**Name: Reem ALKthiri**

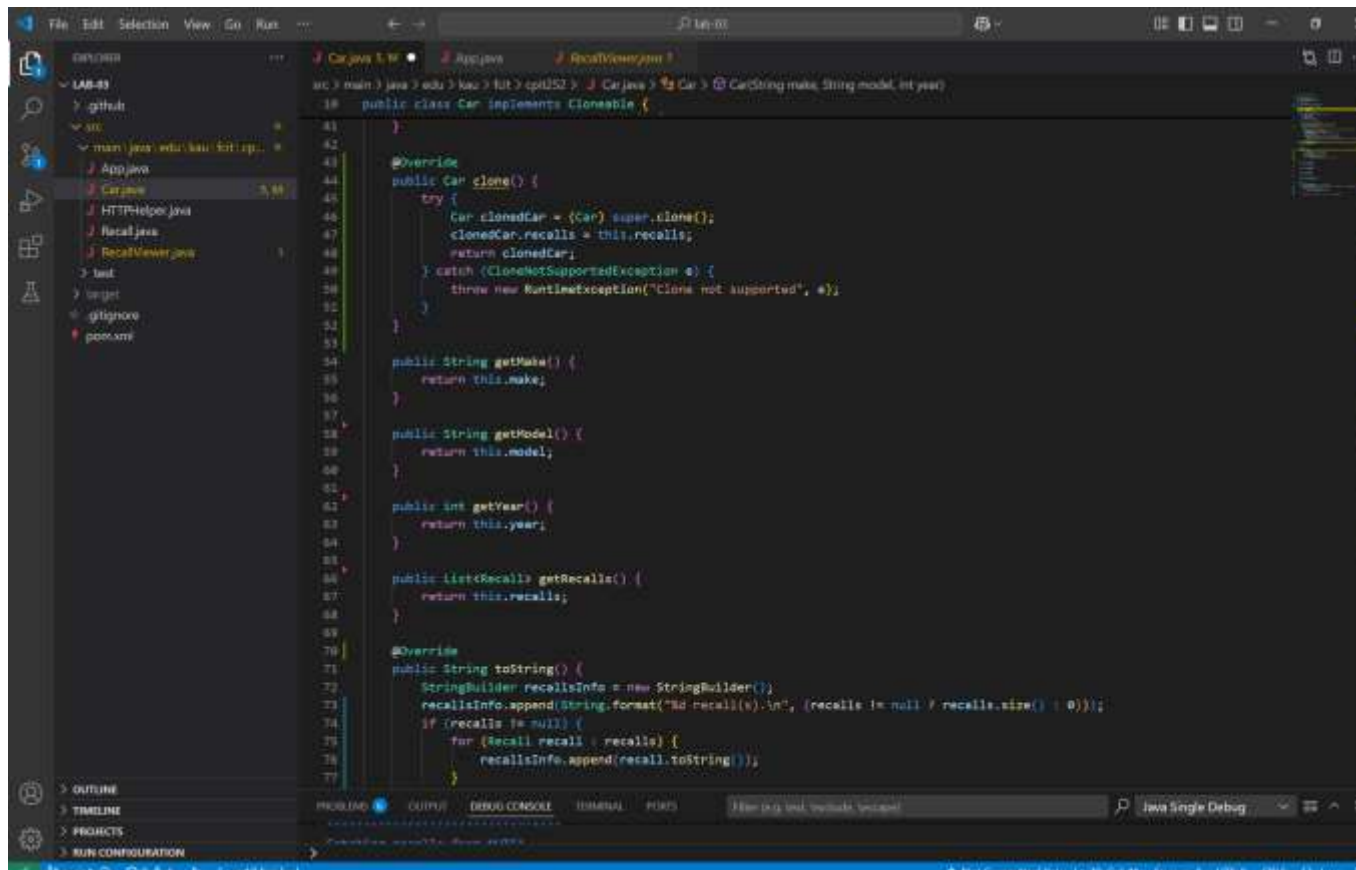**ID:2115561**

**Lab3**

src > main > java > edu > kau > fcit > cpit252 > J Car.java > ☲ Car > ۞ Car(String make, String model, int year)

```java
package edu.kau.fcit.cpit252;

import java.net.URI;
import java.net.URISyntaxException;
import java.net.http.HttpResponse;
import java.util.List;

import org.apache.hc.core5.net.URIBuilder;

public class Car implements Cloneable {
    private String make;
    private String model;
    private int year;
    private List<Recall> recalls;

    public Car(String make, String model, int year) {
        this.make = make;
        this.model = model;
        this.year = year;
        this.recalls = fetchRecalls();
    }


    private List<Recall> fetchRecalls() {
        System.out.println("***********************************");
        System.out.println("Fetching recalls from NHTSA...");
        List<Recall> recallList = null;
        try {
            URIBuilder b = new URIBuilder("https://api.nhtsa.gov/recalls/recallsByVehicle");
            b.addParameter("make", this.make);
            b.addParameter("model", this.model);
            b.addParameter("modelYear", Integer.toString(this.year));
            URI uri = b.build();
            HttpResponse<String> response = HTTPHelper.sendGet(uri);
            if (response != null) {
                recallList = HTTPHelper.parseIntoCollection(response.body(), List.class, Recall.class);
            }
        } catch (URISyntaxException e) {
            e.printStackTrace();
```

PROBLEMS ❶    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS        Filter (e.g. text, !exclude, \escape)        🔎 Java Single Debug    ∨ ☰ ∧ ✕

```java
sc > main > java > edu > kau > fcit > cpit252 > J Car.java > ✇ Car > ☺ Car(String make, String model, int year)
18   public class Car implements Cloneable {
23       private List<Recall> fetchRecalls() {

26           List<Recall> recallList = null;
27           try {
28               URIBuilder b = new URIBuilder("https://api.nhtsa.gov/recalls/recallsByVehicle");
29               b.addParameter("make", this.make);
30               b.addParameter("model", this.model);
