



Topic : Online property sales system

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We declare that this is our own work and this Assignment does not incorporate without acknowledgment any material previously submitted by anyone else in SLIIT or any other university/Institute. And we declare that each one of us equally contributed to the completion of this Assignment.

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## Exercise 01

### 1. User Requirements:

1. User can register into the system by entering name, email. Password, contact number and ID number. Depending on the type of account (buyer/seller/contractor) the user is signing up for the website might ask for more details.
2. Visitors can search for listings added in the property sales system using the website.
3. Customer can buy or add the services they need to the cart that the property sales system provides.
4. Users can place enquiries.
5. Admin can add or remove listings, approve property visits and approve ads.
6. Admin can manage user accounts.
7. Admin can take backups of the database files and generate reports.
8. Admin can verify the payment details and other details by checking with the bank.
9. Sellers and Contractors can place ads for their listings.
10. Registered customer can make payments with credit/debit card or bank transfer.
11. Users can edit the profile details as needed after logging to the system.
12. Buyers can send messages to sellers, and contractors.
13. Buyers can reserve a date for a property visit.
14. Buyers can give a review to a property they bought, to sellers they bought properties from, to contractors whom they bought services from.
15. Sellers and contractors can add listings to the website.

## 2. Noun Verb Analysis:

1. User can register into the property sales system by entering name, email, Password, contact number and ID number. Depending on the type of account (buyer/seller/contractor) the user is signing up for the website might ask for more details.
2. Visitors can search for listings added in the property sales system using the website.
3. Customer can buy or add the services they need to the cart that the property sales system provides.
4. Users can place enquiries.
5. Admin can add or remove listings, approve property visits and approve ads.
6. Admin can manage user accounts.
7. Admin can take backups of the database files and generate reports.
8. Admin can verify the payment details and other details by checking with the bank.
9. Buyers and contractors can place ads for their listings.
10. Registered customer can make payments with credit card, debit card or bank transfer.
11. User can edit the profile details as needed after logging in to the system.
12. Buyers can send messages to sellers and contractors.
13. Buyers can reserve a date for a property visit.
14. Buyers can give a review to a property they bought, to sellers they bought properties from, to contractors whom they bought services from.
15. Seller and contractors can add listings to the website.

## Nouns

- User
- Property Sales System
- Name
- Email
- Password
- Contact Number
- ID Number
- Buyer
- Seller
- Contractor
- Website
- Visitor
- Properties
- Customer
- Services
- Cart
- Enquiries
- Admin
- Listings
- Property Visits
- Ads
- User Accounts
- Database Files
- Reports
- Registered Customer
- Gigs
- Payment
- Credit Card
- Debit Card
- Bank Transfer
- Profile
- Messages

- Date
- Review

### **3. Identified Classes:**

- Buyer
- Seller
- Contractor
- Listings
- Services
- Admin
- Reports
- Payment
- Messages
- Review

- **Reasons for Rejecting Other Nouns**

1. Redundant:

- In property Sales System user, visitor, visitor, registered customer refers to buyer, seller and contractor.
- property visits, ads, gigs refer to services.
- Property refers to listing.

2. Outside scope of system:

- Website, system, user profile, database files, enquiries, messages, cart, profile are outside scope of the Property Sales System.

### 3. An Attribute:

- Name
- Email
- Password
- Contact Number
- ID Number
- date
- Credit Card
- Debit Card
- Bank Transfer

## Exercise 02

### CRC Cards :

Buyer	
Responsibility	Collaborators
Login to the system	
Search properties/gigs	Listing
Edit profile	
Reserve a date	
Send /receive message	Message
Make payments	Payment
Add a Review	Review

Contractor	
Responsibility	Collaborators
Login to the system	
Add a gig	Listing
Add advertisements for gigs	Services
Edit profile	
Send/receive message	Message
Make payments	Payment

Listing	
Responsibility	Collaborators
Add property/gig	Seller/Contractor
Update property/gigs list	Admin
Display property/gigs list	

Review	
Responsibility	Collaborators
Display reviews	

Message	
Responsibility	Collaborators
Display messages	

Seller	
Responsibility	Collaborators
Login to the system	
Add advertisements for properties	Services
Edit profile	
Send/receive message	Message
Add a listing	Listing
Make payments	Payment

