**PROJECT WORK OF COMPUTER** *SLC BATCH – 2067*

PROGRAM ON SEAT RESERVATION

Submitted to: ***Mr. Chandan Regmi***

Computer Department

Gyankunj Higher Secondary School

Prepared by: ***Gaurav Jung Kunwar***

*Class: 10*

**Our Words:**

We would like to thank everyone who encouraged and helped us to prepare the Program, especially teachers from our Computer Department.

**About the Program**

Topic: *Seat Reservation Program*

Designed by: *Group – H of SLC Batch 2067*

Language used: *QBasic Programming Language*

Structure used: *Modular Structure*

This Program is written with modular program concept in QBASIC. Modular programming enables us to build multiple modules of a single program which makes a complex program easy to write.

**Objectives:**

This Program is designed to reserve the seats of a bus. It can store buses with their respective seats and cost per seat. It is a helpful program for Travels. With less effort of manpower and also less time it is able to give accurate results.

**Program Designing**

* **Main Module**

In the main module, all the sub modules are declared and a sub module with the information of the travel is called. It also asks the user whether s/he is Customer or Staff.

* **Sub modules that are provided:**

***Customer***  1. Display All

2. Reserve a Seat

3. Remove Seat Reservation

4. Search

5. Exit

***Staff***  1. Add a Bus

2. Display All

3. Search

4. Edit Bus Status

5. Remove a Bus

6. Exit

* **Sub Modules**

Many sub modules are created in the program. Here are the sub modules which interact with its users.

1. **Add a Bus**

In this module the staff is asked to input the Bus ID, its destination, cost per seat and number of seats available in it.

Also it stores the information in “bus.txt”

1. **Display All**

In this module all the buses with their Bus ID, Destination and Cost per Seat are shown.

1. **Edit Bus Status**

Through this module, the staff can change the destination and cost per seat of the Bus.

1. **Remove a Bus**

This is a module from where a staff can remove a bus permanently i.e. the Bus ID.

1. **Reserve a Seat**

This module is supplied to Customer only. The Customer is asked to enter the Bus ID and Seat number. As the customer gives a suitable input the program moves the seat with the corresponding Bus ID from “bus.txt” to “res.txt”. It also prints the bill of the Seat.

1. **Remove Seat Reservation**

This module is just the reverse of “Reserve a Seat”. The Customer is asked to enter the Bus ID and Seat number that s/he has reserved. If a suitable input is given then the program moves the seat with the corresponding Bus ID from “res.txt” to “bus.txt”. It also prints the amount to be returned to the Customer.

1. **Search**

From this module, both staff and customer can search a seat whether it is free, reserved or not available.

1. **Exit**

It is a sub module that appears at the last stage of the program every time. It displays the messages like “Good Bye!”, “Please! Visit Again.” etc.

**Go to main menu**

It is a type of facility. It is available in all the sub modules. It asks whether the user wants to go to main menu or exit the program.

**Program Codes**

DECLARE SUB inf ()

DECLARE SUB Ret ()

DECLARE SUB Table3 ()

DECLARE SUB main ()

DECLARE SUB Staff ()

DECLARE SUB Table2 ()

DECLARE SUB Table ()

DECLARE SUB Ex ()

DECLARE SUB Add ()

DECLARE SUB Disp ()

DECLARE SUB Srch ()

DECLARE SUB Res ()

DECLARE SUB RemRes ()

DECLARE SUB Edit ()

DECLARE SUB Del ()

DECLARE SUB Cust ()

CALL main

END

SUB Add

CLS

OPEN "bus.txt" FOR APPEND AS #1

DO

CLS

CALL Table

COLOR 6

LOCATE 7, 5

INPUT "Enter the Bus Id : ", b

LOCATE 9, 5

INPUT "Enter its Destination : ", D$

LOCATE 11, 5

INPUT "Enter no. of seats : ", n

LOCATE 13, 5

INPUT "Enter cost per seat : ", c

FOR i = 1 TO n

WRITE #1, b, D$, i, c

NEXT i

LOCATE 21, 6

INPUT "Do you wish to continue [Y/N]"; ch$

LOOP WHILE UCASE$(ch$) = "Y"

