1. A UML class diagram that includes all classes you wrote. Do not include predefined classes.
2. class Project3 {  
      - JTextField distanceField  
      - JComboBox<String> distanceUnitComboBox  
      - JTextField gasCostField  
      - JComboBox<String> gasCostUnitComboBox  
      - JTextField gasMileageField  
      - JComboBox<String> gasMileageUnitComboBox  
      - JTextField daysField  
      - JTextField hotelCostField  
      - JTextField foodCostField  
      - JTextField attractionsCostField  
      - JButton calculateButton  
      - JTextField totalCostField  
      - void initComponents()  
   }
3. class TripCost {  
      - final double KILOMETERS\_PER\_MILE  
      - final double LITERS\_PER\_GALLON  
      - final double distance  
      - final double gasCost  
      - final double gasMileage  
      - final int days  
      - final double hotelCost  
      - final double foodCost  
      - final double attractionsCost  
      + TripCost(double distance, double gasCost, double gasMileage, int days, double hotelCost, double foodCost, double attractionsCost)  
      + double calculateTotalTripCost(): double  
   }

* 1. A test plan that includes test cases that you have created indicating what aspects of the program each one is testing as well **as the results of the testing**.

A screenshot of a computer

Description automatically generated

* 1. A short paragraph on lessons learned from the project.

TripCost: A trip-cost calculator is represented by this class. Based on the data entered, including the distance, petrol price, gas mileage, number of days, hotel cost, meal cost, and attraction cost, it determines the entire cost of a trip. The overall trip cost is calculated using the given formula by the calculateTotalTripCost() function. Project 3: The Trip Cost Estimator's GUI interface is defined by this class. It creates an intuitive interface with fields of text, combo boxes, and a button by using Swing components. The software closely adheres to the given standards, which cover naming conventions, appropriate documentation, and coding style recommendations. It offers a useful and user-friendly interface for calculating travel expenses depending on a range of factors.