**System Implementations**

**Recommended System Requirements**

Processors: Intel® Core™ i3 processor 4300M at 2.60 GHz.

Disk space: 4 to 8 GB.

Operating systems: Windows® 10, MACOS, and UBUNTU.

Python Versions: 3.X.X or Higher.

**Minimum System Requirements**

Processors: Intel Atom® processor or Intel® Core™ i3 processor.

Disk space: 1 GB.

Operating systems: Windows 7 or later, MACOS, and UBUNTU.

Python Versions: 2.7.X, 3.9.X.

**ACKNOWLEDGEMENT**TTT

First and foremost, praises and thanks to the God, the Almighty, for His showers of blessings throughout my research work to complete the research successfully.

We would like to express my deep and sincere gratitude to my subject teacher, Mr. Amit Udiwal, for giving me the opportunity to do research and providing invaluable guidance throughout this research. His dynamism, vision, sincerity and motivation have deeply inspired me. He has taught me the methodology to carry out the research and to present the research works as clearly as and honour to work and study under his guidance. We are very much thankful to our Sr. Jasmin for giving valuable time and moral support to develop this software. We would like to take opportunity to extend my sincere thanks and gratitude to our parents for being a source of inspiration and providing time and freedom to develop this software project. We also feel indebted to my friends for the valuable suggestions during the project work.

Sara Nagori

[Roll No.

Class XII

**CERTIFICATE**

This is to certify that the project on ‘Hotel Management System’ is a work done by Sara Nagori fulfilment of CBSE’S AISSCE EXAMINATION 2022 and has been carried out under my direct supervision and guidance. This report or a similar report on the topic has not been submitted for any other examination and does not form any other examination and does not form any other course undergone by the candidate.

Name:

Sara Nagori [Roll No.

………………….

Signature of Teacher / Guide

Name: Mr. Amit Udiwal

Designation:

………………. ….………………

**REFERENCE**

The order to work on this project on ‘Sales And Inventory Management System’ the following books & literature are referred by me during the various phrases of department of the project.

• http://www.python.org/.

• http://www.itsourcecode.org/.

• http://www.wikipedia.org/.

• Informatics Practices for Class XII

- By Sumita Arora

• Together with informatics practices.

Other than the above mentioned books, the suggestions and supervision of my teacher and my class experience also helped me to develop this software project.

**Introduction**

Simple Hotel Management System project is written in Python. The project file contains a python script. This is a simple console based system which is very easy to understand and use. Talking about the system, it contains all the basic functions which include entering customer’s data, calculating room rent, restaurant bill, laundry bill, game bill, and total cost. In this mini project, there is no such login system. This means he/she can use all those available features easily without any restriction. It is too easy to use, he/she can check the total cost of staying in the hotel easily with each and every detail.

**Objective and**

**Scope of The Project**

the features of this Simple Hotel Management System, at first, the user has to enter his/her data. It includes the name of the user, address, check-in, and check-out dates. The user can calculate room rents. Inside this section, there are total four types of room with different prices. After selecting the room type, the system asks to enter the number of nights spent in order to calculate room rent. This simple system also contains other functions such as calculating restaurant, laundry and game bill. When the user selects to calculate restaurant bill, the system displays a small menu. From there the user has to select foods and then it displays the total restaurant bill. The other remaining features; calculating laundry and game bill also follows the same procedure as of calculating restaurant bill.

**Hotel Management System**

import random

import datetime

# Global List Declaration

name = []

phno = []

add = []

checkin = []

checkout = []

room = []

price = []

rc = []

p = []

roomno = []

custid = []

day = []

# Global Variable Declaration

i = 0

# Home Function

def Home():

print("\t\t\t\t\t\t WELCOME TO HOTEL ANCASA\n")

print("\t\t\t 1 Booking\n")

print("\t\t\t 2 Rooms Info\n")

print("\t\t\t 3 Room Service(Menu Card)\n")

print("\t\t\t 4 Payment\n")

print("\t\t\t 5 Record\n")

print("\t\t\t 0 Exit\n")

ch=int(input("->"))

if ch == 1:

print(" ")

Booking()

elif ch == 2:

print(" ")

Rooms\_Info()

elif ch == 3:

print(" ")

restaurant()

elif ch == 4:

print(" ")

Payment()

elif ch == 5:

print(" ")

Record()

else:

exit()

# Function used in booking

def date(c):

if c[2] >= 2019 and c[2] <= 2020:

if c[1] != 0 and c[1] <= 12:

if c[1] == 2 and c[0] != 0 and c[0] <= 31:

if c[2]%4 == 0 and c[0] <= 29:

pass

elif c[0]<29:

pass

else:

print("Invalid date\n")

name.pop(i)

phno.pop(i)

add.pop(i)

checkin.pop(i)

checkout.pop(i)