CLOSE #1

CALL Ret

END SUB

SUB Cust

top:

CLS

CALL Table

CALL Table2

COLOR 15

LOCATE 9, 23

PRINT "1 : Add a Bus"

LOCATE 10, 23

PRINT "2 : Display all"

LOCATE 11, 23

PRINT "3 : Search"

LOCATE 12, 23

PRINT "4 : Edit Bus Status"

LOCATE 13, 23

PRINT "5 : Remove a Bus"

LOCATE 14, 23

PRINT "6 : Exit"

LOCATE 21, 6

INPUT "Enter a choice"; a

SELECT CASE a

CASE 1

CALL Add

CASE 2

CALL Disp

CASE 3

CALL Srch

CASE 4

CALL Edit

CASE 5

CALL Del

CASE 6

CALL Ex

CASE ELSE

LOCATE 21, 57

PRINT "Invalid Input !!!"

SLEEP 1

GOTO top

END SELECT

END SUB

SUB Del

v:

CLS

CALL Table

COLOR 6

e = 0

OPEN "bus.txt" FOR INPUT AS #1

OPEN "temp.txt" FOR OUTPUT AS #2

PRINT

LOCATE 7, 5

INPUT "Enter Bus Id to be removed : ", a

WHILE NOT EOF(1)

INPUT #1, b, D$, i, c

IF b <> a THEN

WRITE #2, b, D$, i, c

ELSE

e = e + 1

END IF

WEND

IF e = 0 THEN

LOCATE 12, 15

PRINT "----- Sorry! The bus is not available. -----"

ELSE

LOCATE 12, 23

PRINT "----- The bus is removed! -----"

END IF

CLOSE #1, #2

KILL "bus.txt"

NAME "temp.txt" AS "bus.txt"

SLEEP 1

PRINT

LOCATE 21, 6

INPUT "Do you want to repeat the session [Y/N]"; ch$

IF UCASE$(ch$) = "Y" THEN

CLOSE #1, #2

GOTO v

END IF

CALL Ret

END SUB

SUB Disp

CLS

CALL Table3

COLOR 3

LOCATE 3, 18

PRINT "Bus ID"

LOCATE 3, 30

PRINT "Rate"

LOCATE 3, 45

PRINT "Destination"

OPEN "bus.txt" FOR INPUT AS #1

n = 0

a = 0

WHILE NOT EOF(1)

INPUT #1, b, D$, i, c

n = n + 1

WEND

CLOSE #1

OPEN "bus.txt" FOR INPUT AS #1

y = 0

WHILE NOT EOF(1)

INPUT #1, b, D$, i, c

IF b <> a THEN

LOCATE 6 + y, 18

PRINT b

LOCATE 6 + y, 30

PRINT c

LOCATE 6 + y, 45

PRINT D$

a = b

y = y + 1

END IF

WEND

CLOSE #1

LOCATE 25, 5

INPUT "Press ENTER when you are done... ", p$

CALL Ret

END SUB

SUB Edit

j:

CLS

CALL Table

COLOR 6

a = 0

OPEN "temp.txt" FOR OUTPUT AS #2

OPEN "bus.txt" FOR INPUT AS #1

LOCATE 7, 5

INPUT "Enter the Bus Id which should be Edited : ", n

LOCATE 9, 5

INPUT "Enter the new Destination : ", g$

LOCATE 11, 5

INPUT "Enter the cost per seat : ", m

WHILE NOT EOF(1)

INPUT #1, b, D$, i, c

IF b = n THEN

a = a + 1

WRITE #2, b, g$, i, m

ELSE

WRITE #2, b, D$, i, c

END IF

WEND

IF a >= 1 THEN

LOCATE 15, 18

PRINT "----- Successfully changed!!! -----"

ELSE

LOCATE 15, 15

PRINT "----- Sorry! The bus is not available! -----"

END IF

CLOSE #1, #2

KILL "bus.txt"

NAME "temp.txt" AS "bus.txt"

