



# Senior Dot Net Developer Assessment

## Instructions

- ✓ For any of the questions below requiring writing code, please put your answers inside of a C# console application.
- ✓ For the answers requiring a written response, please put your answers inside a .docx file, .txt file, .md file or .pdf file.
- ✓ Feel free to use and include any open source software or libraries.
- ✓ Also feel free to use an internet browser to research anything.
- ✓ Unless stated otherwise, assume that code and algorithms will be run on a server that has 8 cores and 32 Gb or RAM.
- ✓ Also assume that any algorithms described below will be run 10 times per day.

## 1. Cloud

Write something negative about a particular cloud service on one of the major cloud providers (AWS, GCP or Azure) that you have worked with or tried out as part of a personal project.

- ✓ The topic could be a service that didn't work well or something about a service that made it difficult to work with the service or something else related to a particular cloud service.
- ✓ What would you change and would you choose a different service in hindsight?
- ✓ The answer to this question can be as short as two sentences or as long as two paragraphs.

## 2. Project Challenge

Your challenge is to write object oriented or functional code, that will cover the system described below:

- ✓ The system has two types of users, Shipper and Carrier (the Shipper wants to ship things, and the Carrier wants to move those shipments from pickup location to destination location).
- ✓ Shipper can create new shipment requests with the following data: pickup address, destination address, budget amount, additional information (stored as text).
- ✓ A carrier can book a shipment, agreeing on a price set by the shipper.
- ✓ A carrier can create an offer for a shipment with a different price.
- ✓ A shipper can reject or approve offers made by carriers.
- ✓ A shipment can be booked only once.
- ✓ A shipment needs to have a timestamp associated with a time of booking.
- ✓ The solution should only include the code, structure, and unit test that will solve the problem space in memory. There is no need to structure database tables nor server configuration nor API project.
- ✓ The goal of this question is to demonstrate the ability to write object oriented code that is clearly structured with associated unit tests.
- ✓ Obviously not every information is provided so you will need to make some assumptions. If you make an assumption, feel free to add comments for the class, field or method that mentions the assumption made.