

Task 2

2.1

```
VehicleRentalApp (1) [Java Application] /Library/Java/Java
1: Add Vehicle
2: Add Customer
3: Rent Vehicle
4: Return Vehicle
5: Display Available Vehicles
6: Show Rental History
0: Exit

1
  1: Car
  2: Minibus
  3: Pickup Truck
1
Enter license plate: AAA100
Enter make: toyota
Enter model: camry
Enter year: 2016
Enter number of seats: 4
Car created.
Vehicle added successfully.

1: Add Vehicle
2: Add Customer
3: Rent Vehicle
4: Return Vehicle
5: Display Available Vehicles
6: Show Rental History
0: Exit

1
  1: Car
  2: Minibus
  3: Pickup Truck
1
Enter license plate: ABC567
Enter make: honda
Enter model: civic
Enter year: 2024
Enter number of seats: 6
Car created.
Vehicle added successfully.

1: Add Vehicle
2: Add Customer
3: Rent Vehicle
4: Return Vehicle
5: Display Available Vehicles
6: Show Rental History
0: Exit

1
  1: Car
  2: Minibus
  3: Pickup Truck
1
Enter license plate: ZZZ999
Enter make: toyota
Enter model: rav4
Enter year: 2023
Enter number of seats: 4
Car created.
Vehicle added successfully.
```

```

VehicleRentalApp (C:\Java Application\Library\java\javavirt\bin\machines\terminal-2\jdk\Contents\bin\java)
1: Add Vehicle
2: Add Customer
3: Rent Vehicle
4: Return Vehicle
5: Display Available Vehicles
6: Show Rental History
0: Exit

1
  1: Car
  2: Minibus
  3: Pickup Truck
1
Enter license plate:
Enter make: toyota
Enter model: camry
Enter year: 2003
Enter number of seats: 4
Car created.
Error: Invalid license plate format. Must be 3 letters followed by 3 numbers.

1: Add Vehicle
2: Add Customer
3: Rent Vehicle
4: Return Vehicle
5: Display Available Vehicles
6: Show Rental History
0: Exit

1
  1: Car
  2: Minibus
  3: Pickup Truck
1
Enter license plate: AAA1000
Enter make: toyota
Enter model: camry
Enter year: 2023
Enter number of seats: 4
Car created.
Error: Invalid license plate format. Must be 3 letters followed by 3 numbers.

1: Add Vehicle
2: Add Customer
3: Rent Vehicle
4: Return Vehicle
5: Display Available Vehicles
6: Show Rental History
0: Exit

1
  1: Car
  2: Minibus
  3: Pickup Truck
1
Enter license plate: ZZZ99
Enter make: toyota
Enter model: rav4
Enter year: 2023
Enter number of seats: 4
Car created.
Error: Invalid license plate format. Must be 3 letters followed by 3 numbers.

1: Add Vehicle
2: Add Customer
3: Rent Vehicle
4: Return Vehicle
5: Display Available Vehicles
6: Show Rental History
0: Exit

```

2.2

```
Problems Console X Eclipse IDE for Java Developers 2023-09 Release
<terminated> VehicleRentalTest [JUnit] /Library/Java/JavaVirtualMachines/temurin-21.jdk
Testing license plate validation...
✓ AAA100 - Valid plate accepted
✓ ABC567 - Valid plate accepted
✓ ZZZ999 - Valid plate accepted
✓ Empty string - Correctly rejected
✓ Null - Correctly rejected
✓ AAA1000 (too long) - Correctly rejected
✓ ZZZ99 (too short) - Correctly rejected
✓ License plate correctly remains null after invalid attempts
Testing rent/return vehicle...
✓ Vehicle initial status: Available
Vehicle rented to Test Customer
✓ First rental successful, status: Rented
Vehicle is not available for renting.
✓ Second rental correctly failed, status: Rented
Vehicle returned by Test Customer
✓ First return successful, status: Available
Vehicle is not rented.
✓ Second return correctly failed, status: Available
```

2.3

```
Problems Console X Eclipse IDE for Java Developers 2023-09 Release
<terminated> VehicleRentalTest [JUnit] /Library/Java/JavaVirtualMachines/temurin-21.jdk
Testing license plate validation...
✓ AAA100 - Valid plate accepted
✓ ABC567 - Valid plate accepted
✓ ZZZ999 - Valid plate accepted
✓ Empty string - Correctly rejected
✓ Null - Correctly rejected
✓ AAA1000 (too long) - Correctly rejected
✓ ZZZ99 (too short) - Correctly rejected
✓ License plate correctly remains null after invalid attempts
Testing rent/return vehicle...
✓ Vehicle initial status: Available
Vehicle rented to Test Customer
✓ First rental successful, status: Rented
Vehicle is not available for renting.
✓ Second rental correctly failed, status: Rented
Vehicle returned by Test Customer
✓ First return successful, status: Available
Vehicle is not rented.
✓ Second return correctly failed, status: Available
```



HashtagFootballer task 2.1

818d037 · 1 minute ago

10 Commits

Car.java	Initial work	2 weeks ago
Customer.java	Initial work	2 weeks ago
Minibus.java	Initial work	2 weeks ago
PickupTruck.java	Initial work	2 weeks ago
Rentable.java	Initial work	2 weeks ago
RentalHistory.java	Initial work	2 weeks ago
RentalRecord.java	Initial work	2 weeks ago
RentalSystem.java	task 1.4	2 hours ago
SportCar.java	Initial work	2 weeks ago
Task1_Output.txt	task 1.6	2 hours ago
Task2_Output.txt	task 2.1	1 minute ago
Vehicle.java	task 1.5	2 hours ago
VehicleRentalApp.java	added the necessary changes for singleton design task 1.1	3 hours ago
VehicleRentalTest.java	task 2.2	1 minute ago
customers.txt	task 1.6	2 hours ago
rental_records.txt	task 1.6	2 hours ago
testSingletonRentalSystem.java	task 2.3	2 minutes ago
vehicles.txt	task 1.6	2 hours ago