**#car\_rental\_module.py**

from datetime import datetime

class CarRental:

    def \_\_init\_\_(self, stock=0):

        self.stock = stock

    def display\_available\_cars(self):

        print(f"\nWe have {self.stock} car(s) available.")

    def rent\_hourly(self, n):

        if n <= 0:

            print("Number of cars should be positive!")

            return None

        elif n > self.stock:

            print(f"Sorry! Only {self.stock} car(s) available.")

            return None

        else:

            self.stock -= n

            now = datetime.now()

            print(f"You rented {n} car(s) on hourly basis at {now.hour}:{now.minute}.")

            return now

    def rent\_daily(self, n):

        if n <= 0:

            print("Number of cars should be positive!")

            return None

        elif n > self.stock:

            print(f"Sorry! Only {self.stock} car(s) available.")

            return None

        else:

            self.stock -= n

            now = datetime.now()

            print(f"You rented {n} car(s) on daily basis at {now.date()}.")

            return now

    def rent\_weekly(self, n):

        if n <= 0:

            print("Number of cars should be positive!")

            return None

        elif n > self.stock:

            print(f"Sorry! Only {self.stock} car(s) available.")

            return None

        else:

            self.stock -= n

            now = datetime.now()

            print(f"You rented {n} car(s) on weekly basis at {now.date()}.")

            return now

    def return\_car(self, request):

        rental\_time, rental\_basis, num\_of\_cars = request

        if rental\_time and rental\_basis and num\_of\_cars:

            self.stock += num\_of\_cars

            now = datetime.now()

            rental\_period = now - rental\_time

            if rental\_basis == 1:

                bill = rental\_period.seconds / 3600 \* 10 \* num\_of\_cars

            elif rental\_basis == 2:

                bill = rental\_period.days \* 50 \* num\_of\_cars

            elif rental\_basis == 3:

                bill = (rental\_period.days / 7) \* 200 \* num\_of\_cars

            else:

                bill = 0

            print(f"\nThanks for returning your car(s).")

            print(f"Rental duration: {rental\_period}")

            print(f"Total bill: ₹{round(bill, 2)}")

            return round(bill, 2)

        else:

            print("Invalid return.")

            return None

class Customer:

    def \_\_init\_\_(self):

        self.cars = 0

        self.rental\_basis = 0

        self.rental\_time = 0

    def request\_car(self):

        try:

            cars = int(input("How many cars would you like to rent? "))

            if cars <= 0:

                print("Please enter a valid number of cars.")

                return -1

            self.cars = cars

            return self.cars

        except ValueError:

            print("Invalid input. Please enter a number.")

            return -1

    def return\_car(self):

        if self.rental\_time and self.rental\_basis and self.cars:

            return self.rental\_time, self.rental\_basis, self.cars

        else:

            return 0, 0, 0

**#main\_car\_rental.ipynb**

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from car\_rental\_module import CarRental, Customer

def main():

shop = CarRental(20)

customer = Customer()

while True:

print("""

======== Welcome to Drishti Car Rentals ========

1. Display available cars

2. Request a car on hourly basis (₹10/hr)

3. Request a car on daily basis (₹50/day)

4. Request a car on weekly basis (₹200/week)

5. Return a car

6. Exit

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""")

choice = input("Enter your choice (1-6): ")

try:

choice = int(choice)

except ValueError:

print("Invalid input. Please enter a number between 1 and 6.")

continue

if choice == 1:

shop.display\_available\_cars()

elif choice == 2:

customer.rental\_time = shop.rent\_hourly(customer.request\_car())

customer.rental\_basis = 1

elif choice == 3:

customer.rental\_time = shop.rent\_daily(customer.request\_car())

customer.rental\_basis = 2

elif choice == 4:

customer.rental\_time = shop.rent\_weekly(customer.request\_car())

customer.rental\_basis = 3

elif choice == 5:

bill = shop.return\_car(customer.return\_car())

customer.rental\_basis, customer.rental\_time, customer.cars = 0, 0, 0

elif choice == 6:

print("Thank you for using Drishti Car Rentals. Have a great day!")

break

else:

print("Invalid option. Please select a valid choice.")