

Software Requirements Specification

For

HomeWoW System

Version 2.0

Group No.: 4

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Revisions

Version	Primary Author	Description of version	Date Completed
1.0	Wei Joe	Updated activity diagram for “View all users”	6/1/24
1.0	Sadman	Actor - Owner/Agent 1. Use Case 3,9,10 Renamed 2. Replaced use case 14 with a new use case Updated Assumptions & Dependencies	8/1/24
1.0	Teck Fung	Updated Use Case Diagram	8/1/24
1.0	Teck Fung	Added use case for Searcher	9/1/24
1.0	Teng Hui	Renamed Use Case 6 to View Property	10/1/24
1.0	Wei Joe	Updated activity diagram for - “Update User Info” - “Remove User”	
1.0	Sadman	Actor - Owner/Agent - Updated Activity Diagram for use case 3,4,5,6,7,8,10,11	13/1/24
1.0	Teng Hui	Renamed Use case 10 to Pay Bill	14/1/24
1.0	Sadman	Updated Class Diagram & Description	14/1/24
1.0	Teck Fung	Updated Use Case Diagram	14/1/24
1.0	Wei Joe	Updated activity diagram for “Contact Support”	14/1/24

1 System Overview

1.1 Description

The HomeWoW web app is a comprehensive property management platform designed to enhance the user experience through a robust verification system. Ensuring the integrity of the rental process, the system implements a thorough verification mechanism, confirming the legitimacy of property owners and agents by validating their submitted property documents. This feature instills trust and confidence in users seeking rental properties. The platform caters to diverse rental needs by accommodating both short and long-term tenancies, offering flexibility to users based on their preferences. A key functionality of the system is the provision of a seamless Tenancy Agreement feature, allowing property owners and tenants to create, review, and sign agreements efficiently. This makes a more efficient rental process, minimizing paperwork and ensuring a secure promised foundation for both parties. Additionally, the system prioritizes transparency by providing accurate and up-to-date market prices, empowering users to make informed decisions. Altogether this revolutionizes the property rental landscape by prioritizing security, flexibility, efficiency, and transparency for property owners, agents, and tenants.

1.2 Actors

Actor	Use Cases
Owner/Agent	<ol style="list-style-type: none">1. Login2. Sign Up3. Edit Profile4. Change Password5. Add Property6. Remove Property7. Update Property Information8. Upload Property Documents9. View Property10. Updates from Payment API11. Agreement Request12. Contact Support13. Dashboard14. Appointment15. Logout

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Actor	Use Cases
Tenant	<ol style="list-style-type: none">1. Sign Up2. Log In3. Edit Profile4. Change Password5. Search Properties6. View properties7. Make an Appointment8. Sent Agreement request9. View Outstanding Balance10. Pay bill11. View Invoices12. Dashboard13. Contact Support14. View Agreement15. View Receipt16. Logout

Actor	Use Cases
Admin	<ol style="list-style-type: none">1. Login2. Dashboard3. Updates from Payment API4. View All Users (Tenant & Owner/Agent)5. Search User (Tenant & Owner/Agent)6. Update User Info (Tenant & Owner/Agent)7. Remove User8. Remove Property9. Contact Support10. Logout

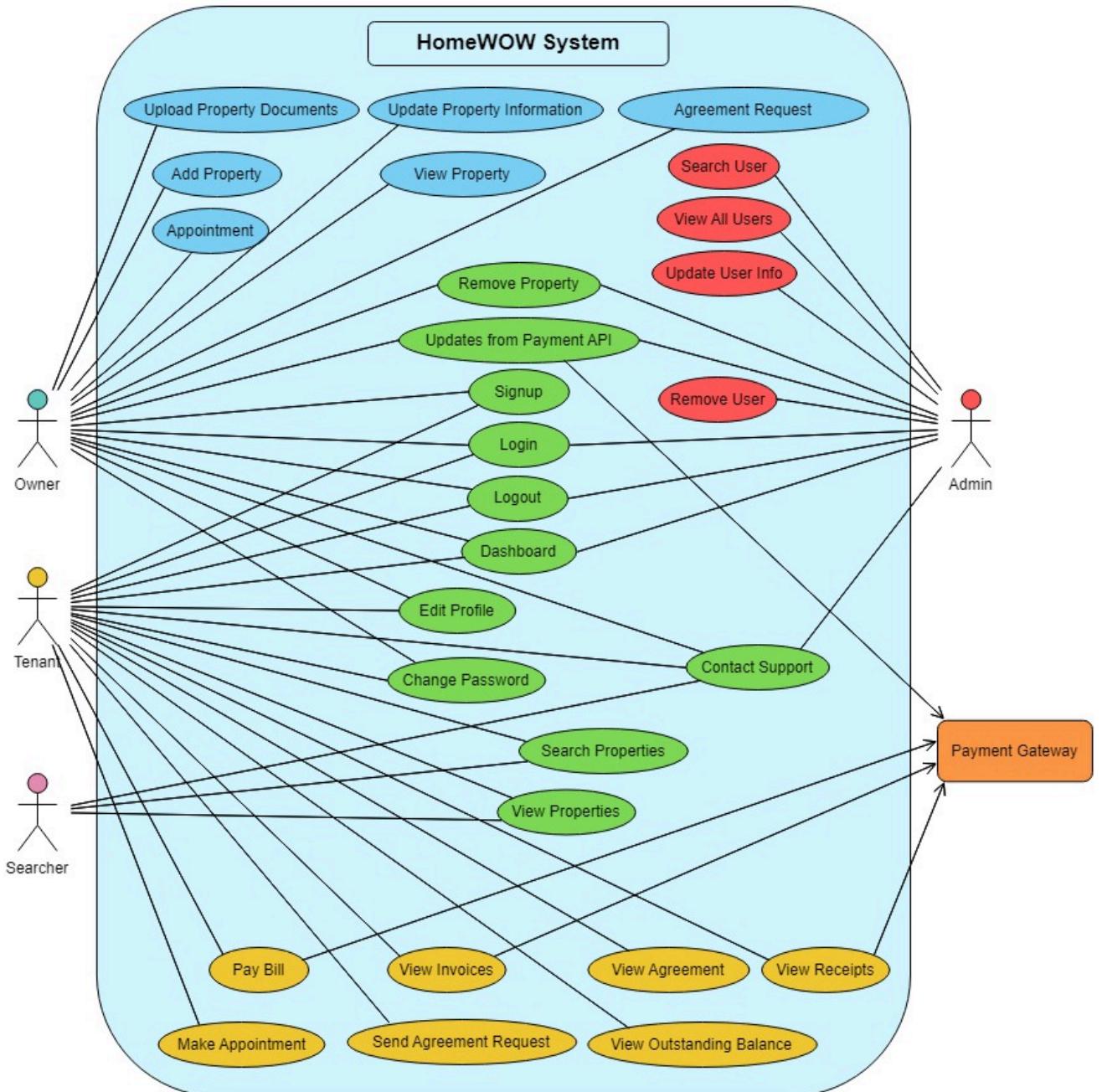
Actor	Use Cases
Searcher (User is not Logged In the System)	<ol style="list-style-type: none">1. View Properties2. Search Properties3. Contact Support

