**Assessment – Car Hire Application**

**Assessment type (🗹):**

Questioning (Oral/Written)

Practical Demonstration

3rd Party Report

Other – Project/Portfolio (*please specify)*

### Assessment Tasks

You have now completed your data model and process model and have done walkthroughs with the client to check for completeness of business rules

You have built code snippets in C# and Windows Forms via Visual Studio.

We have to think about and discuss (with the business owner) your way through a typical client car rental transaction to help you work out the code you will need for each of the functions the code must perform.

Bear in mind that a rental is in **1 of 3 stages:**

* **Booked (future)**
* **Booked and commenced (now)**
* **Completed (past)**

Your sample data must reflect these possibilities.

Also bear in mind that a client may wish to extend their hire period after commencing their booking.

## The bare minimum:

You now have maximum class time for writing a C# forms application that will do the following:

* 1. Display appointments for a given user supplied date and into the future from that date
  2. Make a new appointment for a given client on a given day for a given Vehicle.
  3. Be able to update an appointment (e.g. to enter a payment, or change the date and/or time)
  4. The total cost of the rental should be calculated automatically by your code at the time of booking and when/if the return date/time alters from the original booking
  5. Odometer readings entered into the booking at time of vehicle return should automatically update the vehicles odo reading in the vehicle table

## Here are the business rules to keep in mind:

1. No customer can rent a vehicle without a driver’s license.
2. No customer can rent a vehicle without a credit card.
3. All vehicles have a servicing history that is stored online.
4. Each customer has their details stored online.
5. Each vehicle must have all its details and its availability accessible online at all times for the office staff and any other online users.
6. Payments (credit card “swipes”) are to be made before the client leaves the premises, and the payment details must be recorded by admin staff against the client’s details in the database

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