# Unit 4 - Assignment

This assignment will reinforce your knowledge of the following areas:

* Coding classes with events
* Subscribing to and handling events

## Introduction

This phase of the project will have you make some updates to classes in the library project.

## Requirements

Update the following classes in the Last.First.Business namespace.

### SalesQuote Class

Add the following events and methods to the SalesQuote class.

#### **Events**

+ VehiclePriceChanged : EventHandler - Occurs when the price of the vehicle being quoted on changes.

+ TradeInAmountChanged : EventHandler - Occurs when the amount for the trade in vehicle changes.

+ AccessoriesChosenChanged : EventHandler - Occurs when the chosen accessories changes.

+ ExteriorFinishChosenChanged : EventHandler - Occurs when the chose exterior finish changes.

#### **Methods**

# OnVehiclePriceChanged - Raises the VehiclePriceChanged event.

# OnTradeInAmountChanged - Raises the TradeInAmountChanged event.

# OnAccessoriesChosenChanged - Raises the AccessoriesChosenChanged event.

# OnExteriorFinishChosenChanged - Raises the ExteriorFinishChosenChanged event.

### Invoice Class

Add the following events and methods to the Invoice class.

#### **Events**

+ ProvincialSalesTaxChanged : EventHandler - Occurs when the provincial sales tax rate of the Invoice changes.

+ GoodsAndServicesTaxChanged : EventHandler - Occurs when the goods and services tax rate of the Invoice changes.

#### **Methods**

# OnProvincialSalesTaxChanged : void - Raises the ProvincialSalesTaxChanged event.

# OnGoodsAndServicesTaxChanged : void - Raises the GoodsAndServicesTaxChanged event.

### ServiceInvoice Class

Add the following events and methods to the Invoice class.

#### **Events**

+ CostAdded : EventHandler - Occurs when a cost is added to the invoice.

#### **Methods**

# OnCostAdded : void - Raises the CostAdded event.

### CarWashInvoice Class

Add the following events and methods to the Invoice class.

#### **Events**

+ PackageCostChanged : EventHandler - Occurs when the package cost changes.

+ FragranceCostChanged : EventHandler - Occurs when the fragrance cost changes.

#### **Methods**

# OnPackageCostChanged : void - Raises the PackageCostChanged event.

# OnFragranceCostChanged : void - Raises the FragranceCostChanged event.

## Program

Create a new Visual Studio Solution called Assignment4FirstLast, where First and Last correspond to your first and last names. The solution will contain a Console Application project named EventTest.

1. Construct instances of each type modified in this assignment.
2. Subscribe to at least one event per object.
3. Demonstrate that the event is raised when it is expected to.

**Note**: User input is not required.