1.3 Assumptions & Dependencies

- All property listings submitted by owners or agents will be successfully added to the platform without technical issues.
- The platform is designed for use exclusively within Malaysia, with all users (owners, agents, and tenants) located within the country.
- The assumption is that all property documents submitted by owners or agents are legally valid and compliant with local regulations.
- It is assumed that all verification procedures are done instantly.
- The system assumes the payment gateway works without any technical failures.
- It is assumed that the customer support system is responsive and capable of promptly addressing user inquiries and issues.
- Owners or agents are expected to consistently update the availability status of their properties based on occupancy and other factors.
- The system depends on a single database to store and manage all relevant data.
- The system assumes that the database has sufficient storage capacity to accommodate the expected volume of property listings and user data.
- The system is assumed to work when accessed simultaneously by all actors.
- It is assumed that there are already a few pre-existing users & properties in the system.

2 Use Cases

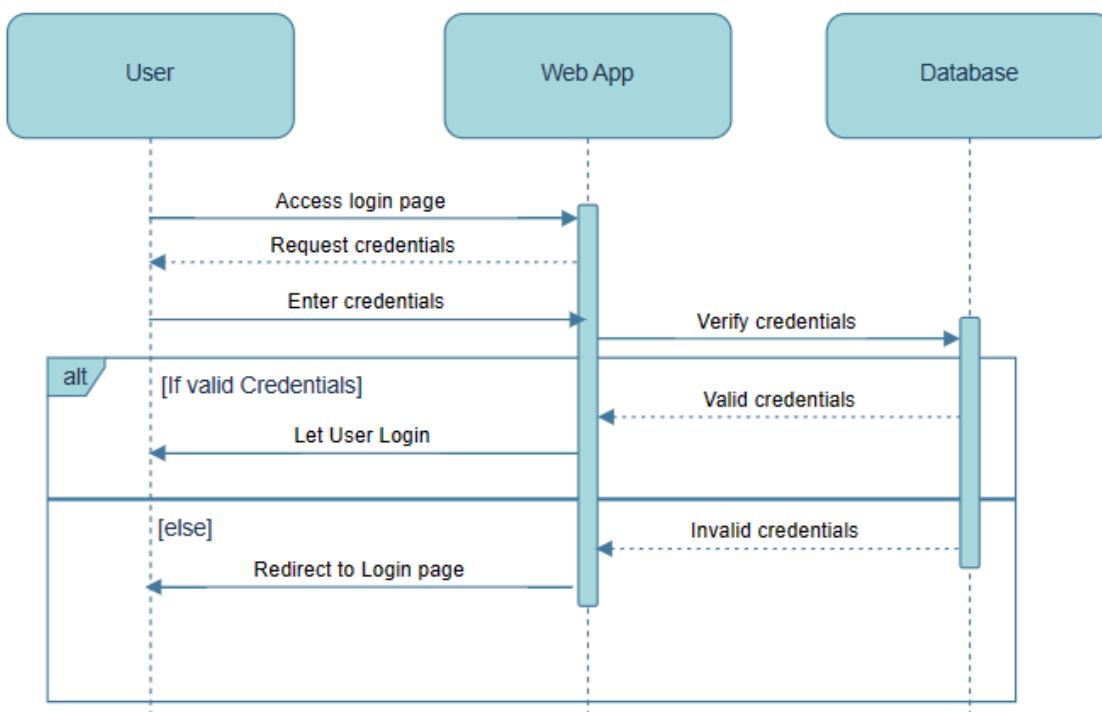
2.1 Use Case Diagram



2.2 Owner/Agent

2.2.1 Use Case 1

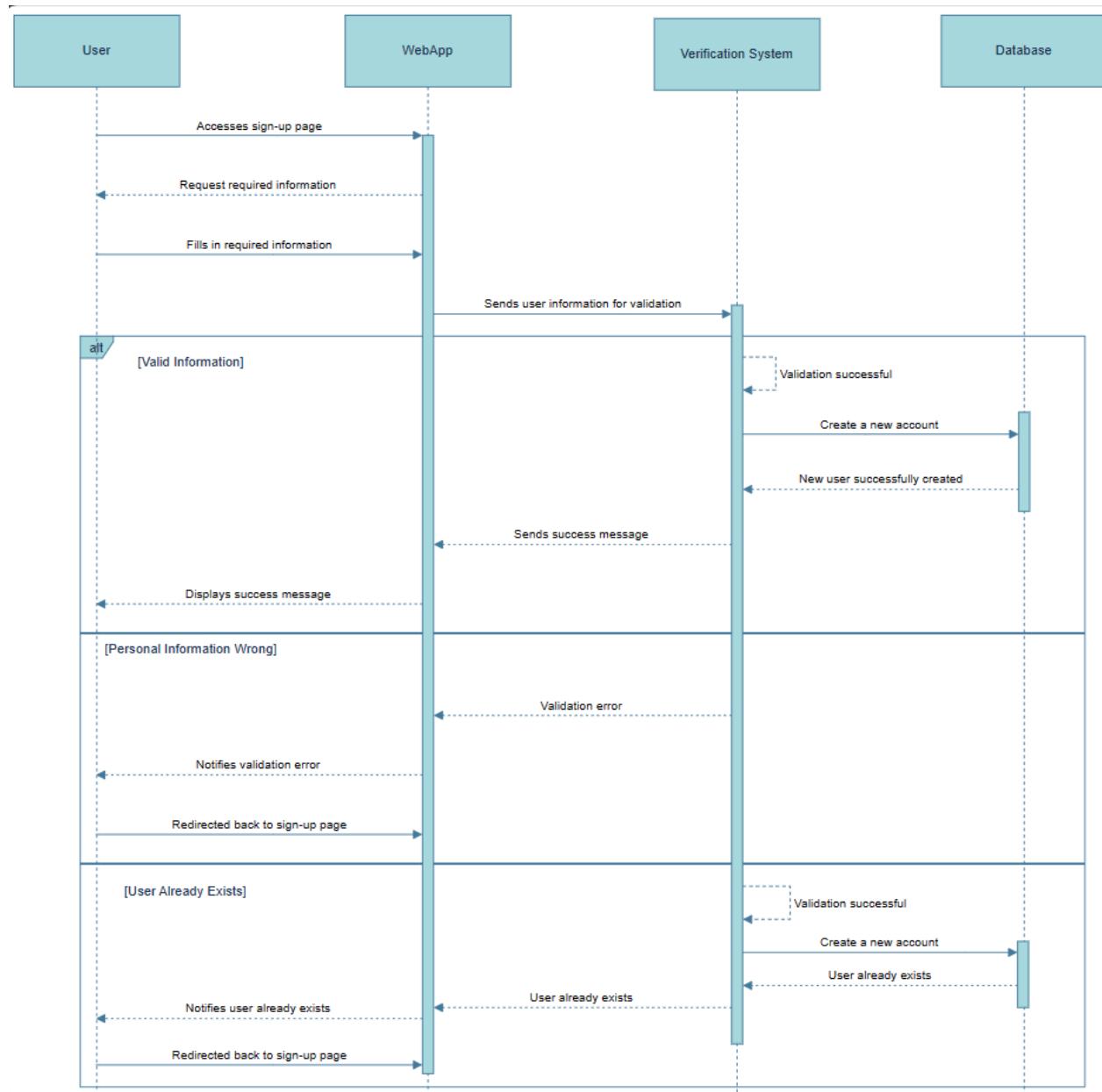
Use Case Name:	Login
Description:	This use case involves the process of a user accessing the web app by entering their registered credentials
Primary Actor:	Owner/Agent
Precondition:	The user has registered an account in the web app.
Postcondition:	The user is logged into the web app.
Main Success Scenario:	<ol style="list-style-type: none"> 1. User accesses the login page. 2. The user enters their credentials in the login form. 3. The system verifies the entered credentials with the database. 4. If the credentials are valid, the user is logged into the system.
Alternative Scenario:	<ul style="list-style-type: none"> - If credentials are invalid <ol style="list-style-type: none"> 1. The system notifies the user that the authentication failed. 2. The user is redirected to the Login Page.



