

**Please complete all parts. All parts are worth equal marks.**

1. Use a test-driven development approach (TDD) to create a class representing a booking for the National Car Test (NCT). A booking must be created with a vehicle registration number, a test centre (a test centre should be represented with a test centre name and test centre address), and a date and time. Use the `LocalDateTime` class from the `java.time` library as the type for the date and time variable.

See <https://docs.oracle.com/javase/8/docs/api/java/time/LocalDateTime.html> for details and examples of how to use this class.

2. It should be possible to query for the test centre of the booking. The value returned should be the value that was set when the booking was created.
3. It should be possible to query for the registration number of the booking. The value returned should be the value that was set when the booking was created, or the value entered in the last edit.
4. It should be possible to edit the vehicle registration number of the booking.
5. It should be possible to create a booking without specifying a date and time. In such cases, the date and time should be set by an external API. You can assume the interface below is available to you for this.

```
public interface NCTBookingSlotWebservice {  
    public LocalDateTime getBookingDateTime(TestCentre testCentre); }
```

6. It should not be possible to create a booking with a date and time in the past. Invalid dates and times should be handled with an appropriate user defined exception.
7. Bookings should have a unique Booking ID Number that is generated when they are created.
8. A `toString()` method should return a string representation of the booking in the following format:

*Booking ID Number: 58964158*

*Registration Number: 16-WH-59741*

*Centre: Ballinasloe*

*Address: Unit 9, Pollboy Industrial Estate,*

*Ballinasloe, Galway H53 NW94*

*Date & Time: On Friday, 22 September 2023 at 08:00*