**Coding Test**

**Parking Charge Calculator**

You run a car park that, at the moment, has two charging options - Short Stay and Long Stay. Visitors choose which option they want to use when they enter the car park and the charge is calculated when they leave based on the length of their visit.

The following charges are used:

* Short Stay  
       £1.10 per hour between 8am and 6pm on weekdays, free outside of these times. Visits need not be whole hours and can last more than one day.
* Long Stay  
       £7.50 per day or part day including weekends, so the minimum charge will be for one day.

Design and code a console application in C# that will be used to calculate the total cost of a visit to the car park. The solution should not require any user interaction, so example inputs can be hard coded.

No third party assemblies are required, although you may want to include your preferred unit test framework. We are interested in SOLID code and will be assessing your design decisions and the patterns you use. While there is no time limit, as a guide, the solution might take less than 2 hours to implement.

A short list of examples:

* A stay entirely outside of a chargeable period will return £0.00
* A short stay from 07/09/2017 16:50:00 to 09/09/2017 19:15:00 would cost £12.28
* A long stay from 07/09/2017 07:50:00 to 09/09/2017 05:20:00 would cost £22.50

Attachments are unlikely to get through the firewall so solutions should be returned to [tdowell@abacusnext.com](mailto:tdowell@abacusnext.com) by sharing a link to a version stored in the cloud. Please note that this is a shared address.