2.2.2 Use Case 2

Use Case Name:	Sign Up
Description:	This use case involves the process of a user registering for an account in the web app by providing the necessary information.
Primary Actor:	Owner/Agent
Precondition:	None
Postcondition:	The user creates a new account & successfully registered.
Main Success Scenario:	<ol style="list-style-type: none">1. The user accesses the sign-up page.2. The user fills in the required information, including username, email, password, and other relevant details.3. The system validates the provided information.4. If the information is valid, the system creates a new account.5. The web app displays a success message, indicating that the registration is successful.
Alternative Scenario:	<ul style="list-style-type: none">- Personal Information wrong<ol style="list-style-type: none">1. The system notifies the user about the validation error.2. User is redirected back to the Sign up page.- User Already exists<ol style="list-style-type: none">1. The system notifies that the user already exists.2. User is redirected back to Sign up page

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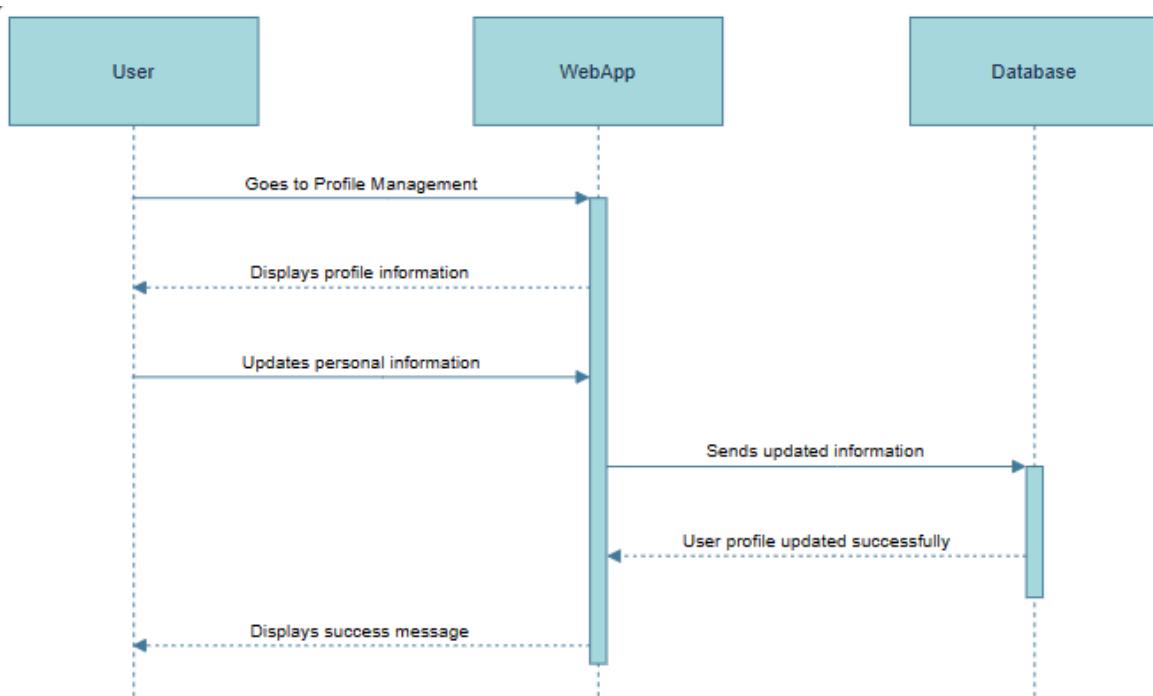


2.2.3 Use Case 3

Use Case Name:	Edit Profile
Description:	This use case allows users to manage their profile information within the system. users can edit personal details, preferences, and other relevant information to keep their profiles up to date.
Primary Actor:	Owner/Agent
Precondition:	User is already logged into the web app

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Postcondition:	User successfully Changes his Personal information
Main Success Scenario:	<ol style="list-style-type: none"> 1. User goes to Edit Profile. 2. User updates his personal information (only selected few). 3. User saves the changes. 4. Database is updated. 5. A successful message is shown.
Alternative Scenario:	None

