



## North South University

Department of Electrical and Computer Engineering

### Lab Project Report

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Semester : NSU Fall 2022  
Course Code : CSE 115L  
Section : 12  
Group Name : B5

Faculty : Rifat Ahmed Hassan (RIH)  
Lab Instructor : A. S. M. Sabiqul Hassan

Project Topic : Travel Ticket Management System  
GitHub Repo Link : <https://github.com/rayhan-31/Project-CSE115.git>

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## Description of the project :

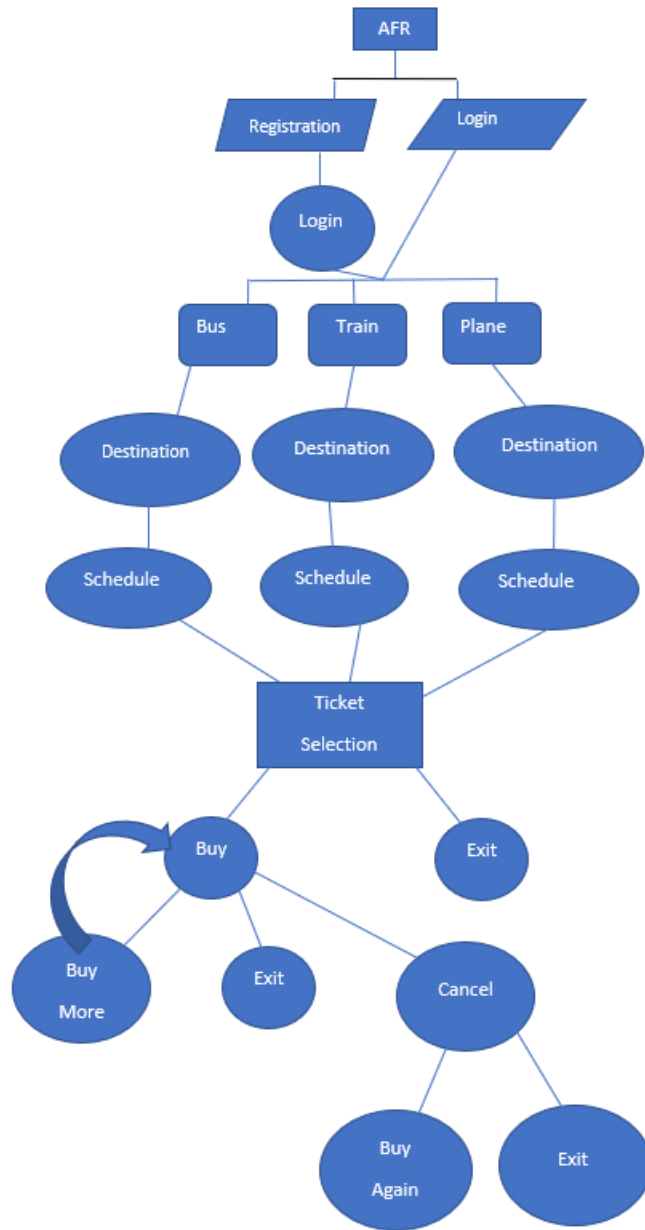
**INTRODUCTION:** The Transport reservation system is created by C programming language, and we have used arrays, structures, strings, loops, files and different types of user-defined functions.

### **Features:**

- 1.**Registration and login system:** User will get two options such as register and login. Existing user can login and new user can register themselves easily.
- 2.**Transport choosing option:** User will get options to choose their method of travel such as bus, train and plane.
- 3.**Purchasing ticket:** User can easily buy tickets according to their time schedules. There are various options to choose.
- 4.**Cancellation system:** After purchasing a ticket user will get option to return the ticket. User can return the ticket if they want to return the ticket.

**Conclusion:** This is a project for transport ticket management system using c programming language. We have used arrays, strings, pointers, structures, files, user-defined functions to build this project. User can register himself and login by his own username and password. Moreover, he can choose his desired vehicle and schedule to travel. Furthermore, he can buy tickets and can cancel them after buying if he wants to return the tickets. This system is built to help the ticket selling or transport companies to make their work well-organized.

