# Ask/Expectation

Assume you are part of a team developing the Vehicle rental application. You are only tasked to design/develop a Class which calculates the total expense for a given trip.

Do not use any property file or constants to store the values mentioned in the problem statement. Instead think in terms of injectable interfaces to your class assuming members of your team will be responsible to develop the same. You develop a default implementation for those interfaces in which you can hard code so that you can complete your Class implementation. Actual implementation of those interfaces may pull data from database, file or http service as per requirement.

Ensure to write unit tests for your main class using framework for your choice. No need to right for the other default implementations.

Just use plain language of your choice and no framework. Main goal is to see OOPs concept, good naming conventions, good design and granularity of class/methods.

# Vehicle rental application – one of the feature problem statement

A vehicle can be rented for a trip. Vehicle can be a SUV, a car, a van, a bus, etc.

The standard rate for a petrol for a standard trip is 1.5 EUR/Km.

Additional 0.2 EUR/Km charge is applicable for vehicles with AC.

Diesel vehicles rate is 0.1 EUR less than standard rate.

2% discount is applicable for bus on standard rate.

Additional charges of 0.1 EUR/Km/Person are charged if number of passengers exceeds certain limit for a vehicle.

Example distance:

Prague - Brno: 200 KM

Prague - Budapest: 550 KM

Brno - Viena: 150 KM

Brno - Budapest: 350 KM etc.

Example trip: VW Golf, Diesel, NON AC, Prague-Brno-Budapest-Prague, 3 Passengers