



COMPUTER ORGANIZATION AND ASSEMBLY LANGUAGE

CS-255

Project Title

HOTEL MANAGEMENT SYSTEM

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HOTEL MANAGEMENT SYSTEM

Introduction:

Hotel management system allows the user to check available rooms, book a room, search data, and display data. The code begins by defining some variables, including a global buffer size, a file name for the data, and variables for the number of rooms in each class. It also declares variables for the name buffer, the length of the entered name, the number of days the guest wants to stay, the total bill, and file handlers.

Main function:

The **main** procedure is the entry point of the program. It starts by creating the output file and displaying the main menu with three options: visit hotel, book a room, or exit the program. The user can choose an option by entering a number.

Functions:

If the user selects to visit the hotel, the **visitHotel** procedure is called, which displays the number of available rooms in each class. If the user selects to book a room, the **bookRoom** procedure is called. The **bookRoom** procedure prompts the user to enter their name, the number of days they want to stay, and the type of room they want. The program calculates the total bill based on the room type and the number of days, decrements the number of available rooms in the selected class, and displays the total bill.

After the user selects an option and performs the corresponding action, the program returns to the main menu until the user chooses to exit the program. Once the user exits the program, the program closes the file and displays the data by calling the **showData** procedure.

There are also commented out sections of the code that allow the user to search for data by name and display it. However, they are not used in the current implementation.

CODE

;-----Description----->

```
;      Hotel Management System
;      Used functions
;      Total Room Available
;      Room Booking
;      searching data
;      displaying data
```

```
include irvine32.inc
include macros.inc

buffer_Size = 1000                ;global variable
.data
record_file byte "Record_file.txt",0
_str1_ byte "                      *****"
",0dh,0ah,0
_str2_ byte "                      Hotel Management System"
",0dh,0ah,0
_str3_ byte "                      * Main Menu *"
",0dh,0ah,0
_str4_ byte "                      *****"
",0dh,0ah,0
_str5_ byte "                      ",0dh,0      ;space string
_str6_ byte 0ah                      ;newline

;total Room 30

h_class dd 10
m_class dd 10
l_class dd 10

name_buffer byte buffer_Size dup(?)      ; array for storing name
name_buffer_size dd ?                    ; size of entered name
```

```
no_Of_Days dd 0
```

```
read_buffer byte buffer_Size dup(0)
```

```
searchnamebufflength dd ?
```

```
searchnamebuff byte buffer_Size dup(0)
```

```
displaybuffer byte buffer_Size dup(0)
```

```
Total_bill dd 0
```

```
;_bill byte ?
```

```
record_handler handle ?
```

```
record_handler2 handle ?
```

```
byteswritten dd ?
```

```
byteswritten2 dd ?
```

```
temp dd ?
```

```
.code
```

```
;<-----Main Procedure----->
```

```
main proc
```

```
    mov edx,offset record_file
```

```
    call createoutputfile
```

```
    mov record_handler,eax
```

```
.repeat
```

```
    call clrscr
```

```
    call crlf
```

```
    mov edx,offset _str1_
```

```
    call writestring
```

```
    mov edx,offset _str2_
```

```
    call writestring
```

```
    mov edx,offset _str3_
```

```
    call writestring
```

```
    mov edx,offset _str4_
```

```
    call writestring
```

```
mWrite "1. Enter to visit Hotel"
```

```
call crlf
```

```
mWrite "2. Enter to book a room"
```

```
call crlf
```

```
mWrite "3. Enter to Exit a loop"
```

```
call crlf
```

```
mWrite "Please Enter your choise..."
```

```
call readdec
```

```
.if eax==1
```

```
    call clrscr
```

```
    call visitHotel
```

```

        call waitmsg
        call crlf
    .elseif eax==2
        call clrscr
        call bookRoom
        call crlf
    .elseif eax==3
    jmp ext
    .else
    call clrscr
    mwrite "Invalid choise Select Again !!!!!!!!!!!!"
    call clrscr
    call crlf
    .endif

```

```

ext:
.until eax==3

```

```

mov eax,record_handler
call closefile
call waitmsg
CALL CRLF

```

```

;<-----CALLING DISPLAY FUNCTION----->

```

```

mwrite"_____
"
CALL CRLF
CALL CRLF
mwrite"NAME    PHONE NO    ID-CARD NO"
CALL CRLF
mwrite"_____
"
CALL CRLF

```

```

call showData

```

```

CALL CRLF
mwrite"_____
"

```

```

CALL CRLF
exit
main endp

```

;<-----visitHotel Function----->

```
visitHotel proc
    call crlf
    mWrite "-----"
    call crlf
    mWrite "  Type Of Available Rooms  "
    call crlf
    mWrite " Family Room          : "
    mov eax,h_class
    call writedec
    call crlf
    mWrite " Double Room          : "
    mov eax,m_class
    call writedec
    call crlf
    mWrite " Single Room          : "
    mov eax,l_class
    call writedec
    call crlf
ret
visitHotel endp
```

