Start

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void userSignIn()

void userSignUp()

void Room\_Type()

int Receipt(int, int, int, int)

bool getOccupied()

void pickRoom(int)

const int MAX\_ROOMS = 10

const int ROOM\_TYPES = 3

int floor1[MAX\_ROOMS][ROOM\_TYPES]

int floor2[MAX\_ROOMS][ROOM\_TYPES]

int floor3[MAX\_ROOMS][ROOM\_TYPES]

bool occupied[MAX\_ROOMS]

const int A\_PRICE = 80

const int B\_PRICE = 150

const int C\_PRICE = 175

Main ()

Declare char choice

Declare char again

do {

Display "------------------------------" \t

Display setw(16) << "Menu:" \t \t

Display "a) User Sign In" \t

Display "b) User Sign Up" \t

Display "------------------------------" \t

Input choice

}

while (choice != 'a' && choice != 'b' && choice != 'c')

{

"Error: Please choose either 'a' or 'b'"

Input choice

}

switch (tolower(choice)) {

case 'a':

userSignIn()

break

case 'b':

userSignUp()

break

}

Display "(y/n)"

Input again

} while(tolower(again) == 'y')

return

}

Void Pick\_Dates ()

{

int Checkin\_Date

int Checkout\_Date

Display "Input check in date"

Input Checkin\_Date

while(Checkin\_Date < 1 && Checkin\_Date > 30)

{

Display "Error: The date has to be in the range of 1-30"

Input Checkin\_Date

}

Display "Input check out date"

Input Checkout\_Date

while(Checkout\_Date <= Checkin\_Date && Checkout\_Date > 30)

{

Display "Error: The date has to be in the range of " << (Checkin\_Date + 1) << "-30"

Input Checkout\_Date

}

}

END

void signup ()

declare username

declare password

display "Welcome to Signup for Hotel Overlook"

display " "

display " "

display "\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*"

display "Please enter your wanted username"

input username

display "Please enter your wanted password"

input password

OPENFILE userinfo.txt

INSERT +username

INSERT +password

CLOSEFILE

Display "Welcome User"

END

Void Room\_Type ()

Declare int price;

Declare bool occupied;

Display “Choose Room Type (1, 2, 3): “

Display “1) Single (1 Bed 1 Bath)” \t “2) Double (2 Bed 1 Bath)” \t “3) Suite (3 Bed 2 Bath)” \t

Switch (room\_type)

a. ‘1’

Display “You Picked the room type: Single Room (1 Bed 1 Bath)”

price = a\_price

occupied = getOccupied()

b. ‘2’

Display “You Picked the room type: Double (2 Bed 1 Bath)”

price = b\_price

occupied = getOccupied()

c. ‘3’

Display “You Picked the room type: Suite (3 Bed 2 Bath)”

price = c\_price

occupied = getOccupied()

Display "There are "+occupied " rooms available for your dates"

pickRoom(occupied)

END

int Receipt (price,total,checkin\_Date,checkout\_Date,username)

Display "--- Receipt ---"

Display "User:"+username

Display "Check In Date: " << "12/"<<checkin\_Date<<"/2024" \n

Display "Check Out Date: " << "12/"<<checkout\_Date<<"/2024" \n

Display "Room type price: $" + price

Display "Total nights: " + (checkout\_Date - checkin\_Date)

Display "Total amount due: $" + total

END

bool getOccupied()

Bool occupied

for (int i = 0; i < MAX\_ROOMS; i++)

{

Occupied = random() % 2

floor1[][]

floor2[][]

floor3[][]

}

}

void PickRoom()

declare choice

for (int row = 0; row <= MAX\_ROOMS; row++)

{

Display “Rooms: “ << hotel[][] << “ “

for (int column =

END

void signin ()

declare bool ValidUser

display "Please enter your username"

input username

display "Please enter your password"

input password

OPENFILE userinfo.txt

set VaildUser = Compare userinfo.txt to +username && +password

If VaildUser == true

Display "Welcome User"

END

void guest ()

declare username

declare password

Display "Welcome guest, no sign-in required"

END

int RandomNumber()

int occupied = random() %2

return occupied

END