

System Design and Implementation Project

You are working for a new car rental company, and your task is to design and implement a simple rental car booking API service for customers (using the mobile app, or web client) to reserve a car for a period of time.

Your job is to provide the following:

- 1) Solution design document with your assumptions.
- 2) API spec
- 3) Source code in the GIT repository. You could use github or other similar service
- 4) Test cases
- 5) Deployed and run in the cloud environment of your choice. Prefer Azure, you could get a FREE Azure account here: <https://azure.microsoft.com/en-us/free/>
- 6) Optional, extra points if you could provide the following:
 - a. A working customer facing web client online that could be used to quickly test the service
- 7) Note:
 - a. You could use the programming language that you are most familiar. Prefer Java as it is the company standard.
 - b. Keep it simple.

The company is new so it only has the following car.

| Car Model | In stock |
|--------------|----------|
| Toyota Camry | 2 |
| BMW 650 | 2 |

Time to delivery: 4 days.