SLEEP 1

LOCATE 21, 6

INPUT "Do you want to repeat the session [Y/N]"; ch$

IF UCASE$(ch$) = "Y" THEN

CLOSE #1, #2

GOTO j

END IF

CALL Ret

END SUB

SUB Ex

CLS

COLOR 15

LOCATE 1, 65

PRINT "Date: "; DATE$

LOCATE 2, 65

z$ = LEFT$(TIME$, 5)

PRINT "Time: "; z$

COLOR 15

LOCATE 6, 33

PRINT "HONEST TRAVELS"

COLOR 4

LOCATE 7, 31

PRINT STRING$(18, 196)

COLOR 11

FOR i = 25 TO 55

LOCATE 8, i

PRINT STRING$(1, 219)

NEXT i

COLOR 11

FOR i = 8 TO 14

LOCATE i, 25

PRINT STRING$(1, 219)

NEXT i

FOR i = 8 TO 14

LOCATE i, 55

PRINT STRING$(1, 219)

NEXT i

COLOR 11

FOR i = 25 TO 55

LOCATE 14, i

PRINT STRING$(1, 219)

NEXT i

COLOR 15

LOCATE 2, 2

PRINT "DEVELOPED BY: GAURAV JUNG KUNWAR "

COLOR 4

LOCATE 3, 2

PRINT STRING$(33, 196)

COLOR 15

LOCATE 10, 33

PRINT " THANK YOU !!! "

LOCATE 12, 33

PRINT "FOR YOUR VISIT"

LOCATE 16, 31

PRINT "PLEASE! VISIT AGAIN."

COLOR 15

END SUB

SUB main

8 :

CLS

CALL Table

COLOR 6

LOCATE 6, 5

PRINT "WELCOME! TO HONEST TRAVELS..."

LOCATE 8, 5

PRINT "WE HAVE A WIDE RANGE OF NETWORK ALL OVER THE COUNTRY."

LOCATE 9, 5

PRINT "ALSO THERE ARE MANY HIGH CLASS VEHICLES FOR YOU."

LOCATE 11, 5

PRINT "IF YOU HAVE ANY COMMENTS OR QUESTIONS REGARDING US"

LOCATE 12, 5

PRINT "THEN PLEASE CONTACT TO ANY OF THE FOLLOWING ADDRESSES:"

LOCATE 14, 5

PRINT "Email : honesttravels@live.com"

LOCATE 15, 5

PRINT "Website : honesttravels.com.np"

LOCATE 16, 5

PRINT "Phone no : 4286321 , 4298826"

LOCATE 17, 40

PRINT "YOUR VIEWS WILL HELP US TO DEVELOP..."

COLOR 6

LOCATE 21, 6

INPUT "Are you a Staff or a Customer [S/C]"; w$

SELECT CASE UCASE$(w$)

CASE "S"

CALL Cust

CASE "C"

CALL Staff

CASE ELSE

LOCATE 21, 57

PRINT "Invalid Input!!!"

GOTO 8

END SELECT

END SUB

SUB RemRes

g = 0

t:

CLS

CALL Table

e = 0

OPEN "res.txt" FOR INPUT AS #1

OPEN "bus.txt" FOR APPEND AS #2

COLOR 6

LOCATE 7, 5

INPUT "Enter Bus Id : ", n

LOCATE 9, 5

INPUT "Enter seat no. : ", a

WHILE NOT EOF(1)

INPUT #1, b, D$, i, c

IF b = n AND i = a THEN

WRITE #2, b, D$, i, c

e = e + 1

END IF

WEND

IF e = 0 THEN

LOCATE 12, 8

PRINT "... Sorry! The Seat is not available or is already reserved ..."