Booking()

# if month is odd & less than equal

# to 7th month

elif c[1] <= 7 and c[1]%2 != 0 and c[0] <= 31:

pass

# if month is even & less than equal to 7th

# month and not 2nd month

elif c[1] <= 7 and c[1]%2 == 0 and c[0] <= 30 and c[1] != 2:

pass

# if month is even & greater than equal

# to 8th month

elif c[1] >= 8 and c[1]%2 == 0 and c[0] <= 31:

pass

# if month is odd & greater than equal

# to 8th month

elif c[1]>=8 and c[1]%2!=0 and c[0]<=30:

pass

else:

print("Invalid date\n")

name.pop(i)

phno.pop(i)

add.pop(i)

checkin.pop(i)

checkout.pop(i)

Booking()

else:

print("Invalid date\n")

name.pop(i)

phno.pop(i)

add.pop(i)

checkin.pop(i)

checkout.pop(i)

Booking()

else:

print("Invalid date\n")

name.pop(i)

phno.pop(i)

add.pop(i)

checkin.pop(i)

checkout.pop(i)

Booking()

# Booking function

def Booking():

# used global keyword to

# use global variable 'i'

global i

print(" BOOKING ROOMS")

print(" ")

while 1:

n = str(input("Name: "))

p1 = str(input("Phone No.: "))

a = str(input("Address: "))

# checks if any field is not empty

if n!="" and p1!="" and a!="":

name.append(n)

add.append(a)

break

else:

print("\tName, Phone no. & Address cannot be empty..!!")

cii=str(input("Check-In: "))

checkin.append(cii)

cii=cii.split('/')

ci=cii

ci[0]=int(ci[0])

ci[1]=int(ci[1])

ci[2]=int(ci[2])

date(ci)

coo=str(input("Check-Out: "))

checkout.append(coo)

coo=coo.split('/')

co=coo

co[0]=int(co[0])

co[1]=int(co[1])

co[2]=int(co[2])

# checks if check-out date falls after

# check-in date

if co[1]<ci[1] and co[2]<ci[2]:

print("\n\tErr..!!\n\tCheck-Out date must fall after Check-In\n")

name.pop(i)

add.pop(i)

checkin.pop(i)

checkout.pop(i)

Booking()

elif co[1]==ci[1] and co[2]>=ci[2] and co[0]<=ci[0]:

print("\n\tErr..!!\n\tCheck-Out date must fall after Check-In\n")

name.pop(i)

add.pop(i)

checkin.pop(i)

checkout.pop(i)

Booking()

else:

pass

date(co)

d1 = datetime.datetime(ci[2],ci[1],ci[0])

d2 = datetime.datetime(co[2],co[1],co[0])

d = (d2-d1).days

day.append(d)

print("----SELECT ROOM TYPE----")

print(" 1. Standard Non-AC")

print(" 2. Standard AC")

print(" 3. 3-Bed Non-AC")

print(" 4. 3-Bed AC")

print(("\t\tPress 0 for Room Prices"))

ch=int(input("->"))

# if-conditions to display alloted room

# type and it's price

if ch==0:

print(" 1. Standard Non-AC - Rs. 3500")

print(" 2. Standard AC - Rs. 4000")

print(" 3. 3-Bed Non-AC - Rs. 4500")

print(" 4. 3-Bed AC - Rs. 5000")

ch=int(input("->"))

if ch==1:

room.append('Standard Non-AC')

print("Room Type- Standard Non-AC")

price.append(3500)

print("Price- 3500")

elif ch==2:

room.append('Standard AC')

print("Room Type- Standard AC")

price.append(4000)

print("Price- 4000")

elif ch==3:

room.append('3-Bed Non-AC')

print("Room Type- 3-Bed Non-AC")

price.append(4500)

print("Price- 4500")

elif ch==4:

room.append('3-Bed AC')

print("Room Type- 3-Bed AC")

price.append(5000)

print("Price- 5000")

else:

print(" Wrong choice..!!")