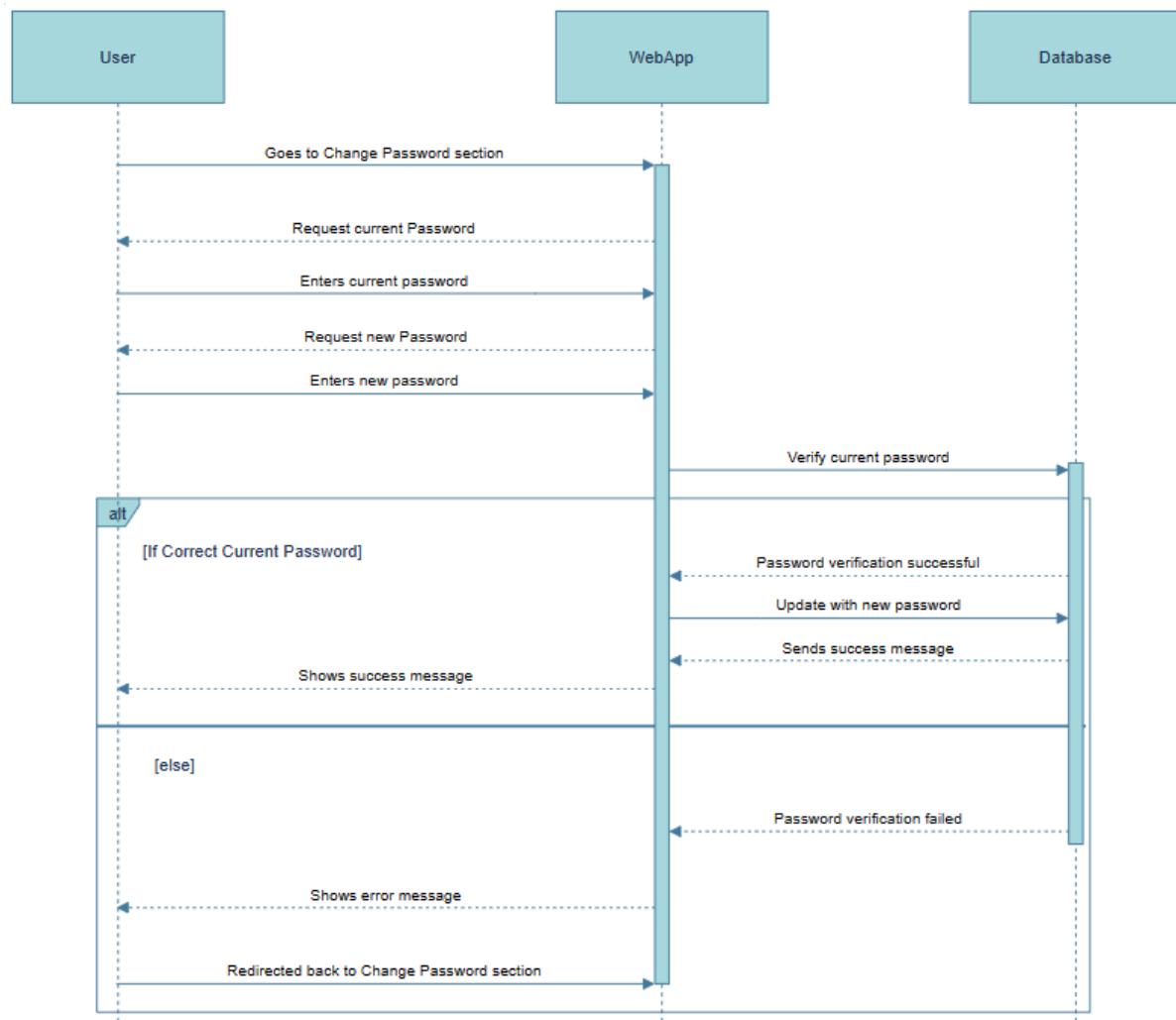


2.2.4 Use Case 4

Use Case Name:	Change Password
Description:	The Change Password use case allows a user to modify their existing password for security reasons, enhancing the security of their account.
Primary Actor:	Owner/Agent
Precondition:	User is already logged into the web app.
Postcondition:	User successfully changes his old password with a new password & can use the new password to login into the system.

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Main Success Scenario:	<ol style="list-style-type: none"> 1. User goes to change the password section. 2. User enters current password. 3. User enters a new password. 4. System verifies the current password. 5. Database updated with new password. 6. System updated message shown to user.
Alternative Scenario:	<ul style="list-style-type: none"> - If current password is wrong <ol style="list-style-type: none"> 1. Current Password wrong message shown. 2. User is redirected back to the change password section.

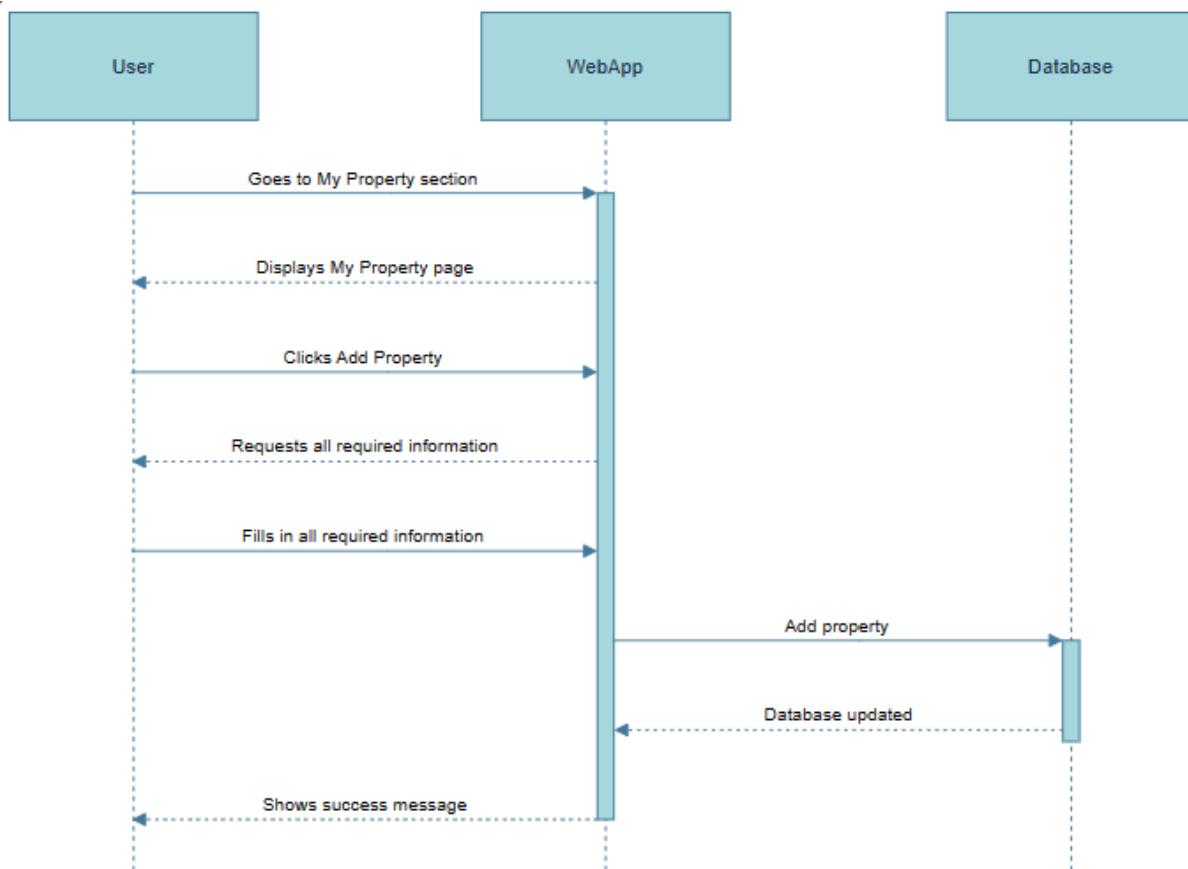


2.2.5 Use Case 5

Use Case Name:	Add Property
Description:	This use case allows the user to Add property with all the required Information in the system which is only visible to this user.

