



## Project and Professionalism (6CS007)

# Project Proposal Home Rental System

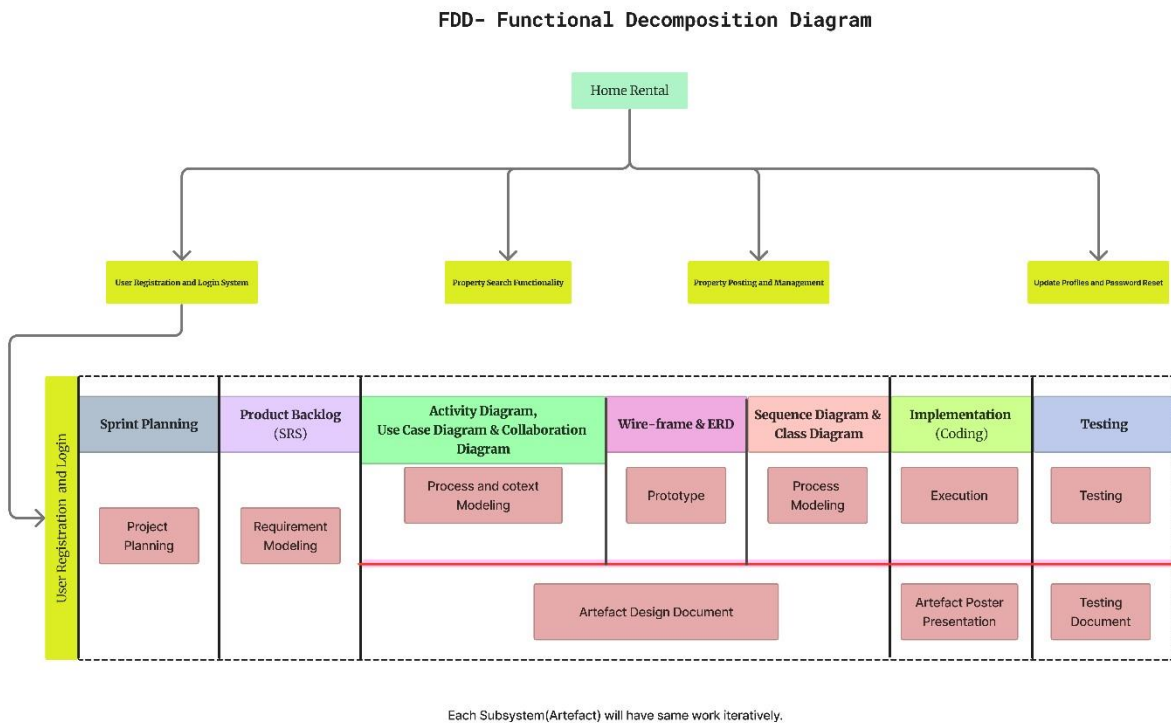
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# Functional Decomposition Diagram



## SRS Document

Legend:

URL-F-1.0

Numbering

### Sub systems

URL : User Registration and Login System  
 PSF : Property Search Functionality  
 PPM : Property Posting and Management  
 UPP : Update Profiles and Password Reset

### Types of Requirements:

F : Functional Requirements  
 NF : Non-Functional Requirements  
 UR : Usability Requirements

## SRS Document for User Registration and Login System

Req code	Req.Desc	Use case
URL-F-1.0	The system shall allow customers to register themselves	Register user
URL-NF-1.0	The system shall encrypt registration data before sending to the server.	Security
URL-UR-1.0	On smaller devices, the header shall appear as a menu for medium better viewing and usability.	Better view
URL-F-1.1	The system shall allow registered users to log in.	User login
URL-NF-1.1	User password shall be combination of alphabets ,number and special character for enhanced security.	User password
URL-UR-1.1	The user and company registration forms shall be fully responsive and provide an optimal user experience on mobile devices.	Company registration
URL-F-1.2	The system shall provide a registration form for companies to create account.	Create account
URL-F-1.3	The system shall allow registered companies to login.	Company login
URL-F-1.4	The system shall allow addition of new users and companies by administrators.	Register new user
URL-F-1.5	The system shall provide a functionality for users and high companies to reset their password.	Reset password
URL-F-2.0	The system shall allow the admin to add and remove users.	Add and remove users

URL-F-2.0	The admin shall have access to a secure panel for user management.	Secure panel
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### SRS Document for Property Search Functionality (PSF)

Req. Code	Req. Desc	Priority
<b>PSF-F-1.0</b>	The system shall provide filters for property search.	Medium
<b>PSF-F-1.1</b>	Users shall be able to search properties by location.	High
<b>PSF-F-1.2</b>	Users shall be able to search properties by property category.	High
<b>PSF-F-1.3</b>	Users shall be able to search properties by property type.	High
<b>PSF-F-2.0</b>	The system shall implement an advanced search algorithm to improve search accuracy and relevance.	High
<b>PSF-NF-2.0</b>	The search algorithm shall return results within 3 seconds under normal server load conditions.	High
<b>PSF-F-3.0</b>	The system shall display property search results in a user-friendly format.	High
<b>PSF-NF-3.0</b>	Property listings shall include detailed information such as property title, location, description, and price.	High
<b>PSF-UR-3.0</b>	Users shall have the search results shown in listing manner, or other criteria.	Medium

### SRS Document for Property Posting and Management (PPM)

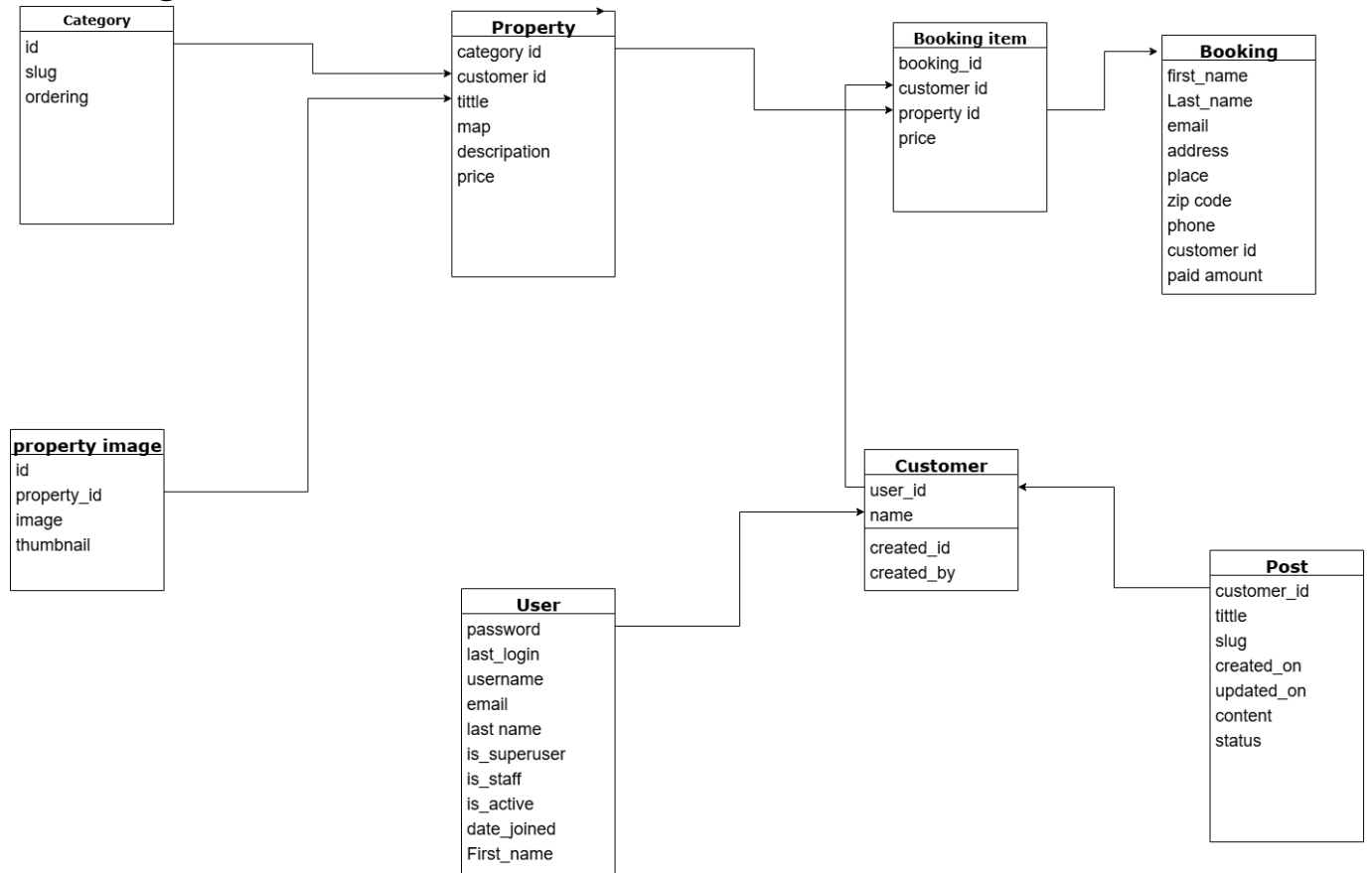
Req. Code	Req. Desc	Priority
PPM-F-1.0	The system shall provide a form for property owners to post their properties.	High
PPM-F-1.1	Property owners shall be able to enter property details such as property title, description, price, and location.	High
PPM-NF-1.0	The property post form shall enforce character limits and validate input data to prevent errors.	High
PPM-F-2.0	The system shall display posted properties in a user-friendly format.	High
PPM-F-2.1	Property listings shall include property title, location, description, and price.	High
PPM-UR-2.0	Property listings shall be visually appealing and easy to navigate.	Medium
PPM-F-3.0	The system shall provide tools for managing property bookings.	High
PPM-F-3.1	Property owners shall receive a confirmation upon successful posting of their property.	High
PPM-F-3.2	Property owners shall have the ability to review and edit property details.	High
PPM-UR-3.0	Property owners shall have the option to manage property bookings based on various criteria such as availability and price.	Medium

## SRS Document for Update Profiles and Password Reset (UPP)

Req code	Req.Desc	Use case
UPP-F-1.0	Users shall able to update their profiles	Update profiles.
URL-NF-1.0	User shall able to update their profiles information including their name and email.	User update.
URL-UR-1.0	User shall be to upload and update their profile pictures.	Upload pictures
URL-F-1.1	The system shall provide functionality for users and property owners to reset their passwords if forgotten.	Reset password

