# **JS Advanced Exam Prep**

# **Problem 3. Unit Testing**

#### **Your Task**

Using **Mocha** and **Chai** write **JS Unit Tests** to test a variable named **dealership**, which represents an object. You may use the following code as a template:

The object that should have the following functionality:

- newCarCost(oldCarModel, newCarPrice) A function that accepts string and a number:
  - o the function checks if you are returning your old car to the dealers or not
  - if you are returning your old car, you will get a fixed amount of money deducted from your new car price
  - o then the function returns the price for the car
- carEquipment(extrasArr, indexArr) A function that accepts two arrays:
  - the first arrays includes the available extras for your car (['heated seats', 'sliding roof', 'sport rims', 'navigation', etc.])
  - o the second array includes the index of the extras you would want ([0, 3, 4])
  - o every given index in the indexArr will be valid
  - o then the function returns an array with all the selected extras
- euroCategory(category) A function that accepts a single parameter (number):
  - o the function checks the ecology of your new car
  - then the function returns a message regarding the final price you will have to pay,
     depending on your car eco category

## **JS Code**

To ease you in the process, you are provided with an implementation which meets all of the specification requirements for the **pizzUni** object:

```
dealership.js
let dealership = {
   newCarCost: function (oldCarModel, newCarPrice) {
        let discountForOldCar = {
            'Audi A4 B8': 15000,
            'Audi A6 4K': 20000,
            'Audi A8 D5': 25000,
            'Audi TT 8J': 14000,
       }
        if (discountForOldCar.hasOwnProperty(oldCarModel)) {
            let discount = discountForOldCar[oldCarModel];
            let finalPrice = newCarPrice - discount;
            return finalPrice;
        } else {
            return newCarPrice;
        }
   },
   carEquipment: function (extrasArr, indexArr) {
        let selectedExtras = [];
        indexArr.forEach(i => {
            selectedExtras.push(extrasArr[i])
        });
       return selectedExtras;
   },
   euroCategory: function (category) {
        if (category >= 4) {
            let price = this.newCarCost('Audi A4 B8', 30000);
            let total = price - (price * 0.05)
            return `We have added 5% discount to the final price: ${total}.`;
        } else {
            return 'Your euro category is low, so there is no discount from the final
price!';
        }
   }
```

### **Submission**

Submit your tests inside a **describe()** statement, as shown above.