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Primary Actor:	Owner/Agent
Precondition:	User is logged into the web app.
Postcondition:	User adds a property to the system & can view property from my property section.
Main Success Scenario:	<ol style="list-style-type: none"> 1. User goes to the My Property section. 2. User clicks add property. 3. User fills in all the required information related to the property. 4. Database is updated 5. User is shown successfully added property message.
Alternative Scenario:	None

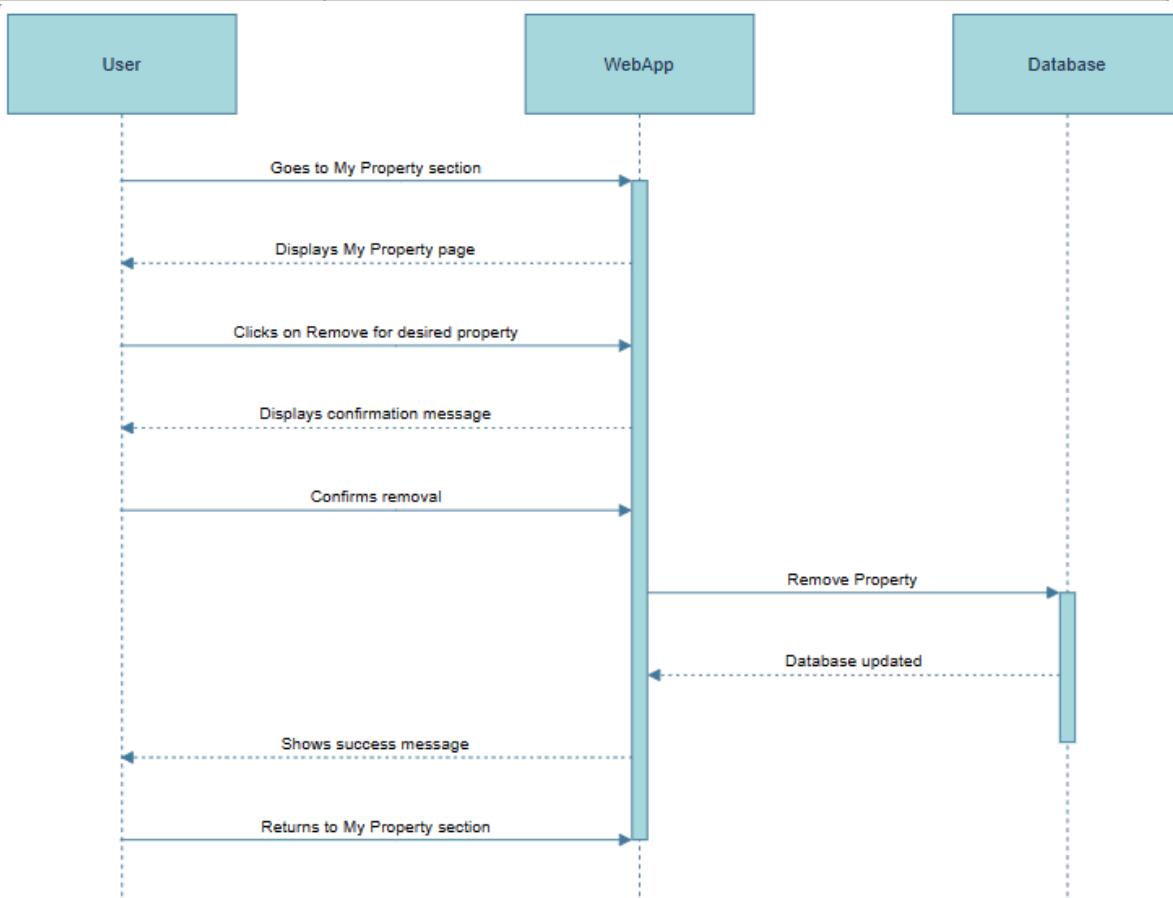


2.2.6 Use Case 6

Use Case Name:	Remove Property
Description:	User removes the desired property from the system.
Primary Actor:	Owner/Agent

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Precondition:	1. User is logged into the web app. 2. User is in My Property Section.
Postcondition:	User successfully removes the desired property from the system.
Main Success Scenario:	1. User clicks on remove. 2. User confirms it. 3. Database is updated 4. Web app displays property removed successfully message. 5. User is back to the “My Property” section.
Alternative Scenario:	None