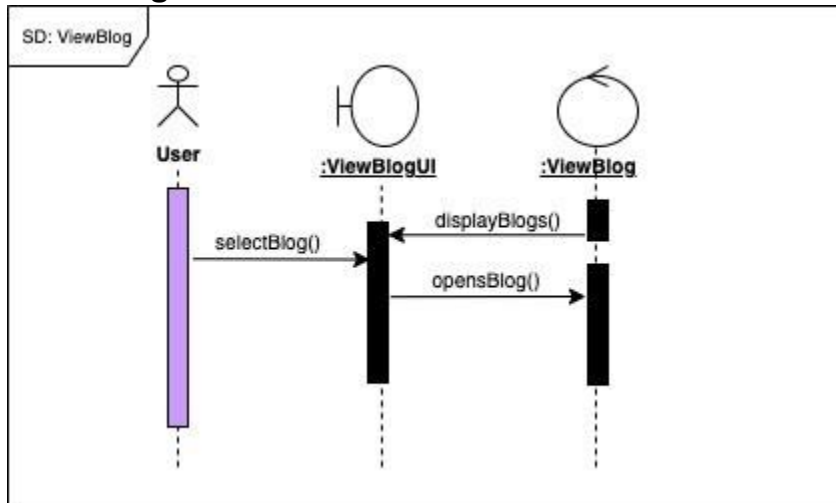


## ERD Diagram

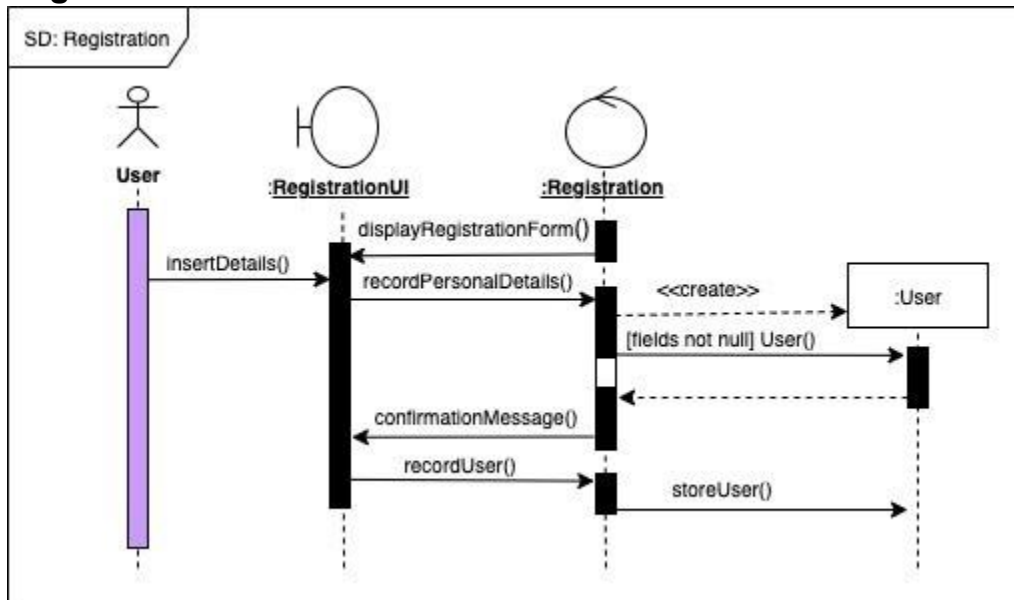


## Sequence Diagram

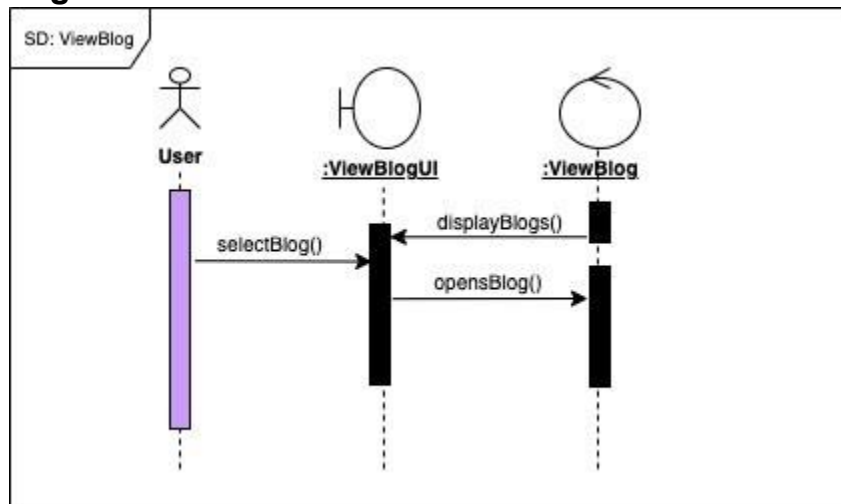
### View Blog



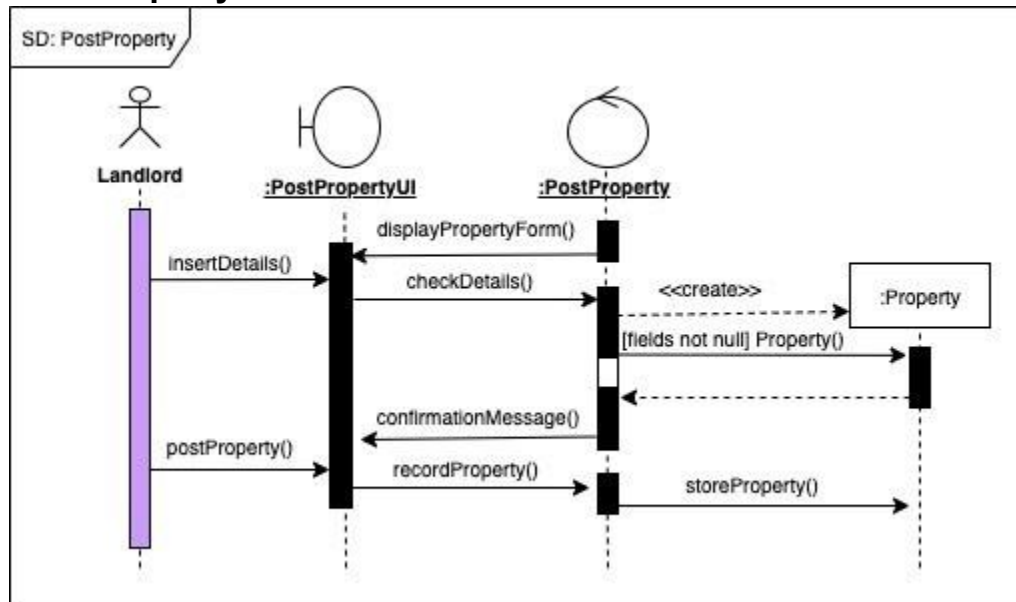
## Registration



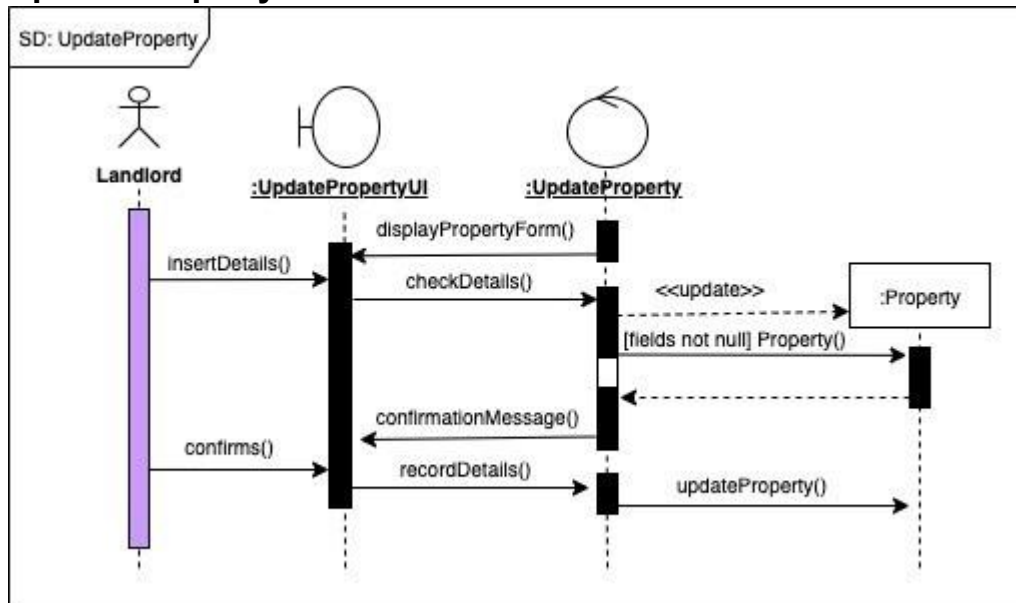
## Login



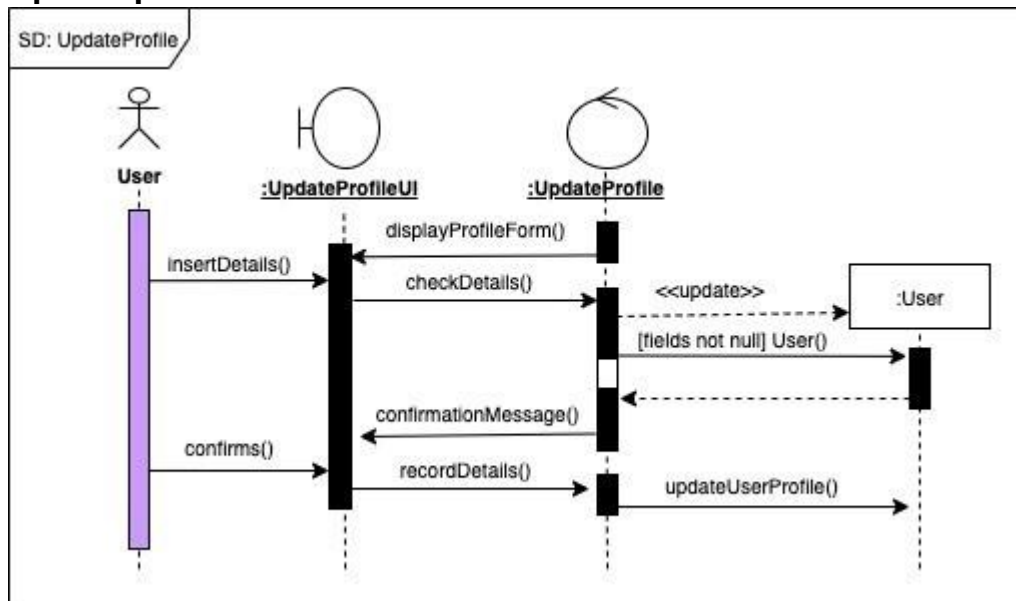
## Post Property



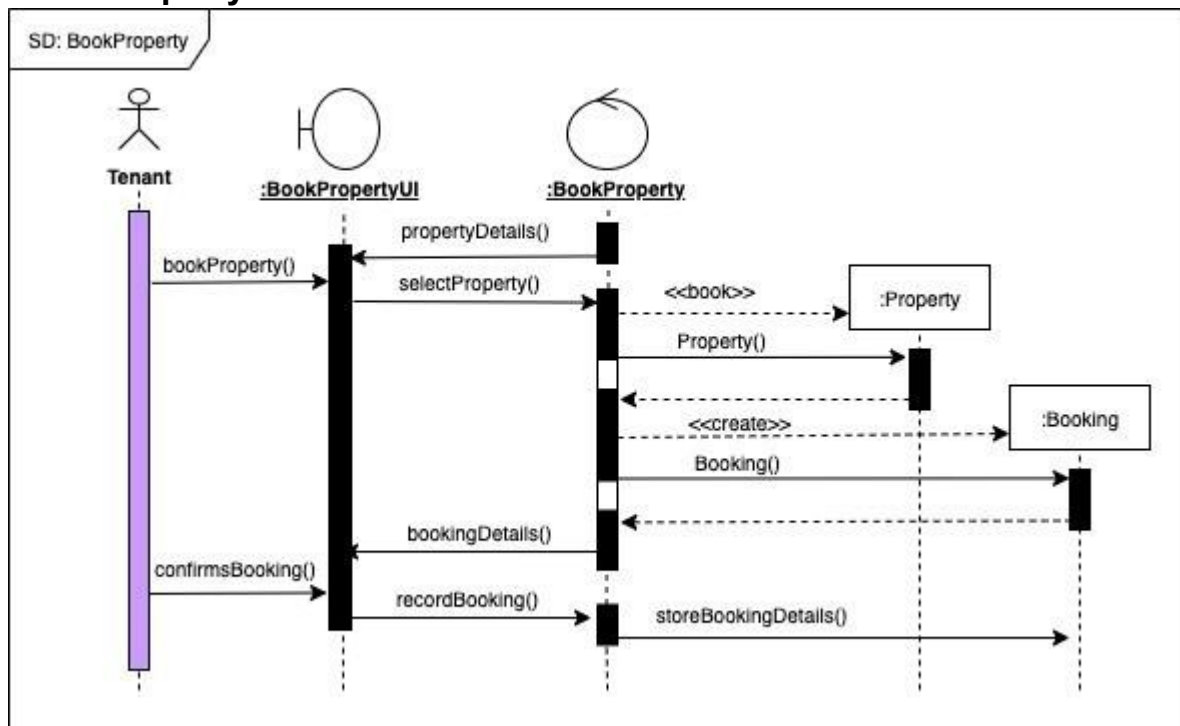
## Update Property



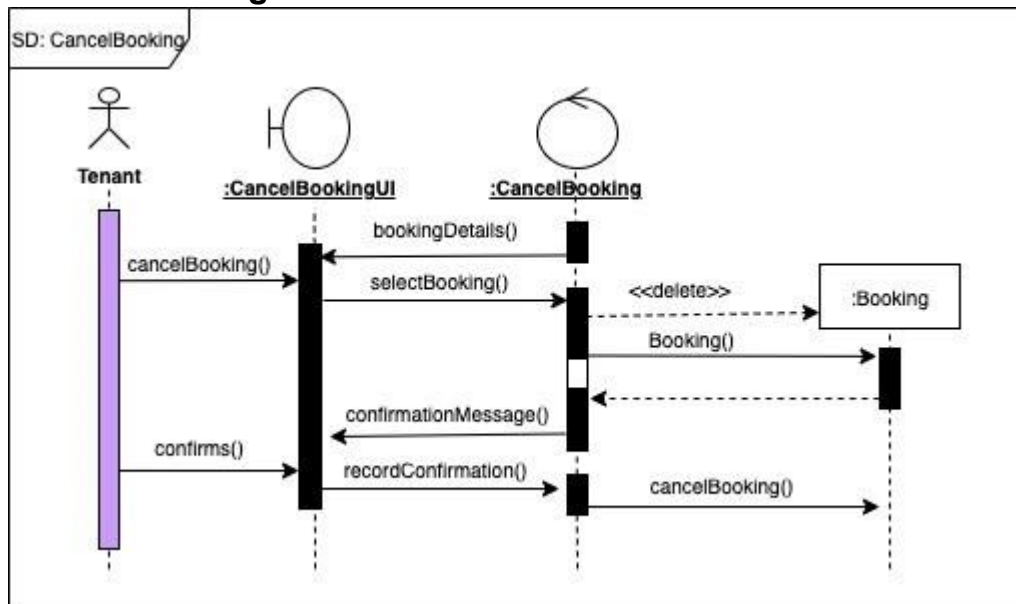
## Update profile



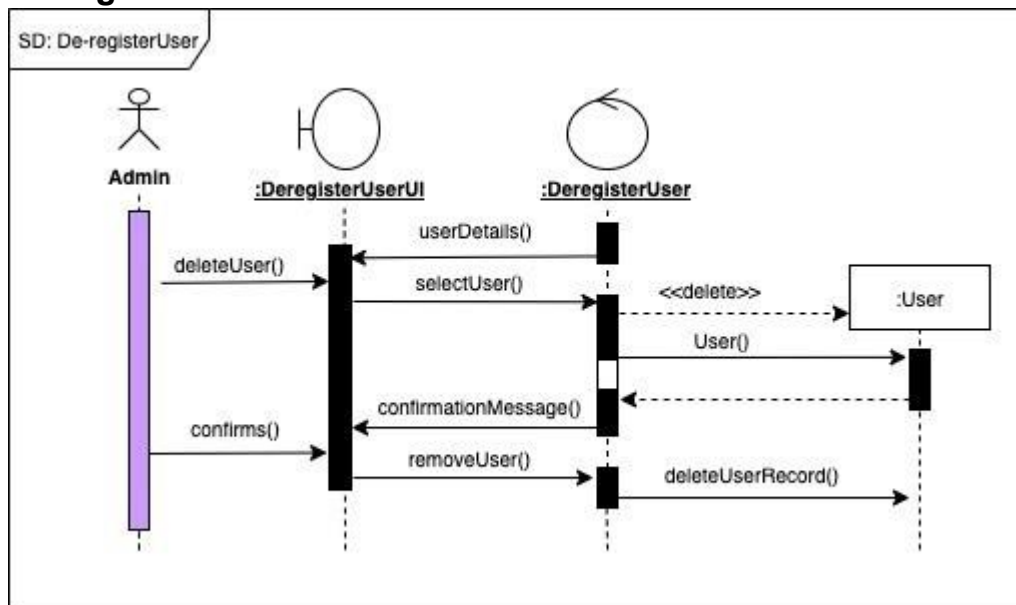
## Book Property



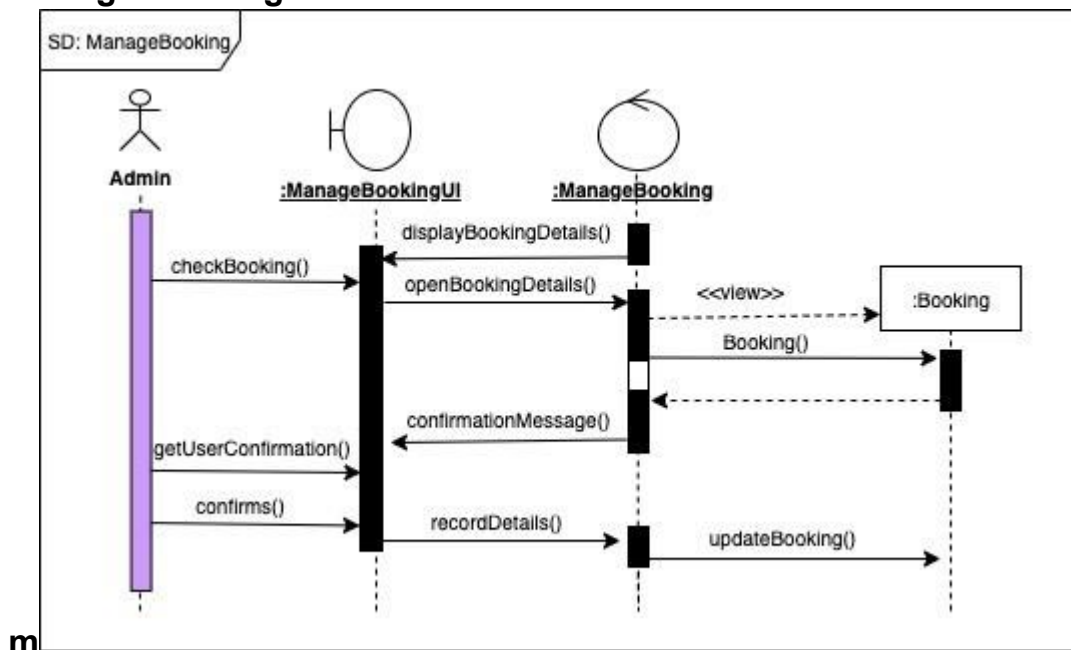
## Cancel Booking



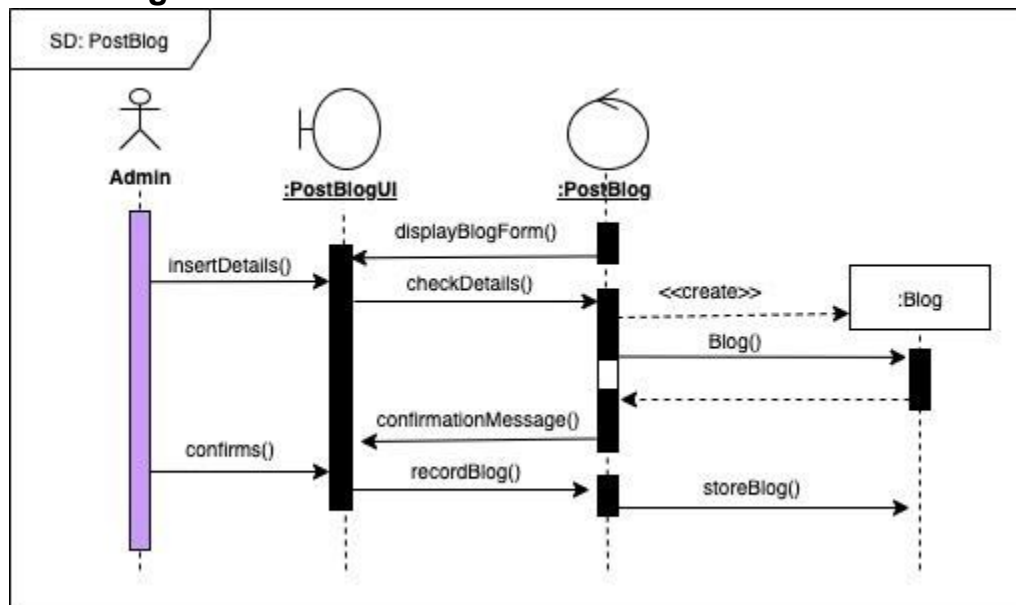
## De-register User



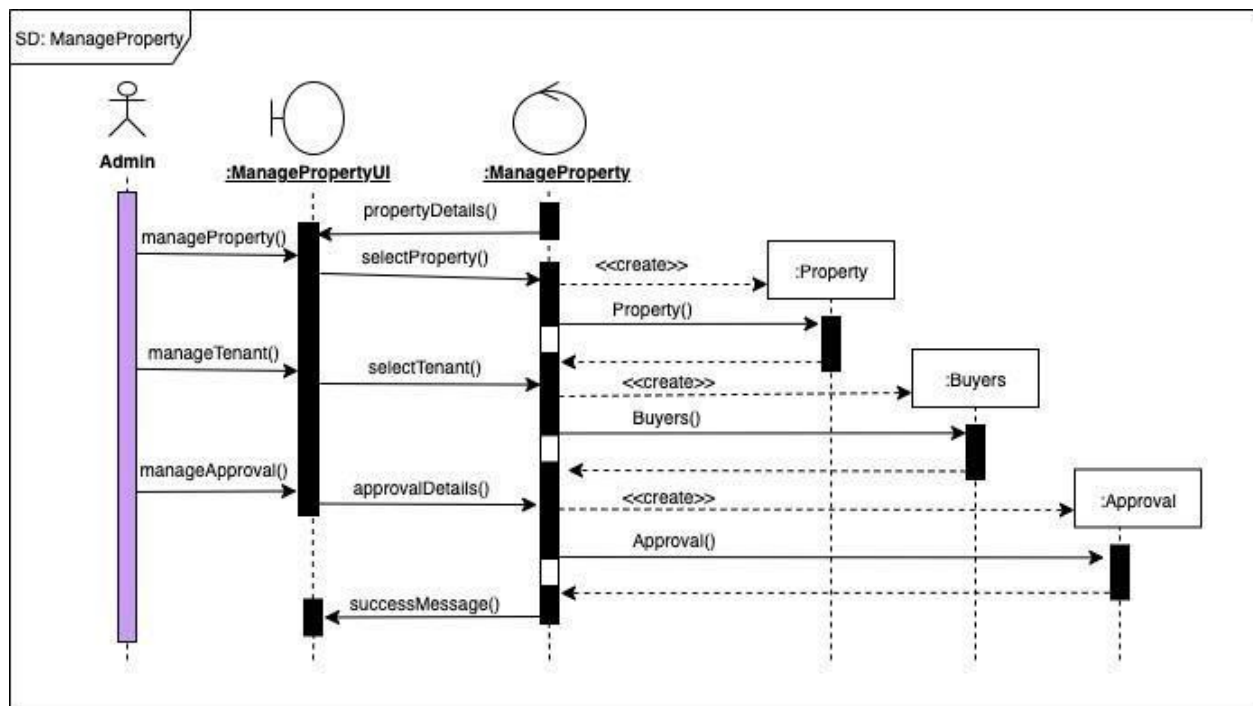
## Manage Booking



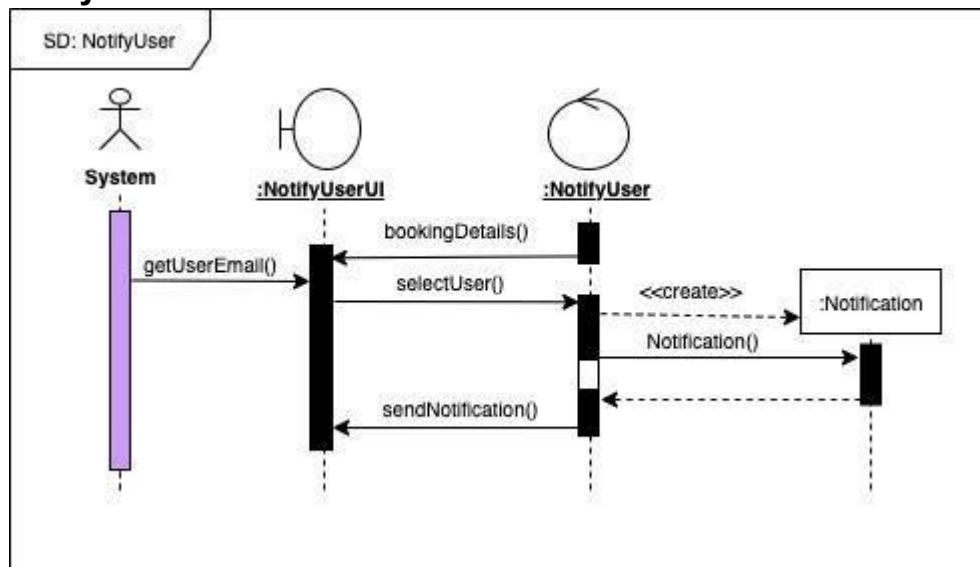
## Post Blog



## Manage Property

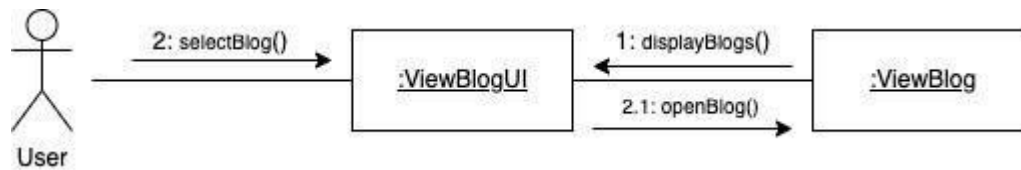


## Notify User



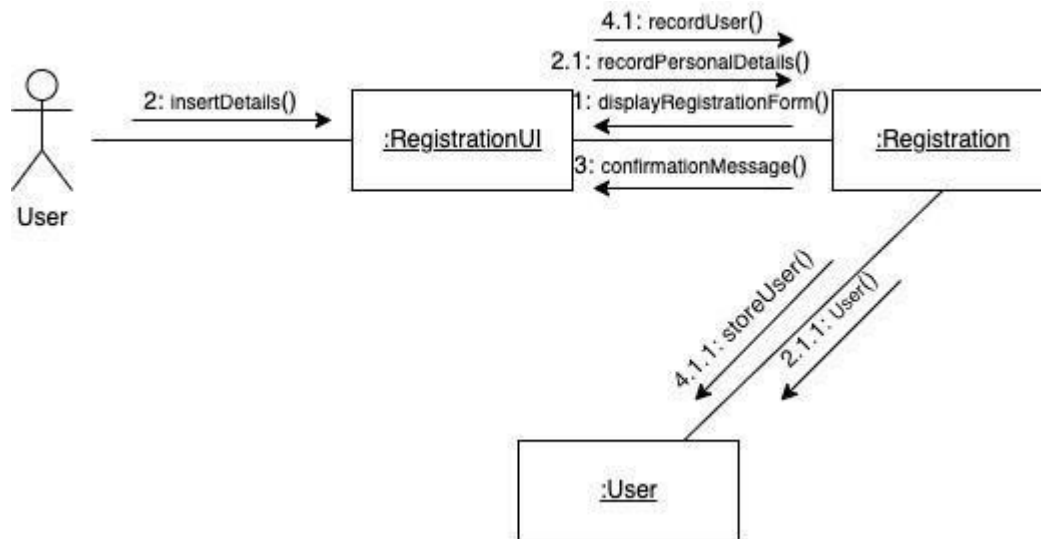
## Collaboration Diagram

### View Blog

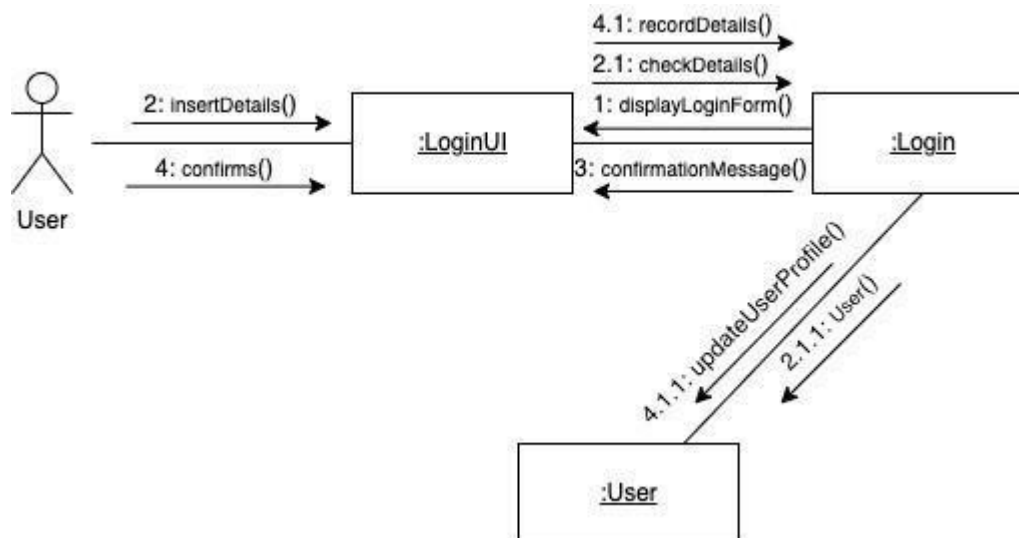




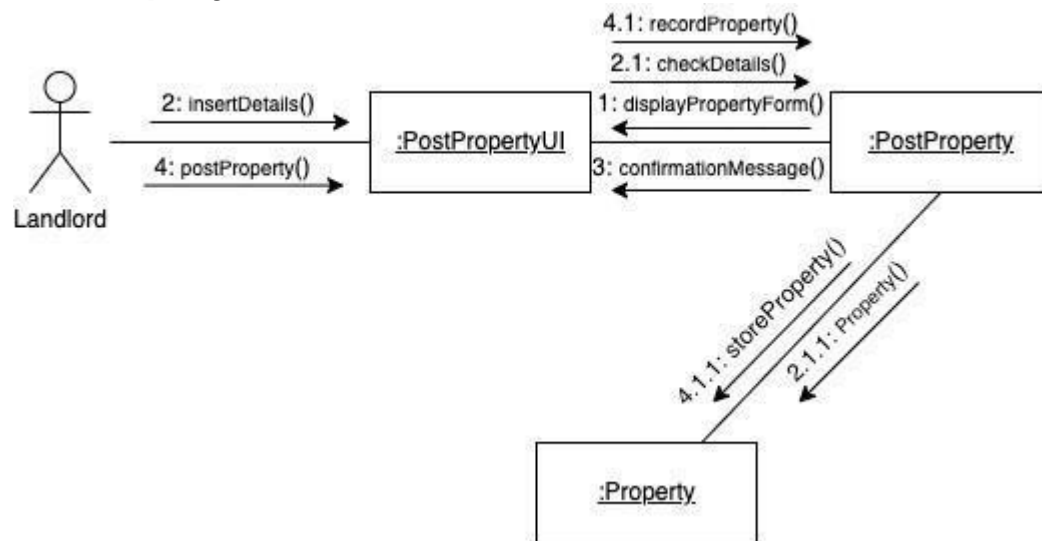
## Registration



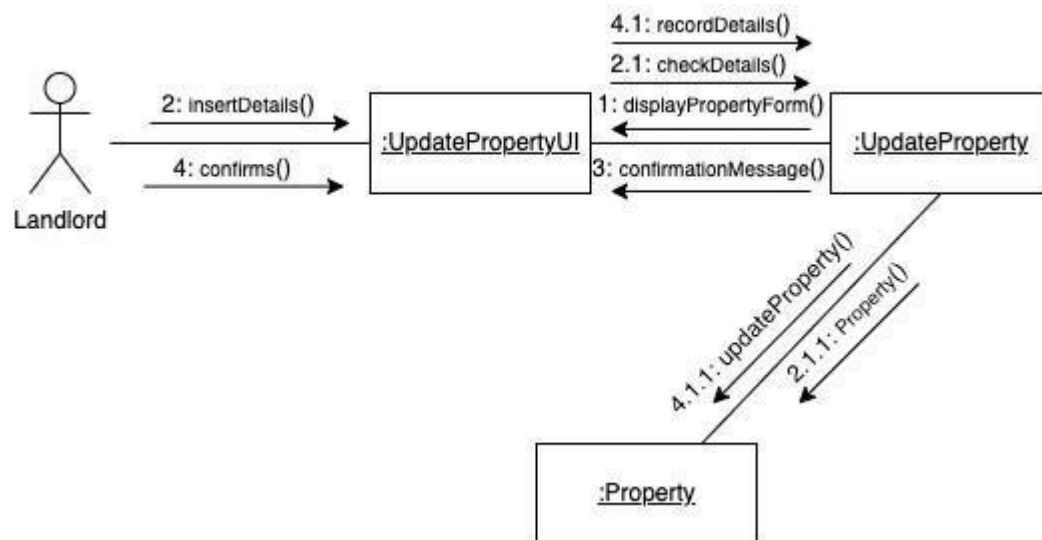
## Login



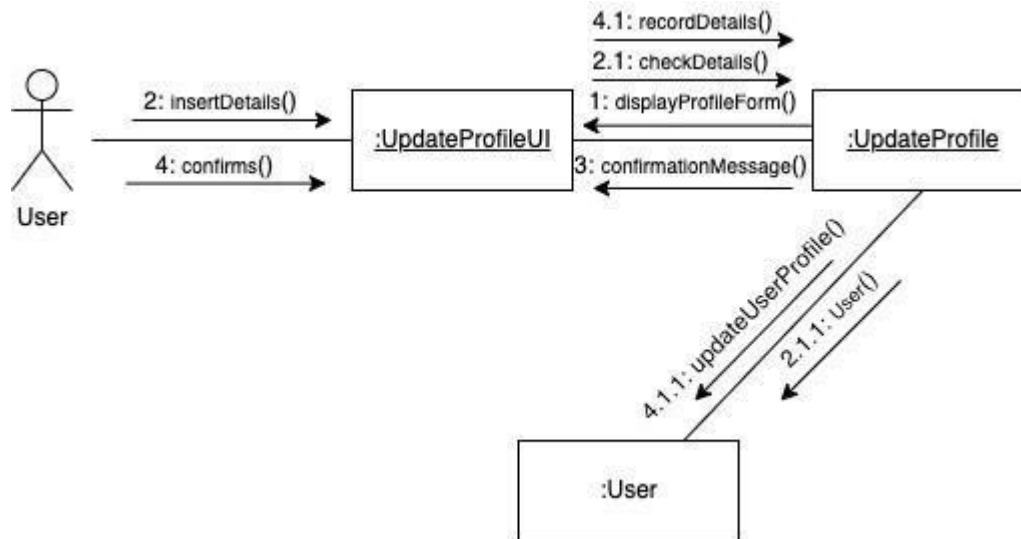
## Post Property



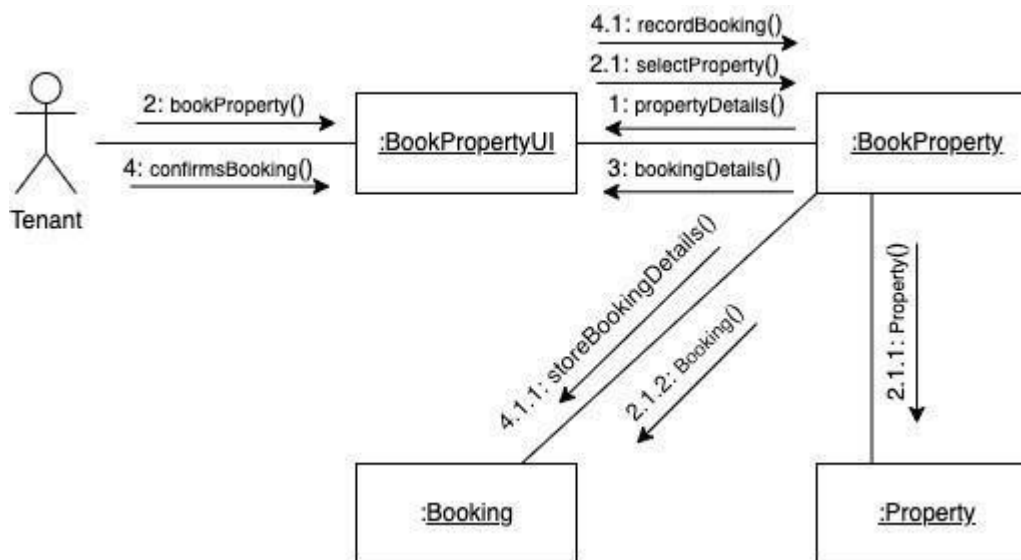
## Update Property



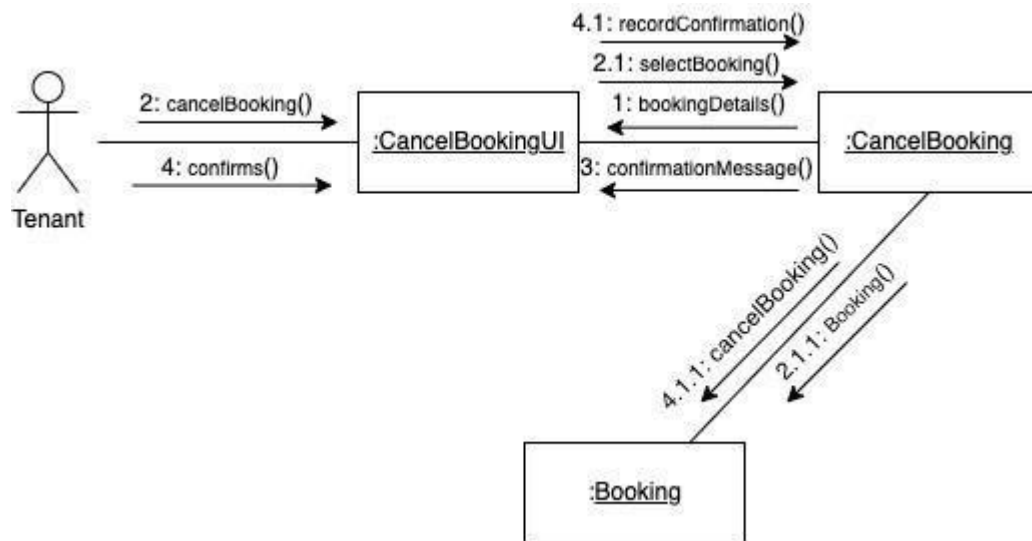