CLOSE #1, #2

SLEEP 1

LOCATE 21, 6

INPUT "Do you want to repeat the session [Y/N]"; ch$

IF UCASE$(ch$) = "Y" THEN

GOTO t

ELSE

GOTO 0

END IF

END IF

CLOSE #1, #2

OPEN "res.txt" FOR INPUT AS #1

WHILE NOT EOF(1)

INPUT #1, b, D$, i, c

IF n = b AND a = i THEN

g = g + c

END IF

WEND

CLOSE #1

OPEN "res.txt" FOR INPUT AS #1

OPEN "temp.txt" FOR OUTPUT AS #2

WHILE NOT EOF(1)

INPUT #1, b, D$, i, c

IF b = n AND i <> a THEN

WRITE #2, b, D$, i, c

ELSE IF b <> n THEN WRITE #2, b, D$, i, c

END IF

WEND

CLOSE #1, #2

KILL "res.txt"

NAME "temp.txt" AS "res.txt"

LOCATE 12, 15

PRINT "----- The seat is successfully unreserved. -----"

LOCATE 17, 47

PRINT "You will be returned Rs :"; g

SLEEP 1

LOCATE 21, 6

INPUT "Do you want to repeat the session [Y/N]"; ch$

IF UCASE$(ch$) = "Y" THEN GOTO t

0 :

CALL Ret

END SUB

SUB Res

g = 0

a:

CLS

CALL Table

COLOR 6

e = 0

OPEN "bus.txt" FOR INPUT AS #1

OPEN "res.txt" FOR APPEND AS #2

LOCATE 7, 5

INPUT "Enter Bus Id : ", n

LOCATE 9, 5

INPUT "Enter seat number : ", a

WHILE NOT EOF(1)

INPUT #1, b, D$, i, c

IF b = n AND i = a THEN

WRITE #2, b, D$, i, c

e = e + 1

END IF

WEND

IF e = 0 THEN

LOCATE 12, 8

PRINT "... Sorry! The Seat is not available or is already reserved ..."

CLOSE #1, #2

SLEEP 1

LOCATE 21, 6

INPUT "Do you want to repeat the session [Y/N]"; ch$

IF UCASE$(ch$) = "Y" THEN

GOTO a

ELSE

GOTO z

END IF

END IF

CLOSE #1, #2

OPEN "bus.txt" FOR INPUT AS #1

WHILE NOT EOF(1)

INPUT #1, b, D$, i, c

IF n = b AND a = i THEN

g = g + c

END IF

WEND

CLOSE #1

OPEN "bus.txt" FOR INPUT AS #1

OPEN "temp.txt" FOR OUTPUT AS #2

WHILE NOT EOF(1)

INPUT #1, b, D$, i, c

IF b = n AND i <> a THEN

WRITE #2, b, D$, i, c

ELSE IF b <> n THEN WRITE #2, b, D$, i, c

END IF

WEND

CLOSE #1, #2

KILL "bus.txt"

NAME "temp.txt" AS "bus.txt"

LOCATE 12, 15

PRINT "----- The seat is successfully reserved. -----"

LOCATE 17, 50

PRINT "Your total bill is Rs :"; g

SLEEP 1

LOCATE 21, 6

INPUT "Do you want to repeat the session [Y/N]"; ch$

IF UCASE$(ch$) = "Y" THEN GOTO a

z:

CALL Ret

END SUB

SUB Ret

6 :

CLS

CALL Table

COLOR 6

LOCATE 7, 5

PRINT "IF YOU HAVE ANY COMMENTS OR QUESTIONS REGARDING US"

LOCATE 8, 5

PRINT "THEN PLEASE CONTACT TO ANY OF THE FOLLOWING ADDRESSES:"

LOCATE 10, 5

PRINT "Email : honesttravels@live.com"

LOCATE 11, 5

PRINT "Website : honesttravels.com.np"

LOCATE 12, 5

PRINT "Phone no : 4286321 , 4298826"

LOCATE 15, 40

PRINT "YOUR VIEWS WILL HELP US TO DEVELOP..."

COLOR 6

LOCATE 21, 6

INPUT "Do you want to return to main menu [Y/N]"; w$

SELECT CASE UCASE$(w$)

CASE "Y"

CALL main

CASE "N"

CALL Ex

CASE ELSE

LOCATE 21, 57

PRINT "Invalid Input!!!"