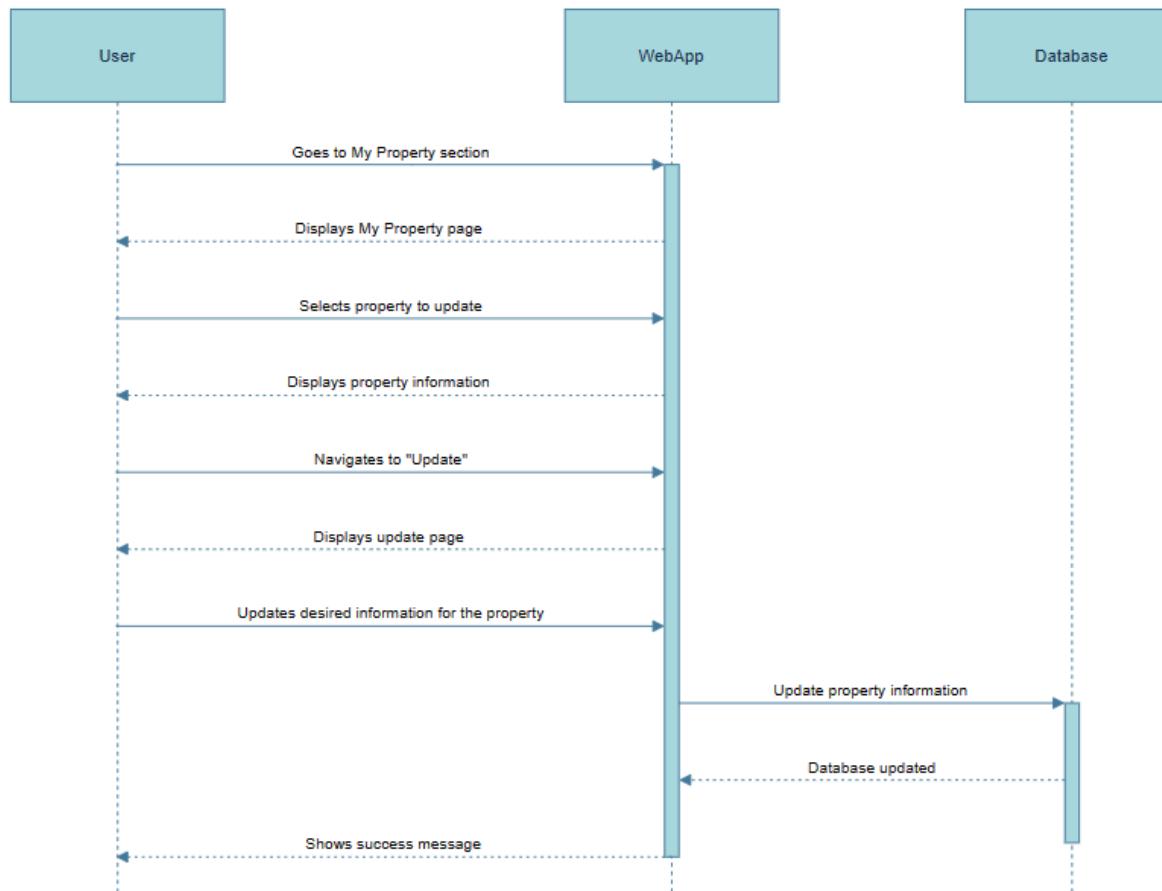


2.2.7 Use Case 7

Use Case Name:	Update Property Information
Description:	The user can update any existing property information in the system.
Primary Actor:	Owner/Agent
Precondition:	1. User is logged into the web app. 2. User is in My Property Section.

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Postcondition:	Property information is successfully updated in the system.
Main Success Scenario:	<ol style="list-style-type: none"> 1. User selects the property they want to update. 2. User navigates to “update”. 3. User updates the desired information for the property & saves it. 4. Database is updated. 5. Web app displays a success message.
Alternative Scenario:	None

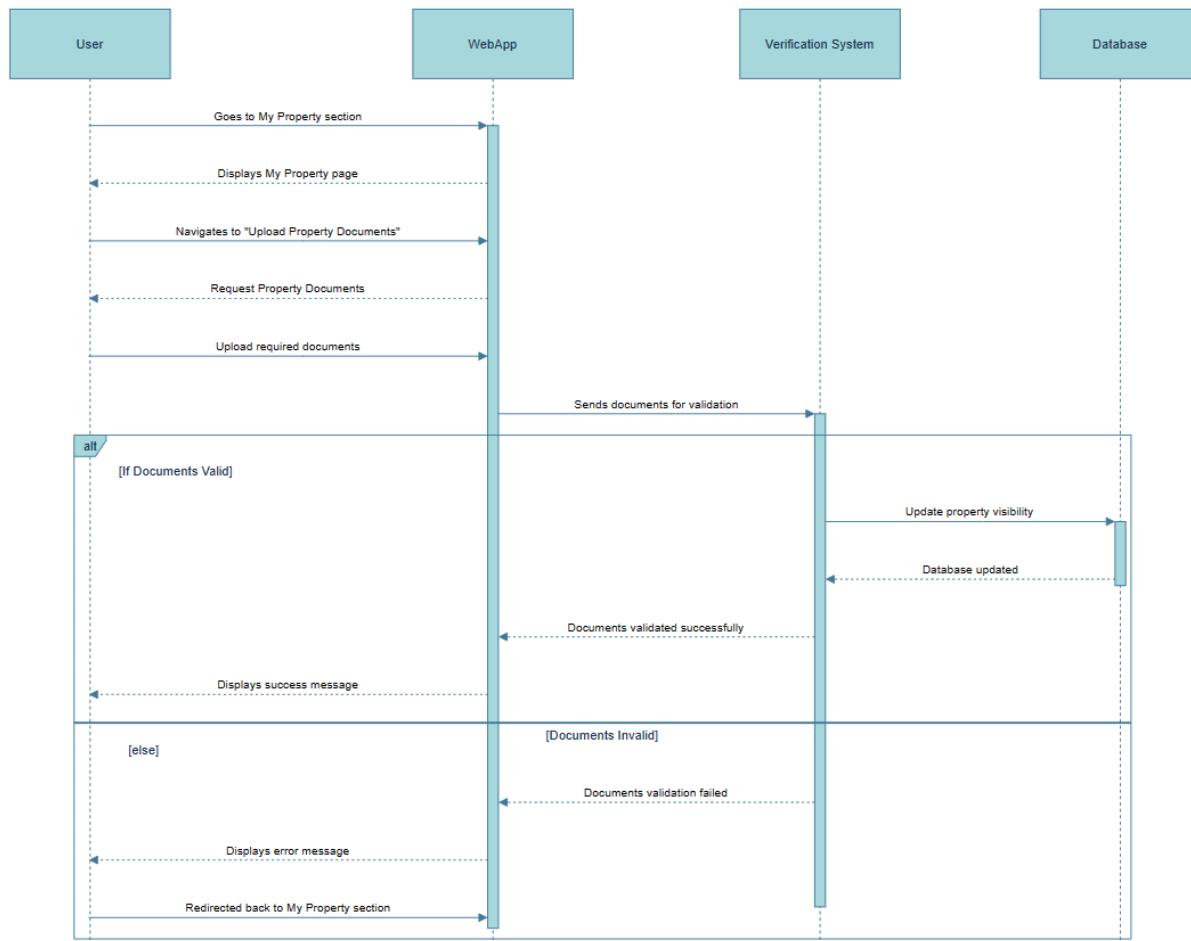


2.2.8 Use Case 8

Use Case Name:	Upload Property Documents
Description:	Allows the user to upload property documents in PDF format for verification.
Primary Actor:	Owner/Agent
Precondition:	<ol style="list-style-type: none"> 1. User is logged into the web app. 2. User is in “My Property” section
Postcondition:	<ol style="list-style-type: none"> 1. The property appears for all the other users accessing the web app.

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Main Success Scenario:	<ol style="list-style-type: none"> 1. User navigates to “Upload Property Documents”. 2. User uploads the required documents. 3. Documents are validated by the system. 4. If the documents are valid, the system is updated so the property is visible to other users in the system. 5. Web app displays a message.
Alternative Scenario:	<ul style="list-style-type: none"> - If documents are invalid <ol style="list-style-type: none"> 1. Web app displays a message. 2. User is redirected back to the “My Property” section.