## Update Profile



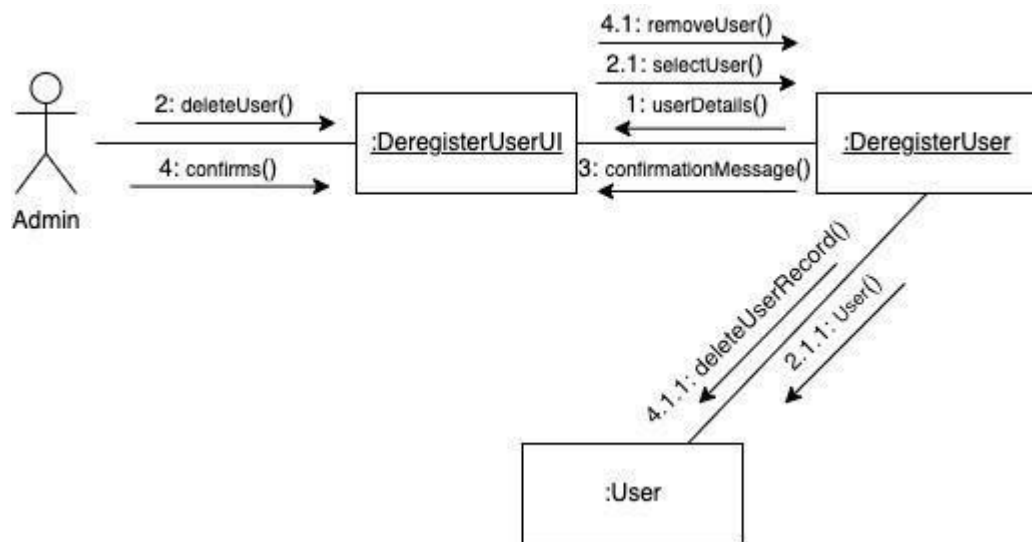
## Book Property



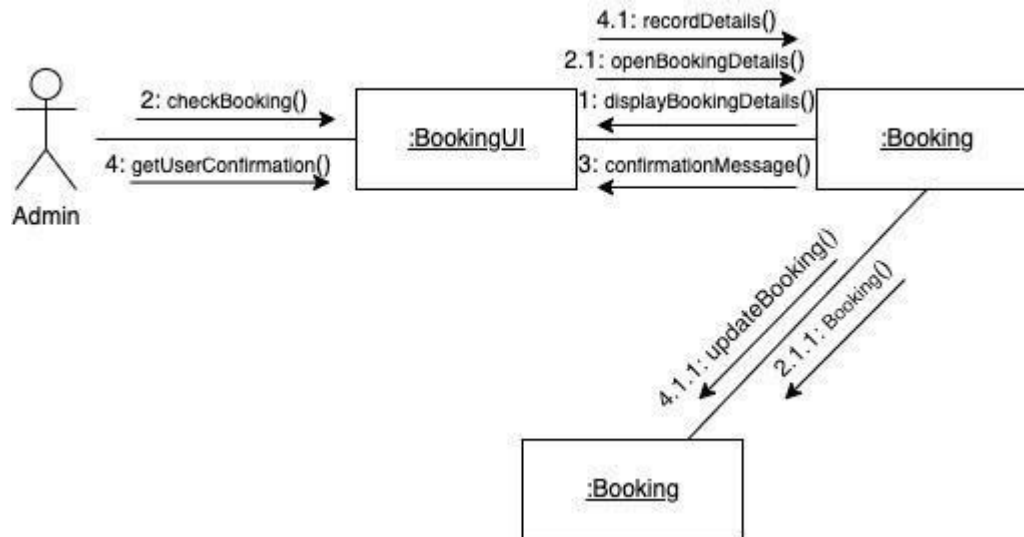
## Cancel Booking



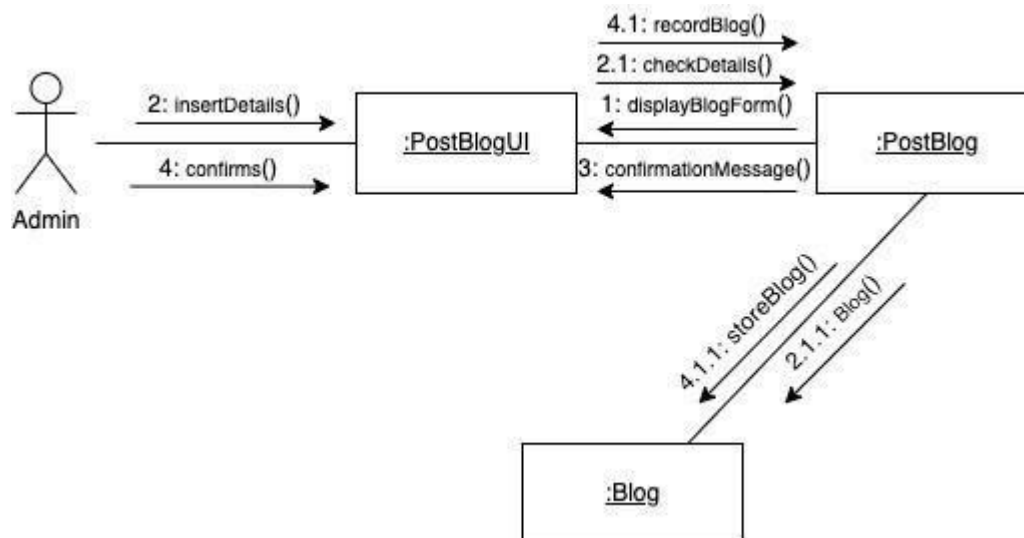
## De-register User



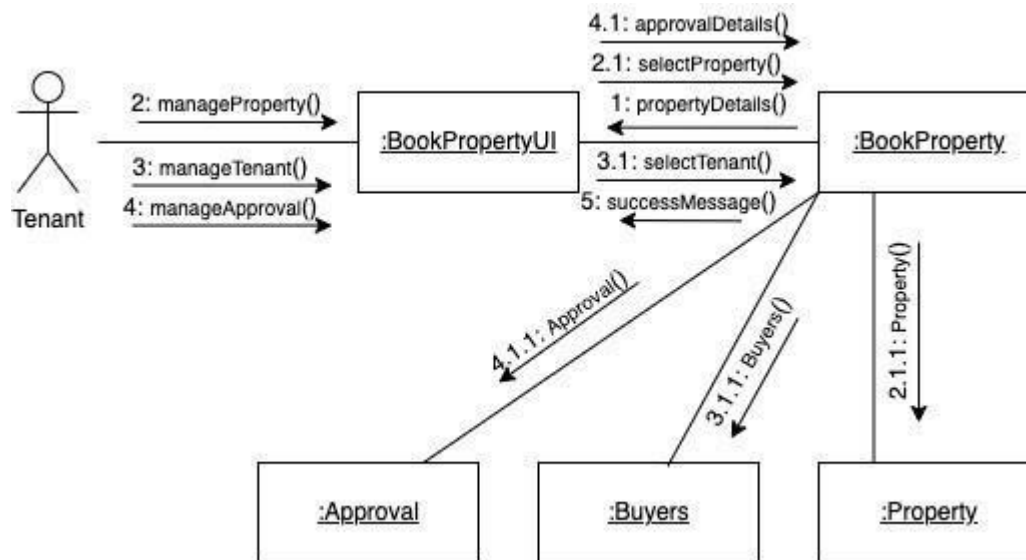
## Manage Booking



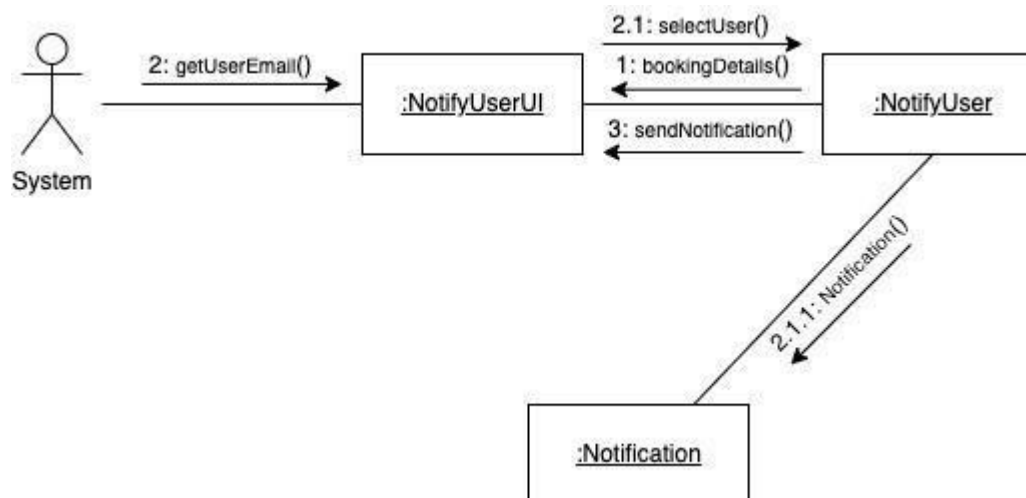
## Post Blog



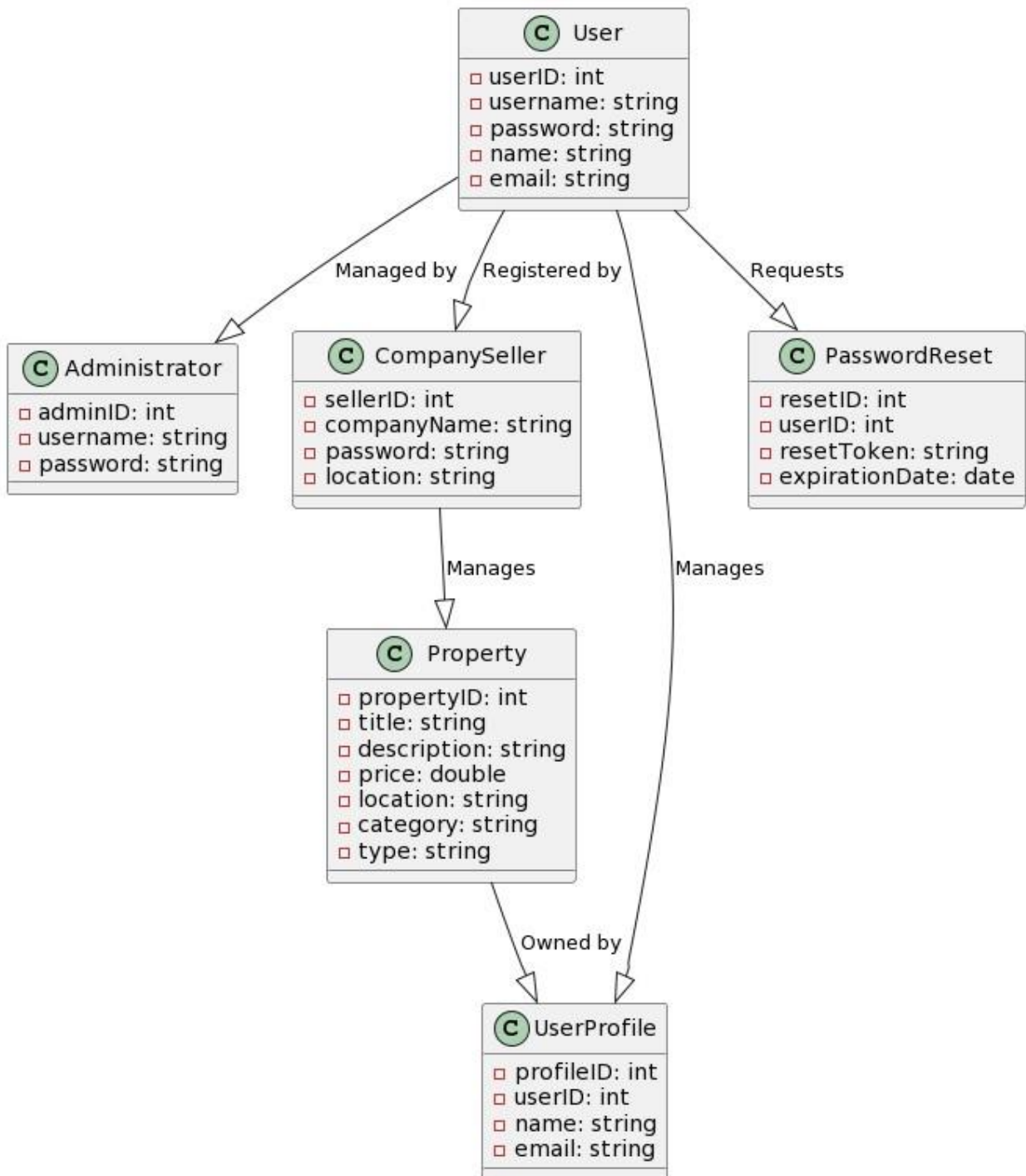
## Book Property



## Notify User



## Class Diagram

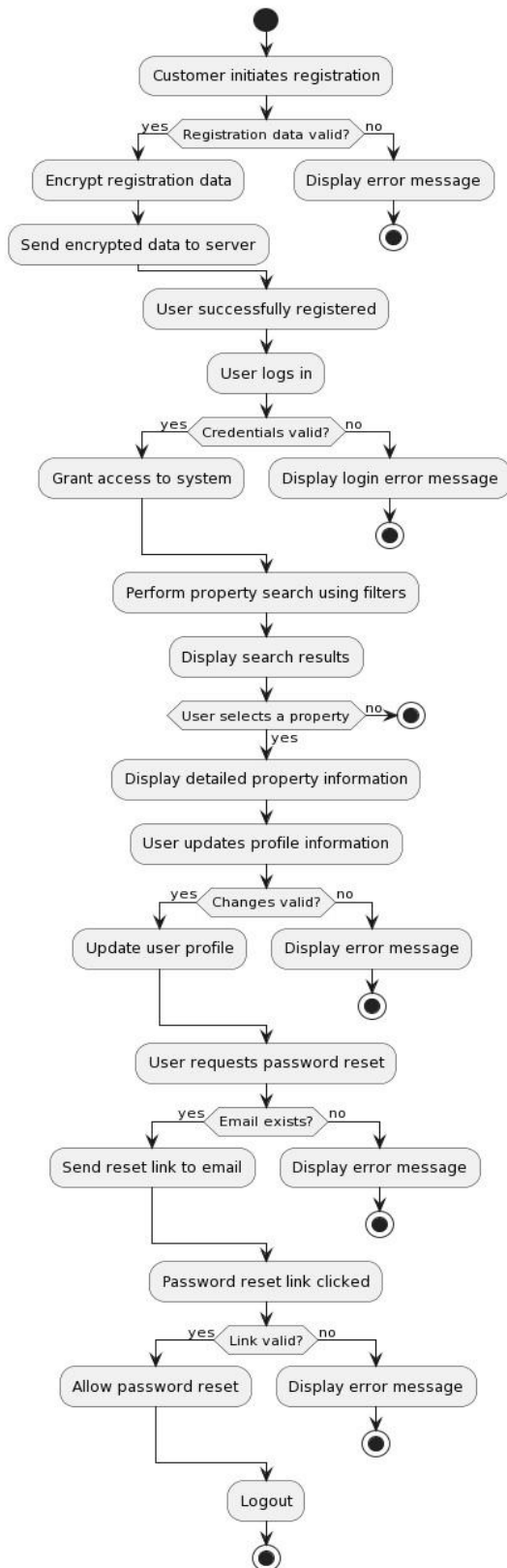


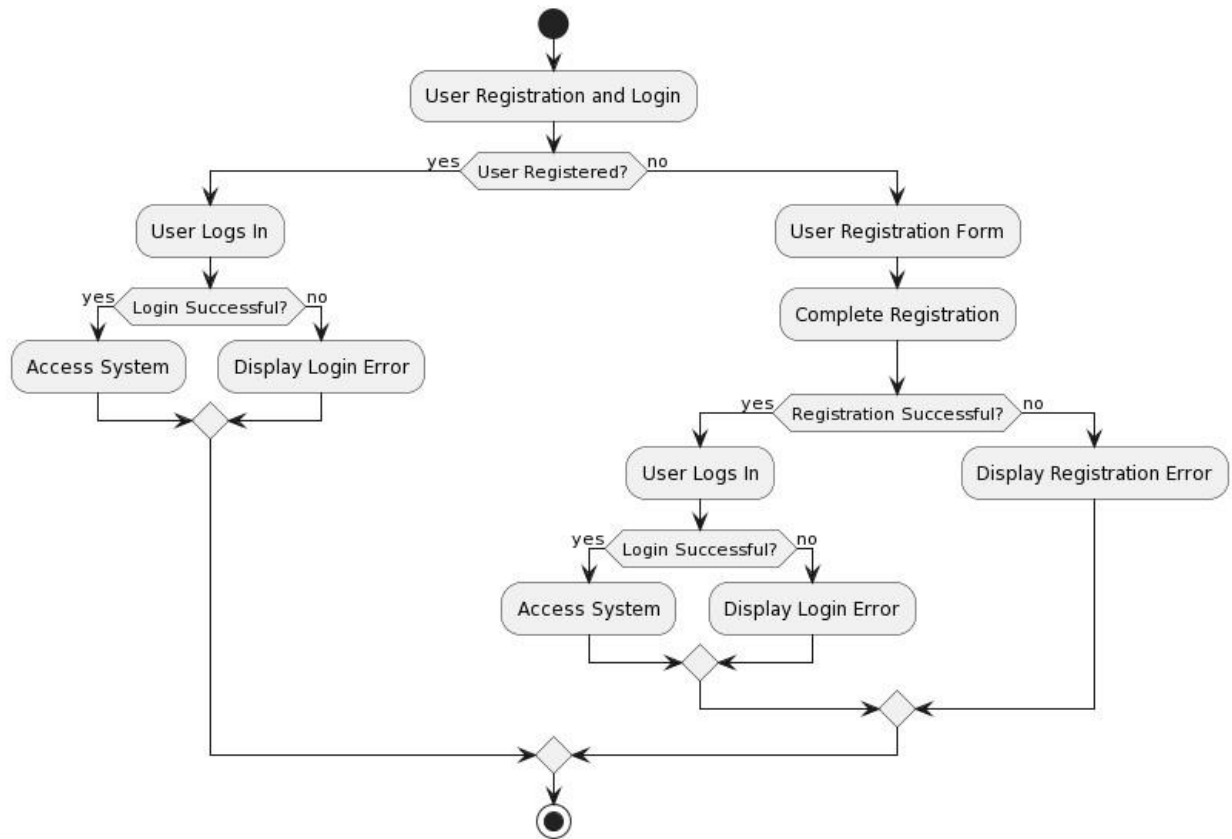
## Use Case Diagram

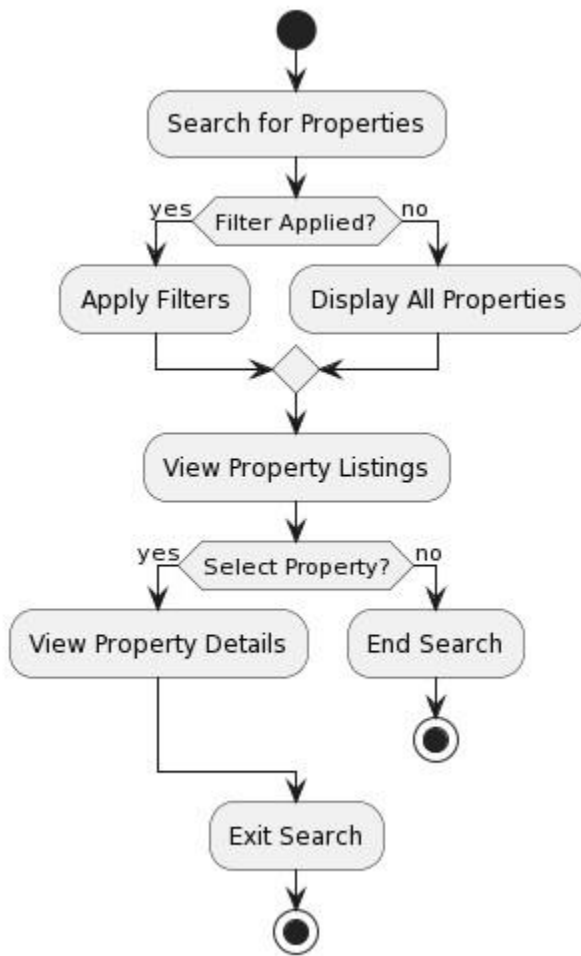


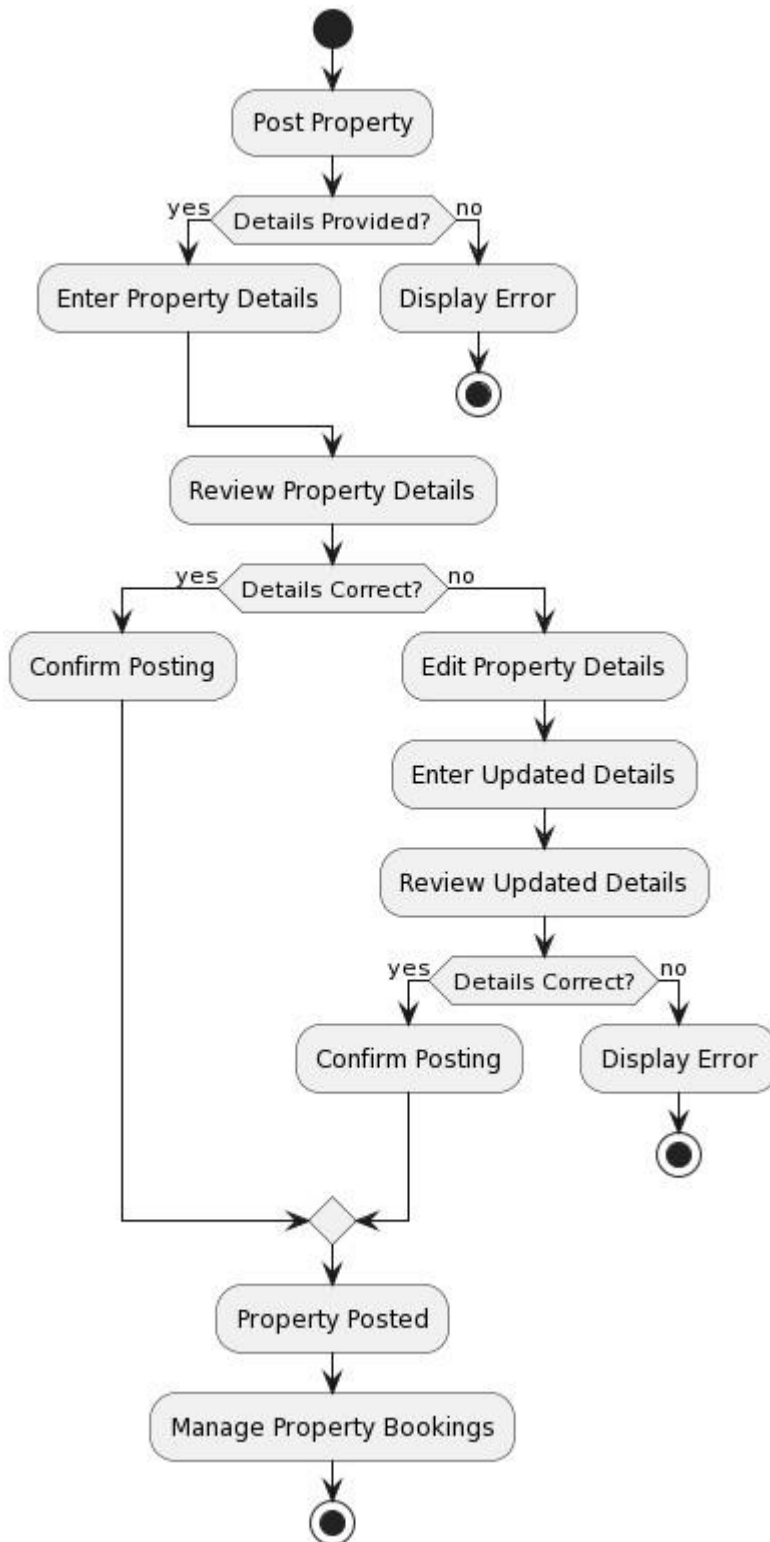


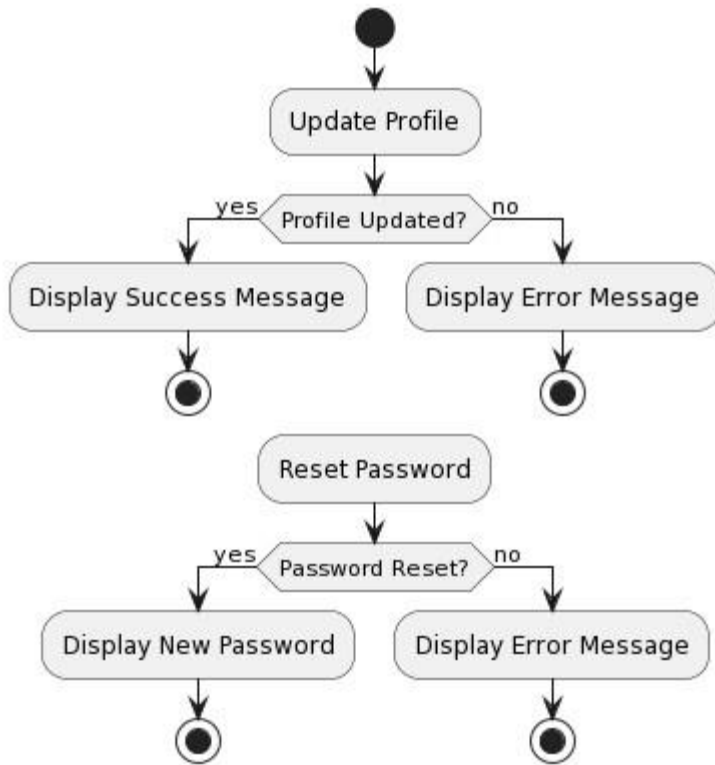
## Activity Diagram











## Test Plan

### User Registration Login System

Test Plan ID	Requirements ID	Steps	Expected Output
TP-URL-001	URL-F-1.0	1. Navigate to the registration page.	Registration page is displayed.
		2. Fill in valid registration data.	Data is accepted, and a user account is created.
		3. Click the "Register" button.	User receives a confirmation message.
	URL-NF-1.0	1. Fill in registration data.	Data is encrypted before sending to the server.
	URL-UR-1.0	1. Access the registration page on a small device.	The header appears as a menu for better usability.