## Diagram(Flowchart):



## **Main Code:**

```
#include <stdio.h>
#include <stdlib.h>
#include<string.h>
#include<conio.h>
#include<stdio.h>

int key=0;

struct login
{
    char fname[100];
    char lname[100];
    char username[100];
    char password[100];
};

void registe();
void login();
int WelcomeMessage();
int Bus();
int Train();
int Plane();
int Schedule();
int BuyTicket();
int main()
//verifying the user.....
{
verification_line:
```

```

printf("\t\t\t#####  
#####");

printf("\n\t\t\t##### Please Verify Yourself  
#####");

printf("\n\t\t\t##### Please Register If You're  
a New User #####");

printf("\n\t\t\t##### Or Login  
#####");

printf("\n\t\t\t#####  
#####");

printf("\n\t\t\t\t\t-----  
-----\n");

int cho;

printf("\n\n\t\t\t\t\tEnter 1 For Register Or Enter 2 For Login:  
");

scanf("%d",&cho);

if(cho==1)
{
    system("CLS");
    registe();
    system("cls");
    login();
}

else if(cho==2)
{
    system("CLS");
    login();
}

else
{
    system("cls");

```

```

        goto verification_line;
    }

    system("cls");
    int scd=0;
    int key;
Welcome_Line:
    system("cls");
    key=WelcomeMessage();
    if(key==1)
    {
        scd= Bus();
    }
    else if(key==2)
    {
        scd= Train();
    }
    else if(key==3)
    {
        scd= Plane();
    }
    else
    {
        goto Welcome_Line;
    }

    Schedule();

    system("cls");

```

```

    BuyTicket();

    return 0;

}

void registe()
{

printf("\t\t\t#####  
#####");

    printf("\n\t\t\t#####  
#####");

    printf("\n\t\t\t\t\t#####           Please Register  
Yourself           #####");

    printf("\n\t\t\t\t\t#####  
#####");

printf("\n\t\t\t\t\t#####  
#####");

    printf("\n\t\t\t\t\t-----  
-----\n");

    FILE *log;

    log=fopen("login12.txt","w");

    struct login l;

    printf("\n\t\t\t\t\tEnter First Name: ");

    scanf("%s",l.fname);

    printf("\n\t\t\t\t\tEnter Last Name: ");

    scanf("%s",l.lname);

    printf("\n\t\t\t\t\tEnter Username: ");

```

```

scanf("%s",l.username);

printf("\n\t\t\tEnter Password: ");
scanf("%s",l.password);

fwrite(&l,sizeof(l),1,log);

fclose(log);

printf("\n\n\t\t\tRegistration Successful...\n");
printf("\n\n\t\t\tNow login with userid and password.\n");
printf("\n\t\t\tPress Any Key To Continue.....");
getch();
system("CLS");

}

void login()
{

printf("\t\t\t#####
#####");

printf("\n\t\t\t##### Please Enter
#####");

printf("\n\t\t\t##### Your UserName And
Password #####");

printf("\n\t\t\t##### TO Login
#####");

printf("\n\t\t\t#####
#####");

printf("\n\t\t\t-----
-----\n");

```



```

char username[200],password[20];
FILE *log;
log=fopen("login12.txt","r");
struct login l;
printf("\n\n\t\t\tUserName: ");
scanf("%s",&username);
printf("\n\n\t\t\tPassword: ");
scanf("%s",&password);

while(fread(&l,sizeof(l),1,log))
{
    if(strcmp(username,l.username)==0
strcmp(password,l.password)==0)
    {

        key = WelcomeMessage;

    }
    else
    {
        system("cls");
        printf("Incorrect Username or password. Please Try
again..\n\n");
        login();
    }
}
fclose(log);
}

```

```

int WelcomeMessage()

