

      name : shanto
      mobile Number : 1788771772
      bus name : HANIF
      To ::jessore
      Form ::dhaka
      Total seats : 3
      cost per tickets : 600
      Total Amount : 1800
Record insert successfully to the old record file

=====
```

When user pressed 4 and inserted some information. Ticket will be booked. This is the output.

```
"C:\Users\User\Documents\c project.exe"

Bus Ticket Management System

=====
Press<1> Insert bus
Press<2> View All Bus
Press<3> Find Bus
Press<4> Book Ticket
Press<5> View All Transections
Press<0> Exit

Enter Your Choice :: 5
shanto 1788771772 3 1800 hanif comilla dhaka 600
rimi 123456789 2 2000 hanif shylet dhaka 1000
shanto 1788771772 2 1200 hanif comilla dhaka 600
shanto 1788771772 3 1800 HANIF jessore dhaka 600
```

When user pressed 5. The system will show all transection.

And when user pressed 0. The user will get exit from this system.

CHAPTER 4

CONCLUTIONS AND RECOMMENDATION

- 4.1 Findings and contributions:** Gone are those days when bus travelling used to be tiring and tedious. Innovations and technological development has led the revolution in tour and tourism industry and so as positively empowered Bus tourism. Technological advancements have made online bus ticket booking absolutely an easy affair. The traditional bus travelling used to be very much complex as well as hectic as one had to stand in long queues for hours under sun to reach his destination and that too a month advance. Also the quality of bus travel used to be very rough and harsh with no luxury options. But time has changed now. You can avail everything you want at your doorstep. Bus is prominent means of transportation which serves both common as well as higher

class of people. The difference lies in the quality only but Bus is been used by all groups of people and hence remains always in great demand while booking bus tickets was a great problem, which used to resist people specially, the higher income group. But now, with the advancements in internet usage round the globe, it has made this process very much hassle free. With the help of internet you can not only check availability, arrival & departure timings, fares etc. This further makes the process faster. The transaction is fast and reliable as the receipt of confirmation reaches instantly. Although it requires some time and extra charges but this is a safe as well as worthy process. There are various types of bus services available as per your choice, needs and budget on Bus ticket booking. Depending upon your own pocket you may choose from various choices. Now, with online book bus ticket booking service you will be left with plenty of time to enjoy your vacation. Go get your tickets booked with a grin on your face. This effort is being taken to reduce the unwanted use of valuable time. Any person will get the help out of this software from any corner of the country very easily. Now you can plan your safe trip just by a click in the mobile or computer.

4.2 Recommendation for future work:

1. In future this system can be used to book any transport internationally.
2. Users might get their tickets delivered to their home.
3. Payments systems might upgrade to Credit/Debit card system.
4. Geo-tagging might be used in future for positional tagging.

REFERENCES

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2. The Complete Reference, written by Herbert Schildt.
3. Let Us C, written by Yashavant Kanetkar.
4. Head First C, written by David Griffiths.
5. www.wikipedia.com

APPENDIX

[illegible]

```

        break;

    case 5 :
        old_record ();
        break;

    case 0 :
        exit (0);
        break;

    default:
        printf("wrong choice !");
        break;
    }
}while(a!=0);
}

void insert_details()
{
    FILE *fp;
    struct book b;
    printf("Enter bus code: ");
    scanf("%s",b.code);
    printf("Enter bus name: ");
    scanf("%s",b.name);
    printf("Enter Date: ");
    scanf("%s",b.date);
    printf("Enter Ticket Price: ");
    scanf("%d",&b.cost);
    printf("To: ");
    scanf("%s",b.to);
    printf("Form: ");
    scanf("%s",b.form);

    fp=fopen("data.text","a");
    if(fp==NULL)
    {
        printf("File Not Found");
    }
    else
    {
        fprintf(fp,"\n%s %s %s %s %s %d \n",b.code,b.name,b.date,b.to,b.form,b.cost);
        printf("Record insert Successful");
    }
    printf("\n");
    fclose(fp);
}

void find()
{
    struct book b;
    FILE *fp;
    char st[20];

    char ch[20];
    printf("Enter Bus code :");
    scanf("%s",ch);
    //system("clear");
    fp=fopen("data.text","r+");
    if(fp==NULL)

```