TP-URL-002	URL-F-1.1	1. Navigate to the login page.	Login page is displayed.
		2. Enter valid login credentials.	User is logged into the system.
	URL-NF-1.1	1. Enter a password with alphabets, numbers, and special characters.	Password meets security requirements.
	URL-UR-1.1	1. Access the login page on a small device.	The login form is fully responsive and usable on mobile devices.
TP-URL-003	URL-F-1.2	1. Navigate to the company registration page.	Company registration page is displayed.
		2. Fill in valid company registration data.	Data is accepted, and a company account is created.
TP-URL-004	URL-F-1.3	1. Navigate to the company login page.	Company login page is displayed.
		2. Enter valid company login credentials.	Company is logged into the system.
TP-URL-005	URL-F-1.4	1. Log in as an administrator.	Administrator panel is accessible.
		2. Add a new user or company.	User or company is added to the system.
TP-URL-006	URL-F-1.5	1. Log in as a user or company.	Reset password page is accessible.
		2. Request a password reset.	Password reset email or confirmation is sent.
		3. Follow the reset link and set a new password.	Password is reset, and the user receives confirmation.

## Property Search Functionality

Test Plan ID	Requirements ID	Steps	Expected Output
TP-PSF-001	PSF-F-1.0	1. Navigate to the property search page.	Property search page is displayed.
		2. Apply filters (e.g., location, category).	Filtered property listings are displayed.
		3. Observe the displayed properties.	Properties match the selected filters.
TP-PSF-002	PSF-F-1.1	1. Navigate to the property search page.	Property search page is displayed.
		2. Search for properties by location.	Property listings in the specified location are shown.
	PSF-F-1.2	1. Navigate to the property search page.	Property search page is displayed.
		2. Search for properties by category.	Property listings in the selected category are displayed.
	PSF-F-1.3	1. Navigate to the property search page.	Property search page is displayed.
		2. Search for properties by property type.	Property listings of the chosen type are displayed.
TP-PSF-003	PSF-F-2.0	1. Navigate to the property search page.	Property search page is displayed.
		2. Conduct a search with specific criteria.	Advanced search algorithm improves accuracy and relevance of results.
	PSF-NF-2.0	1. Perform a property search.	Results are generated within 3 seconds under normal server load.
TP-PSF-004	PSF-F-3.0	1. Navigate to the property search page.	Property search page is displayed.