```

```

{

    printf("\n\n\n\n\n");

    printf("\n\t\t\t\t\t **-*-*-**-*-*-**-*-*-**-*-*-**-*-*-**-*-*-**-*-*-**-*-*-
**-*-*-**-*-*-**\n");

    printf("\n\t\t\t\t\t =--==--==--==--==--==--==--==--==--==--
==--==--==");

    printf("\n\t\t\t\t\t =                                WELCOME
=");

    printf("\n\t\t\t\t\t =                                TO
=");

    printf("\n\t\t\t\t\t =                                AFR Ticket
=");

    printf("\n\t\t\t\t\t =                                Booking System
=");

    printf("\n\t\t\t\t\t =                                =");

    printf("\n\t\t\t\t\t =--==--==--==--==--==--==--==--==--==
==--==--==");

    printf("\n\t\t\t\t\t **-*-*-**-*-*-**-*-*-**-*-*-**-*-*-**-*-*-**-*-*-
**-*-*-**-*-*-**\n");

    int TransportTYpe;

    printf("\n\n\n\t\t\t\t\t Available Transport Options:\n");

    printf("\n\t\t\t\t\t 1. Bus\n");

    printf("\t\t\t\t\t 2. Train\n");

    printf("\t\t\t\t\t 3. Plane\n");

    printf("\n\n\n\t\t\t\t\t Enter How You Want to Travel:");

    scanf("%d", &TransportTYpe);

    system("cls");

    return TransportTYpe;

}

```

[illegible]

```
int dest;

printf("\n\t\t\tEnter Your Destination or 0 to exit ");

scanf("%d", &dest);

system("cls");


if(dest==0)

{

    return 0;

}

else if(dest==1||dest==2||dest==3||dest==4||dest==5||dest==6||dest==7||dest==8||dest==9)

{

    return 1;

}

else

{

    system("cls");

    goto DestinationB_Line;

}

}

int Train()

{

DestinationT_Line:

    printf("\n\t\t\t ***-***-***-***-***-***-***-***-***-***-***-***-***-***-***-***-***-***-***\n");

    printf("\n\t\t\t =---=---=---=---=---=---=---=---=---=---=---=---=---\n");

    printf("\n\t\t\t = WELCOME\n");

    printf("\n\t\t\t = TO\n");
```



```
{
    return 1;
}
else
{
    system("cls");
    goto DestinationT_Line;
}
}

int Plane()
{
DestinationP_Line:

    printf("\n\t\t\t\t\t **-*-*-**-*-*-**-*-*-**-*-*-**-*-*-**-*-*-**-*-*-**-*--\n\n");

    printf("\n\t\t\t\t\t =-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-\n\n");

    printf("\n\t\t\t\t\t =                                WELCOME\n\n");

    printf("\n\t\t\t\t\t =                                TO\n\n");

    printf("\n\t\t\t\t\t =                                AFR Air\n\n");

    printf("\n\t\t\t\t\t =                                Ticket Booking\n\n");

    printf("\n\t\t\t\t\t =                                =");

    printf("\n\t\t\t\t\t =-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-\n\n");

    printf("\n\t\t\t\t\t **-*-*-**-*-*-**-*-*-**-*-*-**-*-*-**-*-*-**-*-*-**-*--\n\n");


    printf("\n\n\n\t\t\t\t\tAvailable Flights:");
    printf("\n\n\t\t\t\t\t##Domestic Flights:");
```

```

printf("\n\t\t\t\t1. Dhaka to Chittagong");
printf("\n\t\t\t\t2. Dhaka to Cox's Bazar");
printf("\n\t\t\t\t3. Dhaka to Sylhet");
printf("\n\n\t\t\t\t##International Flights:");
printf("\n\t\t\t\t\t4. Dhaka to Delhi");
printf("\n\t\t\t\t\t5. Dhaka to Lahore");
printf("\n\t\t\t\t\t6. Dhaka to Beijing");
printf("\n\t\t\t\t\t7. Dhaka to Kathmandu");

int dest;

printf("\n\t\t\t\tEnter Your Destination or 0 to exit ");
scanf("%d", &dest);

system("cls");

if(dest==0)
{
    printf("\n\n\t\t\t\t####Thanks For Using AFR####");
    return 0;

}

else if(dest==1||dest==2||dest==3||
dest==4||dest==5||dest==6||dest==7)
{
    return 1;
}

else
{
    system("cls");
    goto DestinationP_Line;
}