31               b.addParameter("modelYear", Integer.toString(this.year));
32               URI uri = b.build();
33               HttpResponse<String> response = HTTPHelper.sendGet(uri);
34               if (response != null) {
35                   recallList = HTTPHelper.parseIntoCollection(response.body(), List.class, Recall.class);
36               }
37           } catch (URISyntaxException e) {
38               e.printStackTrace();
39           }
40           return recallList;
41       }
42
43       @Override
44       public Car clone() {
45           try {
46               Car clonedCar = (Car) super.clone();
47               clonedCar.recalls = this.recalls;
48               return clonedCar;
49           } catch (CloneNotSupportedException e) {
50               throw new RuntimeException("Clone not supported", e);
51           }
52       }
53
54       public String getMake() {
55           return this.make;
56       }
57
58       public String getModel() {
59           return this.model;
60       }
61   }
```

```java
public class Car implements Cloneable {

    }

    @Override
    public Car clone() {
        try {
            Car clonedCar = (Car) super.clone();
            clonedCar.recalls = this.recalls;
            return clonedCar;
        } catch (CloneNotSupportedException e) {
            throw new RuntimeException("Clone not supported", e);
        }
    }

    public String getMake() {
        return this.make;
    }

    public String getModel() {
        return this.model;
    }

    public int getYear() {
        return this.year;
    }

    public List<Recall> getRecalls() {
        return this.recalls;
    }

    @Override
    public String toString() {
        StringBuilder recallsInfo = new StringBuilder();
        recallsInfo.append(String.format("%d recall(s).\n", (recalls != null ? recalls.size() : 0)));
        if (recalls != null) {
            for (Recall recall : recalls) {
                recallsInfo.append(recall.toString());
            }
        }
```

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

Java Single Debug

## Q1



## Q2

GIT Hub link

https://github.com/Remey1/lab3-DesighnPattren.git