```

    {
        printf("File does not found !\n");
        exit(1);
    }
    else
    {
        while(!feof(fp))
        {
            fscanf(fp,"%s %s %s %s %s %d ",b.code,b.name,b.date,b.to,b.form,&b.cost);
            strcpy(st,b.code);
            if(strcmp(st,ch) == 0)
            {
                //fscanf(fp,"%s %s %s %d",b.code,b.name,b.date,&b.cost);//
                printf("\n Record Found\n");
                printf("\n\t\tCode ::%s",b.code);
                printf("\n\t\tbus name ::%s",b.name);
                printf("\n\t\tbus date ::%s",b.date);
                printf("\n\t\tTo ::%s",b.to);
                printf("\n\t\tForm ::%s",b.form);
                printf("\n\t\tprice of ticket ::%d",b.cost);
            }
        }

        fclose(fp);
    }
}

void viewAll()
{
    char ch;
    FILE *fp;

    fp=fopen("data.text","r");
    if(fp==NULL)
    {
        printf("File does not found !");
        exit(1);
    }
    else
    {
        //system("clear");
        while( (ch=fgetc(fp) ) !=EOF )
            printf("%c",ch);
    }
    fclose(fp);
}

void book_ticket()
{
    struct book b;
    FILE *fp;

    FILE *ufp;

    int total_seat,mobile,total_amount;
    char name[20];

    char ch; //used display all buses
    char bus_code[20]; //for searching

```



```

//display all buses by default for bus code
    fp=fopen("data.text","r");
    if(fp==NULL)
    {
        printf("File does not found !");
        exit(1);
    }
    else
    {
        //system('clear');
        while( ( ch = fgetc(fp) ) !=EOF )
            printf("%c",ch);
    }
    fclose(fp);

//display end
printf("\n For book ticket choice bus(Enter bus Code First Latter)");
printf("Enter Bus Code :");
scanf("%s",bus_code);
//system ('clear');
    fp=fopen("data.text","r");
    if(fp==NULL)
    {
        printf("File does not found !");
        exit(1);
    }
    else
    {
        while(fscanf(fp,"%s %s %s %s %s %d",b.code,b.name,b.date,b.to,b.form,&b.cost)!=
EOF)
        {
            if(strcmp(b.code,bus_code) == 0)
            {
                //printf("%s /%s /%s /%d",b.code,b.name,b.date,b.cost);//
                printf("\n Record Found\n");
                printf("\n\t\tCode ::%s",b.code);
                printf("\n\t\tbus name ::%s",b.name);
                printf("\n\t\tbus date ::%s",b.date);
                printf("\n\t\tTo ::%s",b.to);
                printf("\n\t\tForm ::%s",b.form);
                printf("\n\t\tprice of ticket ::%d",b.cost);
            }
        }
    }

}

printf("\n your name :");
scanf("%s",name);
printf("\n mobile number :+88");
scanf("%d",&mobile);
printf("\n Total number of tickets :");
scanf("%d",&total_seat);

total_amount= b.cost * total_seat;

printf("\n ENJOY Journey \n");
printf("\n\t\tname : %s",name);
printf("\n\t\tmobile Number : %d",mobile);
printf("\n\t\tbus name : %s",b.name);

```

```

printf("\n\t\tTo :: %s",b.to);
printf("\n\t\tForm :: %s",b.form);
printf("\n\t\tTotal seats : %d",total_seat);
printf("\n\t\tcost per tickets : %d",b.cost);
printf("\n\t\tTotal Amount : %d",total_amount);

ufp=fopen("oldTransection.text","a");
if(ufp==NULL)
{
    printf("File not found");
}
else
{
    fprintf(ufp,"%s %d %d %d %s %s %s %d\n",name,mobile,total_seat,total_amount,b.name,b.to,b.form,b.cost);
    printf("\n Record insert successfully to the old record file");
}
printf("\n");
fclose(ufp);
fclose(fp);
}
void old_record()
{
    char ch;
    FILE *fp;
    //system("clear");
    fp=fopen("oldTransection.text","r");
    if(fp==NULL)
    {
        printf("File not found !");
        exit(1);
    }
    else
    {
        //system("clear");
        while( ( ch = fgetc(fp) ) !=EOF )
            printf("%c",ch);
    }
    fclose(fp);
}
}

```