```

```

}

int Schedule()

{
    int sc;

schedule_line:

printf("\t\t\t#####
#####");

    printf("\n\t\t\t#####
#####");

    printf("\n\t\t\t\t##### Available Schedules
#####");

    printf("\n\t\t\t\t#####
#####");

printf("\n\t\t\t\t#####
#####");

    printf("\n\t\t\t\t-----
-----\n");


    printf("\n\t\t\t\t\t1. 12:00 AM");
    printf("\n\t\t\t\t\t2. 02:00 AM");
    printf("\n\t\t\t\t\t3. 04:00 AM");
    printf("\n\t\t\t\t\t4. 06:00 AM");
    printf("\n\t\t\t\t\t5. 08:00 AM");
    printf("\n\t\t\t\t\t6. 10:00 AM");
    printf("\n\t\t\t\t\t7. 11:00 AM");
    printf("\n\t\t\t\t\t8. 12:00 PM");
    printf("\n\t\t\t\t\t9. 02:00 PM");
    printf("\n\t\t\t\t\t10. 04:00 PM");
    printf("\n\t\t\t\t\t11. 06:00 PM");
    printf("\n\t\t\t\t\t12. 08:00 PM");

```



```
printf("\n\t\t\t\t\t13. 10:00 PM");
```

```
printf("\n\n\t\t\t\t\tEnter Your Desired Schedule Or '0' to  
exit: ");
```

```
scanf("%d", &sc);
```

```
switch(sc)
```

```
{
```

```
case 1:
```

```
    return 1;
```

```
case 2:
```

```
    return 1;
```

```
case 3:
```

```
    return 1;
```

```
case 4:
```

```
    return 1;
```

```
case 5:
```

```
    return 1;
```

```
case 6:
```

```
    return 1;
```

```
case 7:
```

```
    return 1;
```

```
case 8:
```

```
    return 1;
```

```
case 9:
```

```
    return 1;
```

```
case 10:
```

```
    return 1;
```

```
case 11:
```

```
    return 1;
```

```
case 12:
```

```

        return 1;
    case 13:
        return 1;
    case 0:
        return 0;
    default:
        system("cls");
        goto schedule_line;
    }
}

int BuyTicket()
{
    int numT, con, a, numS=15;
BuyTicket_Line:

printf("\t\t\t#####\n#####");

    printf("\n\t\t\t#####\n#####");

    printf("\n\t\t\t\t\t#####AFR Tickets\n#####");

    printf("\n\t\t\t\t\t#####\n#####");

printf("\n\t\t\t\t\t#####\n#####");

    printf("\n\t\t\t\t\t-----\n-----\n");

    printf("\n\n\n\t\t\t\t\tAvailable Seats: %d", numS);
printf("\n\n\t\t\t\t\tNumber of Tickets: ");
scanf("%d", &numT);
system("cls");

```

```

        if(numT<=numS)
        {

printf("\t\t\t#####  
#####");

        printf("\n\t\t\t#####  
#####");

        printf("\n\t\t\t\t#####                                AFR  
Tickets                                #####");

        printf("\n\t\t\t\t#####  
#####");

printf("\n\t\t\t\t#####  
#####");

        printf("\n\t\t\t\t\t-----  
-----\n");

        printf("\n\n\n\t\t\t\t\tEnter Yes(1) to Confirm or No(0) to  
Exit: ");

        scanf("%d", &con);

        if(con==1)
        {

                numS = numS-numT;

                system("cls");

printf("\t\t\t#####  
#####");

                printf("\n\t\t\t\t#####  
#####");

                printf("\n\t\t\t\t\t#####                                AFR  
Tickets                                #####");

                printf("\n\t\t\t\t\t#####  
#####");

printf("\n\t\t\t\t\t#####  
#####");

```

```

                printf("\n\t\t\t\t\t-----\n");
                printf("\n\n\n\t\t\t\t\t####Thanks          For          Your
Purchase####");

                printf("\n\n\n\t\t\t\t\tEnter 1 To Buy Again Or 2 To
Cancel Your Purchase Or 0 To Exit: ");

                scanf("%d", &con);

                if(con==0)
                {

                        system("cls");

printf("\t\t\t\t\t#####\n");

                printf("\n\t\t\t\t\t#####\n");

                printf("\n\t\t\t\t\t#####          AFR
Tickets          #####");

                printf("\n\t\t\t\t\t#####\n");

printf("\n\t\t\t\t\t#####\n");

                printf("\n\t\t\t\t\t-----\n");

                printf("\n\n\n\t\t\t\t\t####Thanks          For          Your
Purchase####");

                return 0;

                }

                else if(con==2)
                {

                        system("cls");

printf("\t\t\t\t\t#####\n");