GOTO 6

END SELECT

END SUB

SUB Srch

s:

CLS

CALL Table

COLOR 6

LOCATE 7, 5

INPUT "Enter Bus Id : ", a

LOCATE 9, 5

INPUT "Enter Seat number : ", n

c = 0

OPEN "bus.txt" FOR INPUT AS #1

WHILE NOT EOF(1)

INPUT #1, b, D$, i, c

IF b = a AND i = n THEN

c = 5

LOCATE 14, 23

PRINT "----- The seat is Free. ------"

GOTO 1

END IF

WEND

OPEN "res.txt" FOR INPUT AS #2

WHILE NOT EOF(2)

INPUT #2, b, D$, i, c

IF b = a AND i = n THEN

c = 5

LOCATE 14, 23

PRINT "----- The seat is Reserved. -----"

GOTO 1

END IF

WEND

IF c <> 5 THEN

COLOR 6

LOCATE 14, 20

PRINT "----- Sorry! The seat is not available. -----"

END IF

1 :

SLEEP 1

PRINT

LOCATE 21, 6

INPUT "Do you want to repeat the session [Y/N]"; ch$

IF UCASE$(ch$) = "Y" THEN

CLOSE #1, #2

GOTO s

END IF

CLOSE #1, #2

CALL Ret

END SUB

SUB Staff

5 :

CLS

CALL Table

CALL Table2

COLOR 15

LOCATE 9, 23

PRINT "1 : Display all"

LOCATE 10, 23

PRINT "2 : Reserve a Seat"

LOCATE 11, 23

PRINT "3 : Remove seat Reservation"

LOCATE 12, 23

PRINT "4 : Search"

LOCATE 13, 23

PRINT "5 : Exit"

LOCATE 21, 6

INPUT "Enter a choice"; a

SELECT CASE a

CASE 1

CALL Disp

CASE 2

CALL Res

CASE 3

CALL RemRes

CASE 4

CALL Srch

CASE 5

CALL Ex

CASE ELSE

LOCATE 21, 57

PRINT "Invalid Input !!!"

SLEEP 1

GOTO 5

END SELECT

END SUB

SUB Table

CLS

COLOR 15

LOCATE 3, 63

PRINT "Date: "; DATE$

LOCATE 4, 63

z$ = LEFT$(TIME$, 5)

PRINT "Time: "; z$

COLOR 3

FOR i = 2 TO 79

LOCATE 2, i

PRINT STRING$(1, 219)

NEXT i

FOR i = 2 TO 79

LOCATE 23, i

PRINT STRING$(1, 219)

NEXT i

FOR i = 2 TO 23

LOCATE i, 2

PRINT STRING$(1, 219)

NEXT i

FOR i = 2 TO 23

LOCATE i, 79

PRINT STRING$(1, 219)

NEXT i

COLOR 15

LOCATE 3, 33

PRINT "HONEST TRAVELS"

COLOR 4

LOCATE 4, 31

PRINT STRING$(18, 196)

COLOR 3

LOCATE 19, 3

PRINT STRING$(1, 219)

LOCATE 19, 78

PRINT STRING$(1, 219)

FOR i = 4 TO 77

LOCATE 19, i

PRINT STRING$(1, 219)

NEXT i

COLOR 3

FOR i = 20 TO 22

LOCATE i, 55

PRINT STRING$(1, 219)

NEXT i

END SUB

SUB Table2

COLOR 6

FOR i = 6 TO 17

LOCATE i, 19

PRINT STRING$(1, 186)

NEXT i

FOR i = 6 TO 17

LOCATE i, 61

PRINT STRING$(1, 186)

NEXT i

FOR i = 17 TO 63

LOCATE 7, i

PRINT STRING$(1, 205)

NEXT i

FOR i = 17 TO 63

LOCATE 16, i

PRINT STRING$(1, 205)

NEXT i

END SUB

SUB Table3

CLS

COLOR 6

FOR i = 2 TO 22

LOCATE i, 27

PRINT STRING$(1, 186)

NEXT i

FOR a = 2 TO 22

LOCATE a, 42

PRINT STRING$(1, 186)

NEXT a

FOR i = 15 TO 65

LOCATE 4, i

PRINT STRING$(1, 205)

NEXT i

END SUB