# randomly generating room no. and customer

# id for customer

rn = random.randrange(40)+300

cid = random.randrange(40)+10

# checks if alloted room no. & customer

# id already not alloted

while rn in roomno or cid in custid:

rn = random.randrange(60)+300

cid = random.randrange(60)+10

rc.append(0)

p.append(0)

if p1 not in phno:

phno.append(p1)

elif p1 in phno:

for n in range(0,i):

if p1== phno[n]:

if p[n]==1:

phno.append(p1)

elif p1 in phno:

for n in range(0,i):

if p1== phno[n]:

if p[n]==0:

print("\tPhone no. already exists and payment yet not done..!!")

name.pop(i)

add.pop(i)

checkin.pop(i)

checkout.pop(i)

Booking()

print("")

print("\t\t\t\*\*\*ROOM BOOKED SUCCESSFULLY\*\*\*\n")

print("Room No. - ",rn)

print("Customer Id - ",cid)

roomno.append(rn)

custid.append(cid)

i=i+1

n=int(input("0-BACK\n ->"))

if n==0:

Home()

else:

exit()

# ROOMS INFO

def Rooms\_Info():

print(" ------ HOTEL ROOMS INFO ------")

print("")

print("STANDARD NON-AC")

print("---------------------------------------------------------------")

print("Room amenities include: 1 Double Bed, Television, Telephone,")

print("Double-Door Cupboard, 1 Coffee table with 2 sofa, Balcony and")

print("an attached washroom with hot/cold water.\n")

print("STANDARD NON-AC")

print("---------------------------------------------------------------")

print("Room amenities include: 1 Double Bed, Television, Telephone,")

print("Double-Door Cupboard, 1 Coffee table with 2 sofa, Balcony and")

print("an attached washroom with hot/cold water + Window/Split AC.\n")

print("3-Bed NON-AC")

print("---------------------------------------------------------------")

print("Room amenities include: 1 Double Bed + 1 Single Bed, Television,")

print("Telephone, a Triple-Door Cupboard, 1 Coffee table with 2 sofa, 1")

print("Side table, Balcony with an Accent table with 2 Chair and an")

print("attached washroom with hot/cold water.\n")

print("3-Bed AC")

print("---------------------------------------------------------------")

print("Room amenities include: 1 Double Bed + 1 Single Bed, Television,")

print("Telephone, a Triple-Door Cupboard, 1 Coffee table with 2 sofa, ")

print("1 Side table, Balcony with an Accent table with 2 Chair and an")

print("attached washroom with hot/cold water + Window/Split AC.\n\n")

print()

n=int(input("0-BACK\n ->"))

if n==0:

Home()

else:

exit()

# RESTAURANT FUNCTION

def restaurant():

ph=int(input("Customer Id: "))

global i

f=0

r=0

for n in range(0,i):

if custid[n]==ph and p[n]==0:

f=1

print("-------------------------------------------------------------------------")

print(" Hotel AnCasa")

print("-------------------------------------------------------------------------")

print(" Menu Card")

print("-------------------------------------------------------------------------")

print("\n BEVARAGES 26 Dal Fry................ 140.00")

print("---------------------------------- 27 Dal Makhani............ 150.00")

print(" 1 Regular Tea............. 20.00 28 Dal Tadka.............. 150.00")

print(" 2 Masala Tea.............. 25.00")

print(" 3 Coffee.................. 25.00 ROTI")

print(" 4 Cold Drink.............. 25.00 ----------------------------------")

print(" 5 Bread Butter............ 30.00 29 Plain Roti.............. 15.00")

print(" 6 Bread Jam............... 30.00 30 Butter Roti............. 15.00")

print(" 7 Veg. Sandwich........... 50.00 31 Tandoori Roti........... 20.00")

print(" 8 Veg. Toast Sandwich..... 50.00 32 Butter Naan............. 20.00")

print(" 9 Cheese Toast Sandwich... 70.00")

print(" 10 Grilled Sandwich........ 70.00 RICE")

print(" ----------------------------------")

print(" SOUPS 33 Plain Rice.............. 90.00")

print("---------------------------------- 34 Jeera Rice.............. 90.00")

print(" 11 Tomato Soup............ 110.00 35 Veg Pulao.............. 110.00")

print(" 12 Hot & Sour............. 110.00 36 Peas Pulao............. 110.00")

print(" 13 Veg. Noodle Soup....... 110.00")

print(" 14 Sweet Corn............. 110.00 SOUTH INDIAN")

print(" 15 Veg. Munchow........... 110.00 ----------------------------------")

print(" 37 Plain Dosa............. 100.00")

print(" MAIN COURSE 38 Onion Dosa............. 110.00")

print("---------------------------------- 39 Masala Dosa............ 130.00")

print(" 16 Shahi Paneer........... 110.00 40 Paneer Dosa............ 130.00")

print(" 17 Kadai Paneer........... 110.00 41 Rice Idli.............. 130.00")

print(" 18 Handi Paneer........... 120.00 42 Sambhar Vada........... 140.00")

print(" 19 Palak Paneer........... 120.00")

print(" 20 Chilli Paneer.......... 140.00 ICE CREAM")

print(" 21 Matar Mushroom......... 140.00 ----------------------------------")

print(" 22 Mix Veg................ 140.00 43 Vanilla................. 60.00")

print(" 23 Jeera Aloo............. 140.00 44 Strawberry.............. 60.00")

print(" 24 Malai Kofta............ 140.00 45 Pineapple............... 60.00")

print(" 25 Aloo Matar............. 140.00 46 Butter Scotch........... 60.00")

print("Press 0 -to end ")

ch=1

while(ch!=0):

ch=int(input(" -> "))

