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COLLEGE OF TECHNOLOGY

(AN AUTONOMOUS INSTITUTION)

SAMAYAPURAM, TRICHY-621 112

Practical Record Note

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Programme :

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Staff Incharge **Head of the Department**

Submitted for the Practical exam held on:

Internal Examiner
Date:

External Examiner
Date:

Aim:

Project Module.

Program:

CTP28132.py

```
from datetime import datetime

# In-memory database
vehicles = []
services = []

# Function to add a new vehicle
def add_vehicle():
        make = input("Enter vehicle make: ")
        model = input("Enter vehicle model: ")
        year = input("Enter vehicle year: ")
        vin = input("Enter vehicle VIN: ")
        registration = input("Enter vehicle registration number: ")

        vehicle = {
                'id': len(vehicles) + 1,
                'make': make,
                'model': model,
                'year': year,
                'vin': vin,
                'registration': registration
        }
        vehicles.append(vehicle)
        print(f"Vehicle added with ID: {vehicle['id']}")

# Function to view a vehicle's details
def view_vehicle():
        try:
                vehicle_id = int(input("Enter vehicle ID: "))
                vehicle = next((v for v in vehicles if v['id'] == vehicle_id),
None)
                if vehicle:
                        print(f"Vehicle ID: {vehicle['id']}")
                        print(f"Make: {vehicle['make']}")
                        print(f"Model: {vehicle['model']}")
                        print(f"Year: {vehicle['year']}")
                        print(f"VIN: {vehicle['vin']}")
                        print(f"Registration: {vehicle['registration']}")
                else:
                        print("Vehicle not found.")
        except ValueError:
                print("Invalid ID. Please enter a numeric value.")

# Function to add a service for a vehicle
def add_service():
        try:
                vehicle_id = int(input("Enter vehicle ID: "))
                service_type = input("Enter service type: ")
                provider = input("Enter service provider: ")
                cost = float(input("Enter service cost: "))
                service = {
                        'id': len(services) + 1,
                        'vehicle_id': vehicle_id,
                        'service_type': service_type,
                        'provider': provider,
                        'cost': cost,
                        'date': datetime.now().isoformat()
```

```
                }
                services.append(service)
                print(f"Service added with ID: {service['id']}")
        except ValueError:
                print("Invalid input. Please enter the correct values.")

# Function to view the service history for a vehicle
def view_services():
        try:
                vehicle_id = int(input("Enter vehicle ID: "))
                vehicle_services = [s for s in services if s['vehicle_id'] ==
vehicle_id]
                if vehicle_services:
                        for service in vehicle_services:
                                print(f"\nService ID: {service['id']}")
                                print(f"Service Type: {service['service_type']}")
                                print(f"Provider: {service['provider']}")
                                print(f"Cost: {service['cost']}")
                                print(f"Date: {service['date']}")
                else:
                        print("No services found for this vehicle.")
        except ValueError:
                print("Invalid ID. Please enter a numeric value.")

# Main program loop
def main():
        while True:
                print("\nVehicle Service Tracking System")
                print("1. Add Vehicle")
                print("2. View Vehicle")
                print("3. Add Service")
                print("4. View Services")
                print("5. Exit")
                choice = input("Enter your choice: ")
                if choice == '1':
                        add_vehicle()
                elif choice == '2':
                        view_vehicle()
                elif choice == '3':
                        add_service()
                elif choice == '4':
                        view_services()
                elif choice == '5':
                        print("Sucessfully updated!Exiting the system.")
                        break
                else:
                        print("Invalid choice. Please try again.")

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


Output:

Test case - 1
User Output

Hello World
Hello World

Result:

Thus the above program is executed successfully and the output has been verified