Car Dealership System

Lab – 02: Requirement Analysis

Group Number: 02

Group Members:

Student Id	Student Name
19101069	Md. Mahbubur Rahman Raad
19101088	Md. Mehtabul Islam Shafin
19101076	Sayem Kader Chowdhury

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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 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.