```

```

printf("\n\t\t\t\t#####
#####");

printf("\n\t\t\t\t#####
Tickets#####");

printf("\n\t\t\t\t#####
#####");

printf("\n\t\t\t\t#####
#####");

printf("\n\t\t\t\t-----
-----\n");

printf("\n\t\t\t\tYour %d Tickets Have Been
Successfully Cancelled..", numT);

numS=numS+numT;

printf("\n\t\t\t\tEnter 1 To Buy Again Or 0 To
Exit..");

scanf("%d", &a);

if(a==0)
{

printf("\t\t\t\t#####
#####");

printf("\n\t\t\t\t#####
AFR Tickets#####");

printf("\n\t\t\t\t#####
#####");

printf("\n\t\t\t\t#####
#####");

printf("\n\t\t\t\t-----
-----\n");

printf("\n\n\t\t\t\t###Thanks For Using
AFR###");

```

```

        return 0;
    }
    else if(a==1)
    {
        system("cls");
        goto BuyTicket_Line;
    }

}

else if(con==1)
{
    system("cls");
    goto BuyTicket_Line;
}

}

else if(con==0)
{
    system("cls");

printf("\t\t\t#####\n#####");

        printf("\n\t\t\t#####\n#####");

        printf("\n\t\t\t#####\n#####");
Tickets
        printf("\n\t\t\t#####\n#####");

printf("\n\t\t\t#####\n#####");

        printf("\n\t\t\t-----\n");

        printf("\n\n\n\t\t\t####Thanks For Using AFR####");

```

```

        return 0;

    }

}

else if(numS<numT)

{

printf("\t\t\t#####
#####");

    printf("\n\t\t\t#####
#####");

    printf("\n\t\t\t#####                                AFR
Tickets                                #####");

    printf("\n\t\t\t#####
#####");

printf("\n\t\t\t#####
#####");

    printf("\n\t\t\t-----
-----\n");

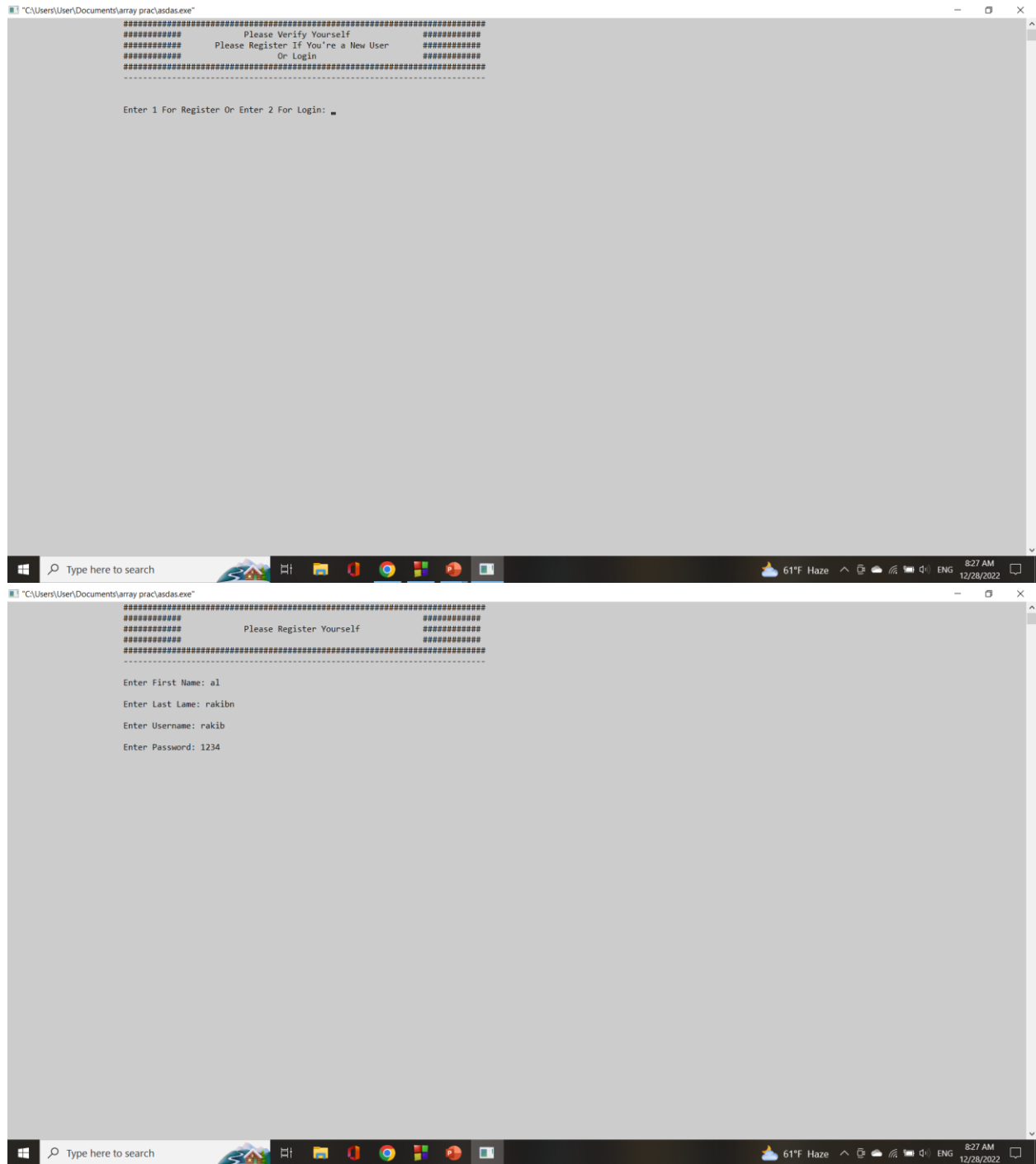
    printf("\n\n\t\t\t\t\t%d Tickets not Available\n", numT-
numS);

    printf("Enter 0 to exit or 1 to go backwards.");
    scanf("%d", &con);
    if(con==1)
    {
        system("cls");
        goto BuyTicket_Line;
    }
    else if(con==0)
    {
        return 0;
    }
}