# if-elif-conditions to assign item

# prices listed in menu card

if ch==1 or ch==31 or ch==32:

rs=20

r=r+rs

elif ch<=4 and ch>=2:

rs=25

r=r+rs

elif ch<=6 and ch>=5:

rs=30

r=r+rs

elif ch<=8 and ch>=7:

rs=50

r=r+rs

elif ch<=10 and ch>=9:

rs=70

r=r+rs

elif (ch<=17 and ch>=11) or ch==35 or ch==36 or ch==38:

rs=110

r=r+rs

elif ch<=19 and ch>=18:

rs=120

r=r+rs

elif (ch<=26 and ch>=20) or ch==42:

rs=140

r=r+rs

elif ch<=28 and ch>=27:

rs=150

r=r+rs

elif ch<=30 and ch>=29:

rs=15

r=r+rs

elif ch==33 or ch==34:

rs=90

r=r+rs

elif ch==37:

rs=100

r=r+rs

elif ch<=41 and ch>=39:

rs=130

r=r+rs

elif ch<=46 and ch>=43:

rs=60

r=r+rs

elif ch==0:

pass

else:

print("Wrong Choice..!!")

print("Total Bill: ",r)

# updates restaurant charges and then

# appends in 'rc' list

r=r+rc.pop(n)

rc.append(r)

else:

pass

if f == 0:

print("Invalid Customer Id")

n=int(input("0-BACK\n ->"))

if n==0:

Home()

else:

exit()

# PAYMENT FUNCTION

def Payment():

ph=str(input("Phone Number: "))

global i

f=0

for n in range(0,i):

if ph==phno[n] :

# checks if payment is

# not already done

if p[n]==0:

f=1

print(" Payment")

print(" --------------------------------")

print(" MODE OF PAYMENT")

print(" 1- Credit/Debit Card")

print(" 2- Paytm/PhonePe")

print(" 3- Using UPI")

print(" 4- Cash")

x=int(input("-> "))

print("\n Amount: ",(price[n]\*day[n])+rc[n])

print("\n Pay For AnCasa")

print(" (y/n)")

ch=str(input("->"))

if ch=='y' or ch=='Y':

print("\n\n --------------------------------")

print(" Hotel AnCasa")

print(" --------------------------------")

print(" Bill")

print(" --------------------------------")

print(" Name: ",name[n],"\t\n Phone No.: ",phno[n],"\t\n Address: ",add[n],"\t")

print("\n Check-In: ",checkin[n],"\t\n Check-Out: ",checkout[n],"\t")

print("\n Room Type: ",room[n],"\t\n Room Charges: ",price[n]\*day[n],"\t")

print(" Restaurant Charges: \t",rc[n])

print(" --------------------------------")

print("\n Total Amount: ",(price[n]\*day[n])+rc[n],"\t")

print(" --------------------------------")

print(" Thank You")

print(" Visit Again :)")

print(" --------------------------------\n")

p.pop(n)

p.insert(n,1)

# pops room no. and customer id from list and

# later assigns zero at same position

roomno.pop(n)

custid.pop(n)

roomno.insert(n,0)

custid.insert(n,0)

else:

for j in range(n+1,i):

if ph==phno[j] :

if p[j]==0:

pass

else:

f=1

print("\n\tPayment has been Made :)\n\n")

if f==0:

print("Invalid Customer Id")

n = int(input("0-BACK\n ->"))

if n == 0:

Home()

else:

exit()

# RECORD FUNCTION

def Record():

# checks if any record exists or not

if phno!=[]:

print(" \*\*\* HOTEL RECORD \*\*\*\n")

print("| Name | Phone No. | Address | Check-In | Check-Out | Room Type | Price |")

print("----------------------------------------------------------------------------------------------------------------------")

for n in range(0,i):

print("|",name[n],"\t |",phno[n],"\t|",add[n],"\t|",checkin[n],"\t|",checkout[n],"\t|",room[n],"\t|",price[n])

print("----------------------------------------------------------------------------------------------------------------------")

else:

print("No Records Found")

n = int(input("0-BACK\n ->"))

if n == 0:

Home()

else:

exit()

# Driver Code

Home()