PROJECT

```python
import datetime
import math

class car_rent:

    '''This is a module created for an online car rental platform'''
    def __init__(self,stock=0):
    #Inputting the available stock
        self.stock=stock

    def rent_car(self):
        self.x = int(input("\n Enter the car quantity requirement \n ")) #Getting the quantity from user
        if self.x <= 0: #Returns the message if quantity entered is in negative or zero
            print("Enter a valid quantity")
        elif self.x > self.stock:
            print("Your requirement exceed our stock quantity! Available stock is",self.stock)
        else:
            self.stock -=self.x
            print ("\n Requested car quantity is available for rent. Please proceed! \n")


    def display_all(self): #For displaying the stock
            print("\n \n The Cars available for rent is {}. In case of additional requirement you can book the same.". format(self.stock))


    def return_car(self):
        print ("\n MENU FOR RETURNING CARS \n")
        print("--------------------------------------")
        print(" \n Press 1 for car taken on hourly basis \n Press 2 for car taken on daily basis \n Press 3 for car taken on weekly basis")
        self.p = int(input("\n Please enter your requirement "))
        self.r2 = datetime.datetime.now() # For storing the current date for calculating the return period
        self.r3 = input("\n\n Enter the date of renting car in YYYY-MM-DD format: ") #Inputting date of availement from customer
        self.dateformat = "%Y-%m-%d" #converting the same to date variable
        self.r1 = datetime.datetime.strptime(self.r3, self.dateformat)
        self.r = self.r2 - self.r1
        if self.p not in [1, 2, 3]: #For restricting the input
            print("Enter valid input")
        else:
            self.q = int(input("\n Number of cars to be returned\n "))
            print("\n \t\t ABC CAR RENTAL SERVICES \t\t") #Generating the billprint ("-----------------------------------------------------------")

        if self.p == 1:
            self.rent_time = math.ceil((self.r.total_seconds()) / (60 * 60))
            self.a= self.q * self.rent_time * 100
            print("\n You have availed the service for ", self.rent_time, "hrs. \n The total amount to be paid is Rs.", self.q * self.rent_time * 10

        elif self.p == 2:
            self.rent_time = math.ceil((self.r.total_seconds()) / (24 * 60 * 60))
            self.a=self.q * self.rent_time * 2400
            print("\n You have availed the service for ", self.rent_time, "days. \n The total amount to be paid is Rs.", self.q * self.rent_time * 2
        elif self.p == 3:
            self.rent_time = math.ceil((self.r.total_seconds()) / (7 * 24 * 60 * 60))
            self.a = self.q * self.rent_time * 15000
            print("\n You have availed the service for ", self.rent_time, "weeks. \n The total amount to be paid is Rs.", self.q * self.rent_time *

        self.stock += self.q


    def return_display(self):
        print("\n \tPayment Details")
        print("\n-------------------")
        print("\n Cars to be returned : ",self.q)
        print("\n Rental Period :",self.rent_time)
        print("\n Total Amount to be paid : Rs.",self.a)
        print("\n************************************************")
        print("\n \t Thank you for using our service. \n We have {} available cars for rent. You can avail the services anytime!!! ". format(self.st

class customer():
    def __init__(self):

        self.name = input ("\n Enter your name \n ")

        self.place = input ("\n Enter place \n ")

        self.ph_no = input("\n Enter your ph number\n ")

        self.email_ID = input ("\n Enter your email ID \n")

    def details(self):
        print ("\n Customer details are :\n\t Name :{} \n\t Place : {} \n\t ph_no : {} \n\t Email ID : {}".format(self.name,self.place,self.ph_no,se

    def return_display(self):
        print("\n \tCustomer Details")
        print("\n--------------------")
        print("\n Customer Name :\t",self.name)
        print("\n Place :\t",self.place)
        print("\n Contact details:\t", self.email_ID,self.ph_no)
        print("\n************************************************")
```

```python
import Car_Rental
from datetime import datetime
import math

class car_for_rent:
    def __init__(self):
        c=Car_Rental.car_rent(100)
        print ("\n \t Welcome to ABC Car Rental Services. \n Please provide an input: \n 1. Rent on hourly basis \n 2. Rent on daily basis \n 3. Ren
        print()
        self.p = int(input("\n Enter your choice "))
        if self.p != 1 and self.p != 2 and self.p != 3 and self.p !=4:
            print("\n Enter valid input")
        elif self.p == 1 or self.p == 2 or self.p == 3:
            c.rent_car()
            d=Car_Rental.customer()
            d.details()
            self.r1= datetime.now() #storing the rent date to a variable
            print("-"*50)
            print("YOUR RENTAL CAR IS CONFIRMED")
        if self.p == 1:
            print ("\n Dear {}, your request is placed successfully on {}. \n The rent period selected is on hourly basis, at the rate of Rs.100 per
        elif self.p == 2:
            print ("\n Dear {}, your request is placed successfully on {}. \n The rent period selected is on daily basis, at the rate of Rs.2400 per
        elif self.p == 3:
            print ("\n Dear {}, your request is placed successfully on {}. \n The rent period selected is on weekly basis, at the rate of Rs.15,000
            print("\n \t Thankyou for partnering with us")
            c.display_all()
        elif self.p == 4:
            d=rentclass.customer()
            self.r2= datetime.now()
            c.return_car()
            d.return_display()
            c.return_display()

a=car_for_rent()
```

```
         Welcome to ABC Car Rental Services.
 Please provide an input:
 1. Rent on hourly basis
 2. Rent on daily basis
 3. Rent on weekly basis.
 4. Return the car


 Enter your choice 2

 Enter the car quantity requirement
 1

 Requested car quantity is available for rent. Please proceed!


 Enter your name
 Tina

 Enter place
 Chennai

 Enter your ph number
 8956732463

 Enter your email ID
abc123@gmail.com

 Customer details are :
         Name :Tina
         Place : Chennai
         ph_no : 8956732463
         Email ID : abc123@gmail.com
--------------------------------------------------
YOUR RENTAL CAR IS CONFIRMED

 Dear Tina, your request is placed successfully on 2024-02-19 13:13:49.012778.
 The rent period selected is on daily basis, at the rate of Rs.2400 per day
```