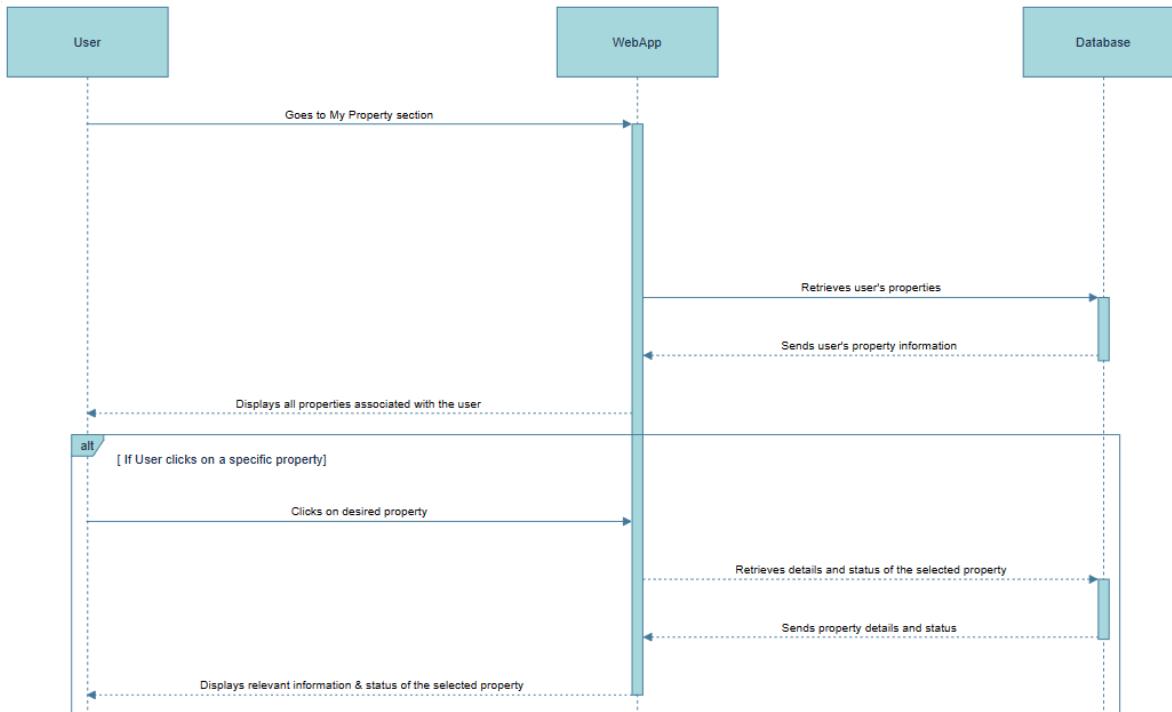


2.2.9 Use Case 9

Use Case Name:	View Property
Description:	Allows the user to view all his properties in the system with details & status.
Primary Actor:	Owner/Agent
Precondition:	<ol style="list-style-type: none"> 1. User is logged into the web app. 2. User has at least one property in the system.

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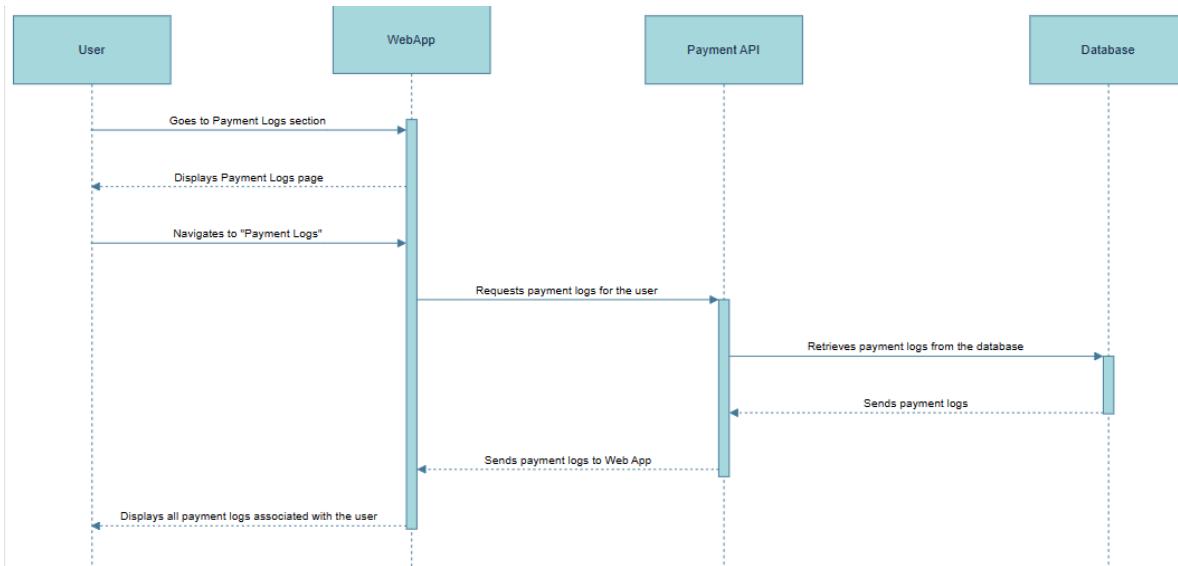
Postcondition:	User can view all his property that is in the system.
Main Success Scenario:	<ol style="list-style-type: none"> 1. User navigates to the “My Property” section. 2. Web app displays all properties associated with the user from the database.
Alternative Scenario:	<ul style="list-style-type: none"> - If user clicks on a desired property <ol style="list-style-type: none"> 1. Web app displays all relevant information & status related to the selected property.



2.2.10 Use Case 10

Use Case Name:	Updates from Payment API
Description:	Allows the user to view payment logs from the Payment Gateway system.
Primary Actor:	Owner/Agent
Precondition:	User is logged into the web app.
Postcondition:	User can see all payment logs associated with the user.
Main Success Scenario:	<ol style="list-style-type: none"> 1. User Navigates to the “Payment Logs” section. 2. Web app displays all payment logs associated with the user from the database.
Alternative Scenario:	None