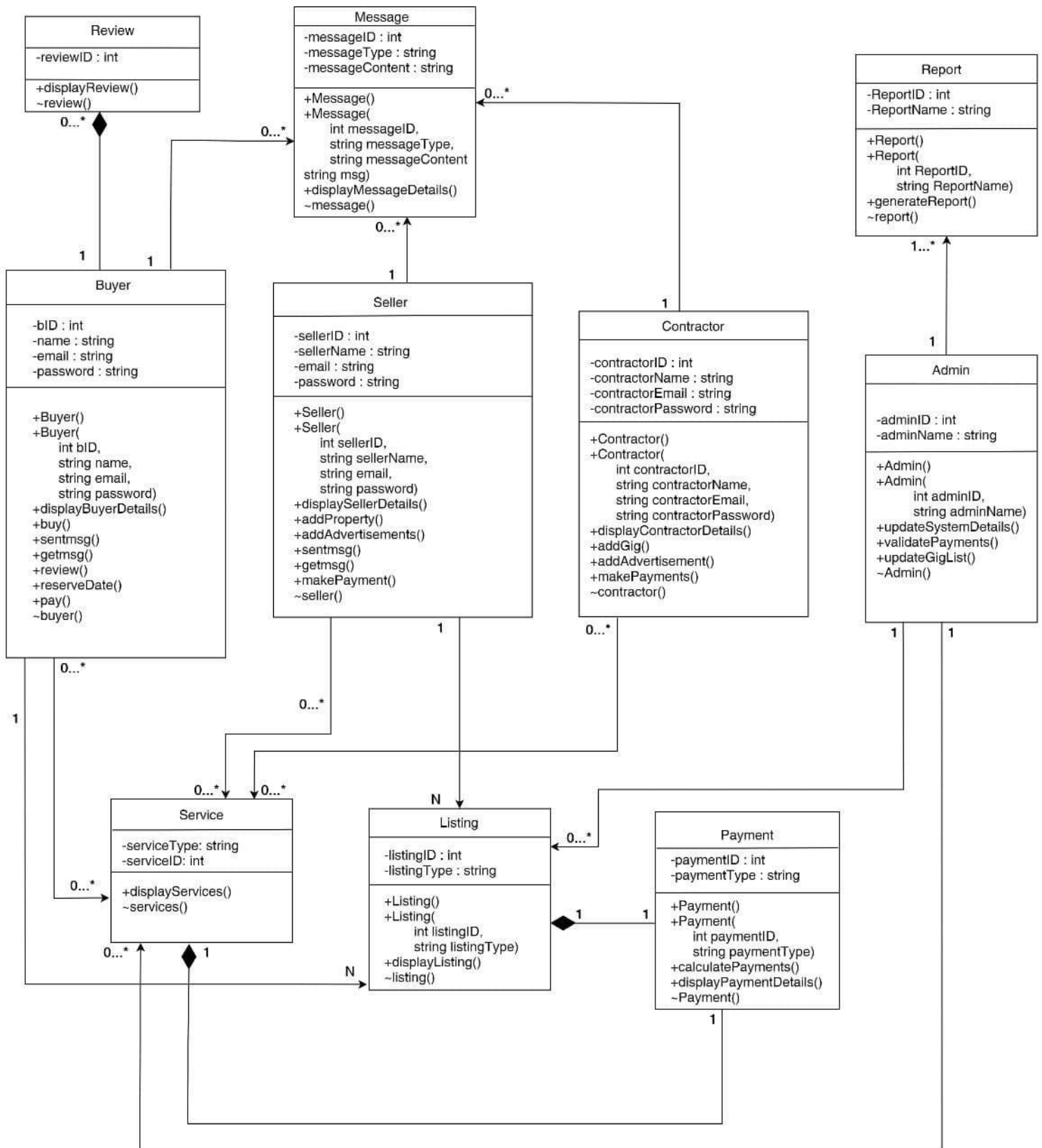
Report	
Responsibility	Collaborators
List of properties	Listing
List of buyers	Buyer
List of sellers	Seller
List of contractors	Contractor
Payment details	Payment

Admin	
Responsibility	Collaborators
Login to the system	
Add or remove a buyer/seller/contractor	Buyer/seller/Contractor
Backup files	
Generate reports	Report
Update system details	

Payment	
Responsibility	Collaborators
View payment	Seller/Contractor
Validate payment	Admin
Save payment details	

Services	
Responsibility	Collaborators
Display services	

## Exercise 03





# Individual Contribution

## **IT21008382,**

- Did the noun verb analysis and identified the nouns.
- Created CRC cards and part of the UML diagram for buyer and review classes.
- Wrote codes for buyer and review.

## **IT21035012,**

- Wrote user requirements with IT21023996.
- Created CRC cards and part of the UML diagram for seller and service classes.
- Drew the UML diagram.
- Wrote codes for seller and service classes.

## **IT21023996.**

- Wrote user requirements with IT21035012.
- Created CRC cards and part of the UML diagram for contractor and message.
- Wrote codes for contractor and message.
- Made a one single code for exercise 4 by combining everyone's codes and updating them as necessary.

## **IT21004940,**

- Identified classes and rejected other nouns with IT21014222.
- Created CRC cards and part of the UML diagram for report and listing classes.
- Wrote codes for report and listing classes.

## **IT21014222,**

- Identified classes and rejected other nouns with IT21004940.
- Created CRC cards and part of the UML diagram for admin and payment classes.
- Wrote codes for admin and payment classes.