```

```
    }  
    else  
    {  
        return 0;  
    }  
  
}
```





```
"C:\Users\User\Documents\array prac\asd.exe"
#####
##### Please Register Yourself #####
#####
#####
-----

Enter First Name: al
Enter Last Name: rakibn
Enter Username: rakib
Enter Password: 1234

Registration Successful...

Now login with userid and password.
Press Any Key To Continue.....
```

```
"C:\Users\User\Documents\array prac\asd.exe"
#####
##### Please Enter #####
##### Your Username And Password #####
##### TO Login #####
#####
-----

Username: rakib

Password: 1234
```

```
"C:\Users\User\Documents\array prac\asdas.exe"

=====
=                                     =
=             WELCOME                 =
=             TO                       =
=             AFR Ticket              =
=             Booking System          =
=                                     =
=====

Available Transport Options:

1. Bus
2. Train
3. Plane

Enter How You Want to Travel: _
```

```
"C:\Users\User\Documents\array prac\asdas.exe"

=====
=                                     =
=             WELCOME                 =
=             To                       =
=             AFR BUS                 =
=             Ticket Booking          =
=                                     =
=====

Available Buses:

1. Dhaka to Chittagong
2. Dhaka to Cox's Bazar
3. Dhaka to Sylhet
4. Dhaka to Teknaf
5. Dhaka to Rajshahi
6. Dhaka to Khulna
7. Dhaka to Rangpur
8. Dhaka to Barishal
9. Dhaka to Rangamati
Enter Your Destination or 0 to exit
```

```
"C:\Users\User\Documents\array prac\asdas.exe"
#####
##### Available Schedules #####
#####
#####
-----
1. 12:00 AM
2. 02:00 AM
3. 04:00 AM
4. 06:00 AM
5. 08:00 AM
6. 10:00 AM
7. 11:00 AM
8. 12:00 PM
9. 02:00 PM
10. 04:00 PM
11. 06:00 PM
12. 08:00 PM
13. 10:00 PM

Enter Your Desired Schedule Or '0' to exit:
```

```
"C:\Users\User\Documents\array prac\asdas.exe"
#####
##### AFR Tickets #####
#####
#####
-----

Available Seats: 15
Number of Tickets: 0
```