;<-----Room Booking Function----->

```
bookRoom proc

    mWrite "-----"
    call crlf
    mWrite "Please Enter Guest Name: "
    mov ecx,buffer_Size                ;total length of global variable
    mov edx,offset name_buffer
    call readstring
    mov name_buffer_size,eax           ;length of name that I enter
    call crlf

    mWrite "How many days Guest want to stay:  "
    call readdec
    mov no_Of_Days,eax
    call crlf
again:
    mWrite "Which Room  select for Guest to stay ? "
    call crlf
    mWrite "1. Family Room          "
    call crlf
    mWrite "2. Double BedRoom      "
    call crlf
    mWrite "3. Single Bedroom      "
    call crlf
    mWrite "Enter your choise:  "
```

```

call readdec

;mov esi,offset Total_bill

.if eax==1
    mov ebx,10000
    mov eax,no_Of_Days
    mul ebx
    mov Total_bill,eax

                                ; total rooms are 10 so 1 decrimented of alloting
    dec h_class

.elseif eax==2
    mov ebx,8000
    mov eax,no_Of_Days
    mul ebx
    mov Total_bill,eax

                                ; total rooms are 10 so 1 decrimented of alloting
    dec m_class

.elseif eax==3
    mov ebx,6000
    mov eax,no_Of_Days
    mul ebx
    mov Total_bill,eax

                                ; total rooms are 10 so 1 decrimented of alloting
    dec l_class

.else
    mWrite "Invalid choise select Again !!!!!!!!!!!!!!"
    call crlf
    jmp again
.endif

                                ;DISPLAYING TOTAL BILL
mWrite "Guest total bill calculated: "
mov eax>Total_bill
call writedec
call crlf
mwrite "NOTE: so after paying this bill your room will be Alloted "
call crlf

mov edx,offset name_buffer
mov ecx,name_buffer_size
mov eax,record_handler
call writetofile
add byteswritten,eax

```

```

;create a text file
;mov edx,offset record_file
;call createoutputfile
;mov record_handler,eax

mov edx,offset _str5_           ;space in file
mov ecx,10
mov eax,record_handler
call writetofile
add byteswritten,eax

call crlf
mWrite "Enter Guest Contact No: "
mov edx,offset name_buffer
mov ecx,buffer_Size
call readstring
mov name_buffer_size,eax

mov edx,offset name_buffer
mov ecx,name_buffer_size
mov eax,record_handler
call writetofile
add byteswritten,eax
call crlf

mov edx,offset _str5_           ;space in file
mov ecx,10
mov eax,record_handler
call writetofile
add byteswritten,eax

call crlf
mWrite "Enter Guest ID Card No: "
mov edx,offset name_buffer
mov ecx,buffer_Size
call readstring
mov name_buffer_size,eax

mov edx,offset name_buffer
mov ecx,name_buffer_size
mov eax,record_handler
call writetofile
add byteswritten,eax
call crlf

mov edx,offset _str6_           ;newline string for file

```



```
    mov ecx,1
    mov eax,record_handler
    call writetofile
    add byteswritten,eax
```

```
ret
bookRoom endp
```

```
;<-----showData function----->
showData proc
```

```
    mov edx,offset record_file
    call openinputfile
    mov record_handler2,eax
```

```
    mov edx,offset read_buffer
    mov ecx,buffer_Size
    mov eax,record_handler2
    call readfromfile
    mov byteswritten,eax
```

```
    mov edx,offset read_buffer
    call writestring
```

```
    mov eax,record_handler2
    call closefile
```

```
ret
showData endp
```

```
end main
```

Output:

```
*****
Hotel Management System
* Main Menu *
*****

1. Enter to visit Hotel
2. Enter to book a room
3. Enter to Exit a loop
Please Enter your choise...2
```

```
-----
Please Enter Guest Name: Amriha

How many days Guest want to stay: 2

Which Room select for Guest to stay ?
1. Family Room
2. Double BedRoom
3. Single Bedroom
Enter your choise: 3
Guest total bill calculated: 12000
NOTE: so after paying this bill your room will be Alloted

Enter Guest Contact No: 03416627485

Enter Guest ID Card No: 26475835272
```

```
*****
Hotel Management System
* Main Menu *
*****

1. Enter to visit Hotel
2. Enter to book a room
3. Enter to Exit a loop
Please Enter your choise...3
Press any key to continue...

NAME                PHONE NO            ID-CARD NO
-----
Amriha              03416627485        26475835272
```