

# **Car Dealership System**

## **Lab – 02: Requirement Analysis**

**Group Number: 02**

**Group Members:**

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# Requirement Analysis

## 1. Authentication:

### Functional Requirement:

1. FR1.1: Customers must register to the system in order to access the system.
2. FR1.2: Customers must provide valid Bangladeshi NID (National Identification Card) number and personal information such as First Name, Last Name, Date of Birth, e-mail address in order to create an account.

### Non Functional Requirement:

1. NFR1.1: Registration response time should not exceed 15 seconds.
2. NFR1.2: The system will have a two-factor authentication system through e-mail or personal phone number.
3. NFR1.3: 10 failed password attempts will result in a locked account.
4. NFR1.4: Users can request for password reset if they forget their password, an automated generated password will be sent to their email.

## 2. Contact:

### Functional Requirement:

1. FR2.1: Users must be logged in, in order to contact the sellers.
2. FR2.2: Users will have the choice to either chat or call the sellers.
3. FR2.3: Clients may call the sellers only on workdays, and on office time.
4. FR2.4: Users will be able to like, or comment on the items.

### Non Functional Requirements:

1. NFR2.1: Chat response time must not exceed 2 seconds.
2. NFR2.2: Sellers will not be able to access the customer's cell number unless the customer calls sellers first.

## 3. Payment Gateway Integration

### Functional Requirement:

1. FR3.1: Clients will be able to select his/her desired payment method, out of several payment methods embedded to the system such as, bKash, Nagad, Online Banking, or cash on delivery.
2. FR3.2: Advertisers may promote their banking system through promo codes for a fixed percentage of discounts on each purchase.

**Non Functional Requirements:**

1. NFR3.1: Users will be penalized if they cancel a cash on delivery order.
2. NFR3.2: Users can earn points through each purchase, which can be redeemed during their next purchase through discounts.

## **4. Payment Gateway Integration**

**Functional Requirement:**

1. FR4.1: Clients may select their desired time-slot and date to inspect and test-drive their purchase before delivery.
2. FR4.2: The system will have an embedded calendar for client's increased accessibility.

**Non Functional Requirements:**

1. NFR4.1: Clients will get a text or e-mail reminder a day before the date of inspection and test drive.
2. NFR4.2: Both clients and buyers will be able to reschedule with both party's consent.

## **Non-Functional:**

### **1. Operational:**

- The system has to be up and running within 5 (five) months.
- The system will be accessible through web browsers and will have a pc as well as a mobile version.
- The system will have an application which will run on operating system(s) android, and iOS.

### **2. Performance:**

- The system should be able to host at least 500 users at a time.
- The system should be able to list at least 3000 items at once.
- System's response time should not exceed 2 seconds.

- The system should be operational 24/7.

### **3. Security:**

- Sellers will not be able to access clients information.
- The system should ensure clients anonymity from other users.
- The system must ensure secure online payments through encryption.

### **4. Cultural & Political:**

- Total cost of the car will include the government mandated TAX on the vehicle.
- The system should publish annual sales numbers, show profits and losses to its shareholders.