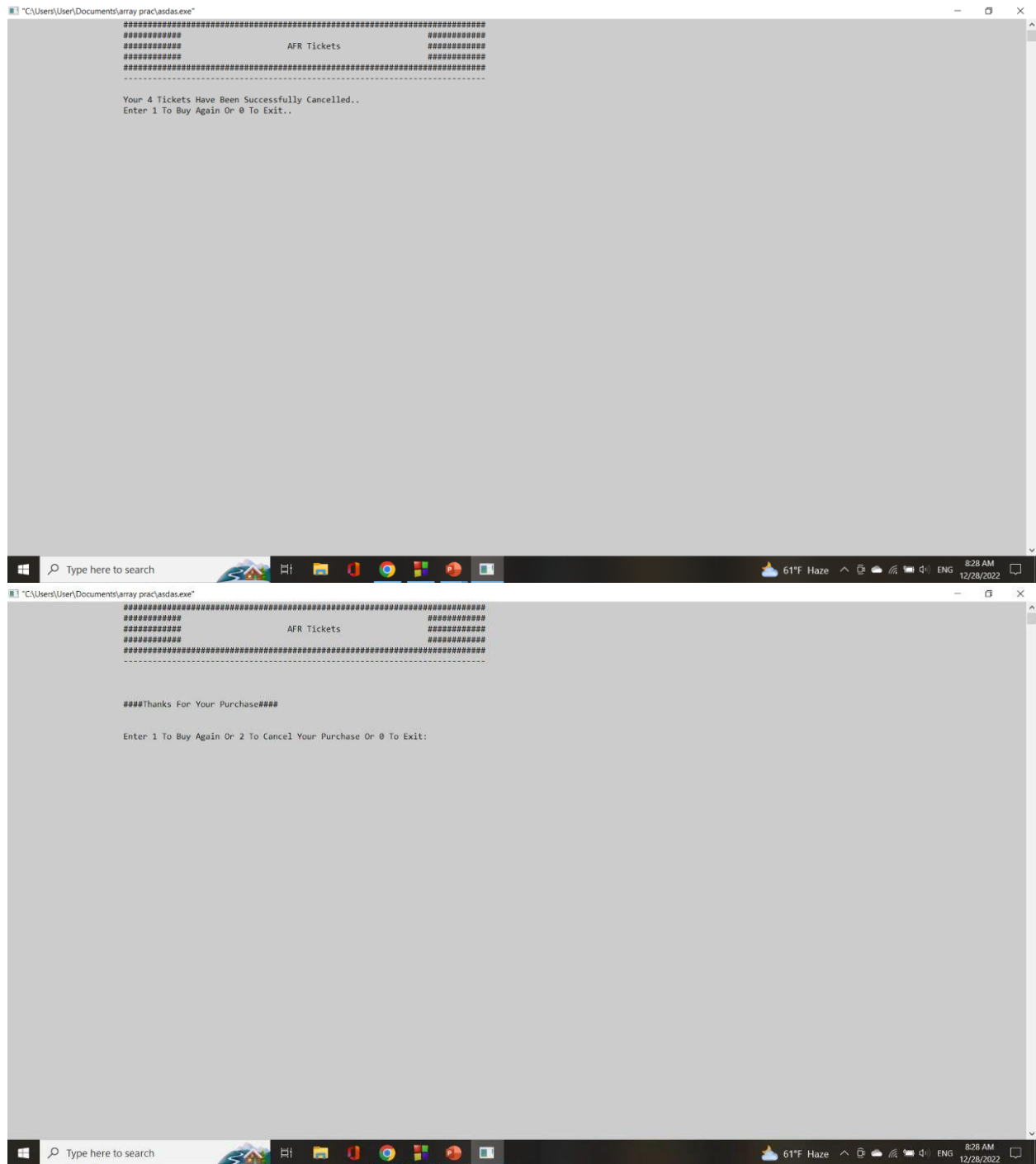
```
"C:\Users\User\Documents\array prac\asdas.exe"
#####
#####          AFR Tickets          #####
#####
#####
#####
#####
#####

Enter Yes(1) to Confirm or No(0) to Exit: _
```

```
"C:\Users\User\Documents\array prac\asdas.exe"
#####
#####          AFR Tickets          #####
#####
#####
#####
#####
#####

####Thanks For Your Purchase####

Enter 1 To Buy Again Or 2 To Cancel Your Purchase Or 0 To Exit:
```



## **Planned to do:**

- User Login system
- Option to choose transportation type
- Buying ticket
- Cancelling ticket

**Done:**

- User Login system
- Option to choose transportation type
- Buying ticket
- Cancelling ticket