main

May 2, 2025

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[1]: # Hlanhla Hlungwane
     # 30 April 2025
     # Define a class for an Online Car Rental Platform
     # Hlanhla Hlungwane
     # 30 April 2025
     # Define a class for an Online Car Rental Platform
     # Object-Oriented Programming on Python
     # Performed on Jupyter Notebook

     # Import the car rental module
     from car_rental import CarRental, Customer

     # Optional: Use colorama for colored text
     from colorama import Fore, Style

     def main():
         """
         Main CODE to run the car rental System.
         """
         # Create objects for CarRental and Customer classes
         rental_system = CarRental(50)  # Initialize with 50 cars in inventory
         customer = Customer()

         # Customer Options to select from
         while True:
             print(Fore.CYAN + "\nWelcome to the Car Rental System!" + Style.RESET_ALL)
             print(Fore.YELLOW + "1. Display available cars" + Style.RESET_ALL)
             print(Fore.YELLOW + "2. Rent cars" + Style.RESET_ALL)
             print(Fore.YELLOW + "3. Return cars" + Style.RESET_ALL)
             print(Fore.YELLOW + "4. Exit" + Style.RESET_ALL)

             try:
                 choice = int(input( "Enter your choice: "))
             except ValueError:
                 print(Fore.RED + "Invalid input. Please enter a number between 1 and 4.
     ↪" + Style.RESET_ALL)
                 continue
```

```python
    if choice == 1:
        # Display available cars
        rental_system.display_available_cars()

    elif choice == 2:
        # The customer will choose the rental mode
        print(Fore.CYAN + "\nChoose a rental mode:" + Style.RESET_ALL)
        print(Fore.YELLOW + "1. Hourly (R250/hour)" + Style.RESET_ALL)
        print(Fore.YELLOW + "2. Daily (R1200/day)" + Style.RESET_ALL)
        print(Fore.YELLOW + "3. Weekly (R4500/week)" + Style.RESET_ALL)

        try:
            rental_mode = int(input(Fore.GREEN + "Enter your choice: " + Style.
↪RESET_ALL))
        except ValueError:
            print(Fore.RED + "Invalid input. Please enter a number between 1␣
↪and 3." + Style.RESET_ALL)
            continue

        num_of_cars = customer.request_car()
        if num_of_cars is not None:
            if rental_mode == 1:
                rental_system.rent_car_hourly(num_of_cars)
            elif rental_mode == 2:
                rental_system.rent_car_daily(num_of_cars)
            elif rental_mode == 3:
                rental_system.rent_car_weekly(num_of_cars)
            else:
                print(Fore.RED + "Invalid rental mode." + Style.RESET_ALL)

    elif choice == 3:
        # The customer is returning rented cars
        customer.return_car()
        rental_system.return_car()

    elif choice == 4:
        # The customer is exiting the system
        print(Fore.BLUE + "Thank you for using the Car Rental System. Goodbye!
↪" + Style.RESET_ALL)
        break

    else:
        print(Fore.RED + "Invalid choice. Please enter a number between 1 and␣
↪4." + Style.RESET_ALL)

# Run the main method
```

```python
if __name__ == "__main__":
    main()
```

Welcome to the Car Rental System!
1. Display available cars
2. Rent cars
3. Return cars
4. Exit

Enter your choice: 1

Available cars for rent: 50

Welcome to the Car Rental System!
1. Display available cars
2. Rent cars
3. Return cars
4. Exit

Enter your choice: 2

Choose a rental mode:
1. Hourly (R250/hour)
2. Daily (R1200/day)
3. Weekly (R4500/week)

Enter your choice: 1
How many cars do you want to rent? 49

49 car(s) rented on an hourly basis at 2025-05-02 09:32:14.970708.

Welcome to the Car Rental System!
1. Display available cars
2. Rent cars
3. Return cars
4. Exit

Enter your choice: 3

You have returned 49 car(s).
Cars returned successfully. Total bill: R248.40

Welcome to the Car Rental System!
1. Display available cars
2. Rent cars
3. Return cars

4. Exit

Enter your choice: 4

Thank you for using the Car Rental System. Goodbye!

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