		2. Observe the format of property listings.	Property listings are presented in a user-friendly format.
	PSF-NF-3.0	1. View a property listing.	Detailed information is provided, including title, location, description, and price.
	PSF-UR-3.0	1. Customize the way property search results are displayed.	The results are shown according to the user's preferences.

## Property Posting Management

Test Plan ID	Requirements ID	Steps	Expected Output
TP-PPM-001	PPM-F-1.0	1. Log in as a property owner.	Property owner successfully logs in.
		2. Navigate to the property posting page.	Property posting form is displayed.
		3. Fill in property details.	Property details are entered.
		4. Click the "Post Property" button.	Property is successfully posted.
	PPM-NF-1.0	1. Log in as a property owner.	Property owner successfully logs in.
		2. Navigate to the property posting page.	Property posting form is displayed.
		3. Attempt to submit incomplete or invalid data.	Form enforces character limits and validates input data.
		4. Click the "Post Property" button.	Appropriate error messages are displayed.
TP-PPM-002	PPM-F-2.0	1. Log in as a property owner.	Property owner successfully logs in.
		2. Navigate to the property management page.	Property listings are displayed in a user-friendly format.
TP-PPM-003	PPM-F-2.1	1. Log in as a property owner.	Property owner successfully logs in.
		2. Navigate to the property management page.	Property listings are displayed with title, location, description, and price.
TP-PPM-004	PPM-F-3.0	1. Log in as a property owner.	Property owner successfully logs in.
		2. Navigate to the property management page.	Property management tools are accessible.
	PPM-F-3.1	1. Log in as a property owner.	Property owner successfully logs in.
		2. Post a property.	Property posting is confirmed.
	PPM-F-3.2	1. Log in as a property owner.	Property owner successfully logs in.
		2. Edit property details.	Property details are successfully updated.
	PPM-UR-3.0	1. Log in as a property owner.	Property owner successfully logs in.
		2. Navigate to the property management page.	Property management tools are accessible.
		3. Manage property bookings based on criteria.	Property bookings are successfully managed.



## Update Password and Password Reset

Test Plan ID	Requirements ID	Steps	Expected Output
TP-UPP-001	UPP-F-1.0	1. Log in as a user.	User successfully logs in.
		2. Navigate to the profile update page.	User profile update page is displayed.
		3. Update profile information.	Profile information is successfully updated.
		4. Save the changes.	Changes are saved, and a success message is displayed.
		5. Log out and log in again to confirm changes.	Updated profile information is displayed upon login.
TP-UPP-002	UPP-F-1.1	1. Log in as a user.	User successfully logs in.
		2. Navigate to the profile update page.	User profile update page is displayed.
		3. Update name and email.	Name and email are updated successfully.
		4. Save the changes.	Changes are saved, and a success message is displayed.
		5. Log out and log in again to confirm changes.	Updated profile information is displayed upon login.
TP-UPP-003	UPP-F-1.2	1. Log in as a user.	User successfully logs in.
		2. Navigate to the profile update page.	User profile update page is displayed.
		3. Upload and update profile picture.	Profile picture is successfully updated.
		4. Save the changes.	Changes are saved, and a success message is displayed.
		5. Log out and log in again to confirm changes.	Updated profile picture is displayed upon login.
TP-UPP-004	UPP-F-2.0	1. Log in as a user.	User successfully logs in.
		2. Navigate to the password reset page.	Password reset page is displayed.
		3. Request a password reset.	Reset token is sent to the user's email.
		4. Follow the reset link and set a new password.	Password is reset, and a confirmation message is displayed.