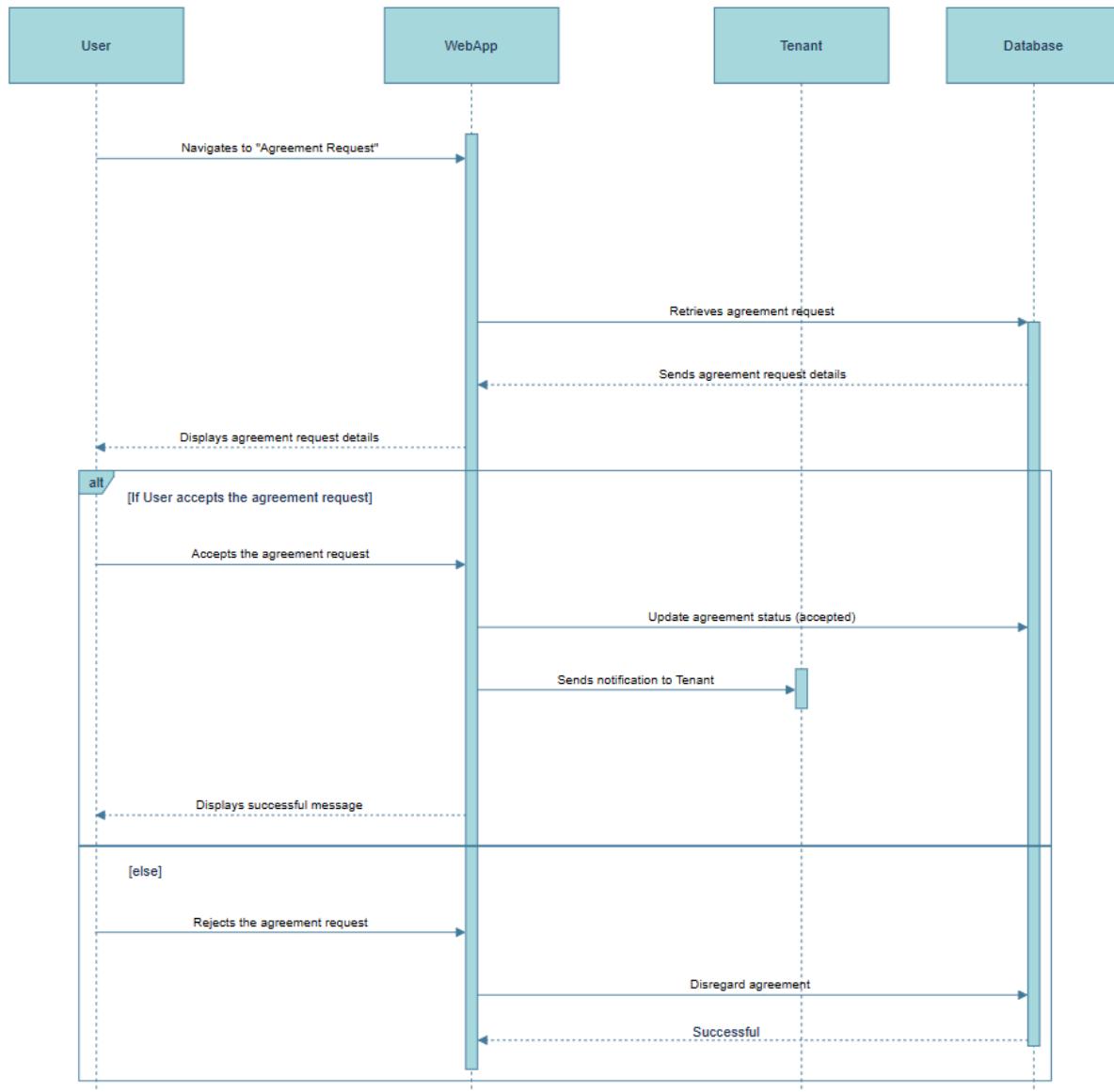
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2.2.11 Use Case 11

Use Case Name:	Agreement Request
Description:	Allows the user to receive a tenancy agreement request sent by the tenant.
Primary Actor:	Owner/Agent, Tenant
Precondition:	<ol style="list-style-type: none"> 1. User (Owner/Agent) is logged into the web app 2. User (Owner/Agent) at least has a property with validated documents in the system.
Postcondition:	Successfully Agree or disagree with a tenancy agreement.
Main Success Scenario:	<ol style="list-style-type: none"> 1. User (Owner/Agent) navigates to the "Agreement Request" section. 2. User (Owner/Agent) accepts the agreement request. 3. System is updated for users (Owner/Agent, Tenant) involved in the agreement. 4. Web app displays a successful message.
Alternative Scenario:	<ul style="list-style-type: none"> - If the user (Owner/Agent) rejects the agreement request. <ol style="list-style-type: none"> 1. The request is disregarded.

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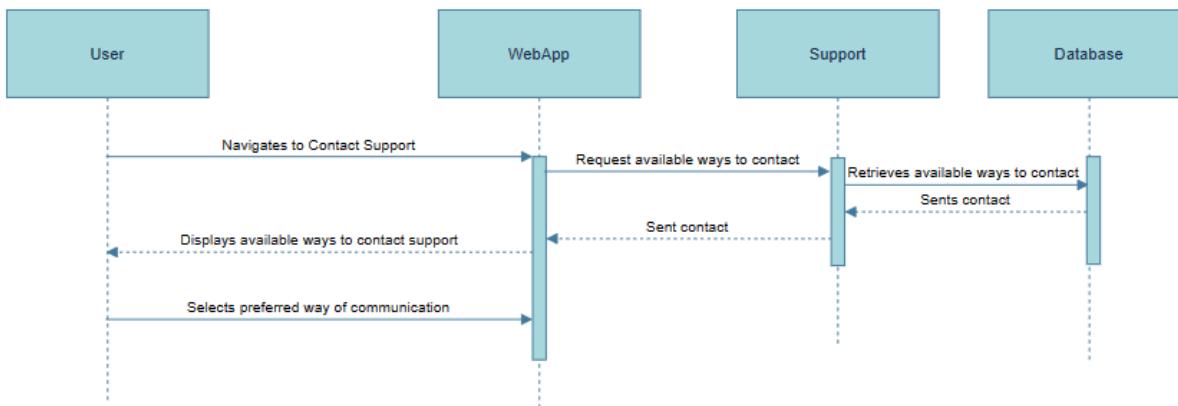


2.2.12 Use Case 12

Use Case Name:	Contact Support
Description:	Allows users to reach out to customer support team
Primary Actor:	Owner/Agent
Precondition:	None
Postcondition:	User successfully interact with the support team for assistance.
Main Success Scenario:	<ol style="list-style-type: none"> 1. User navigates to the contact support. 2. Web app displays available ways to contact support.

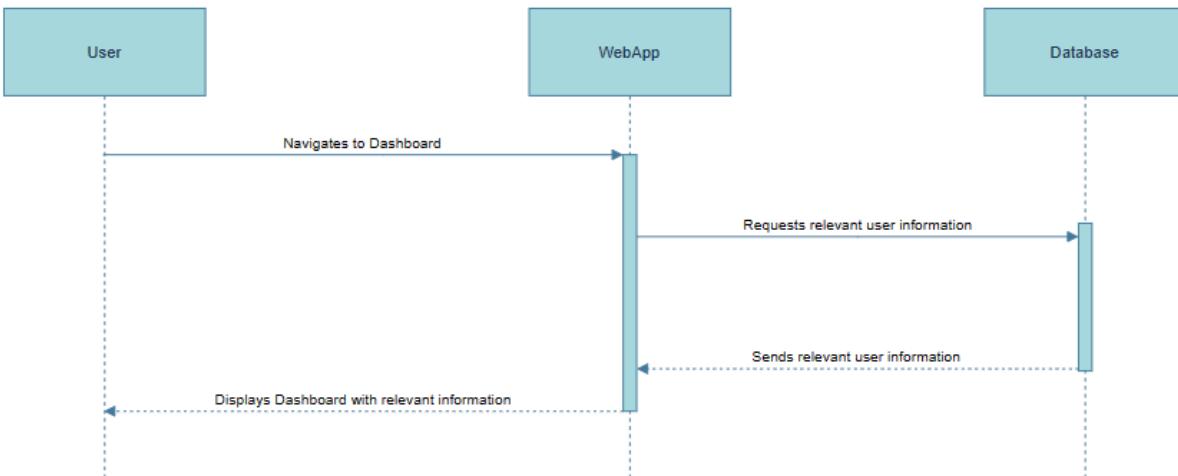
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	3. User selects his preferred way of communication.
Alternative Scenario:	None



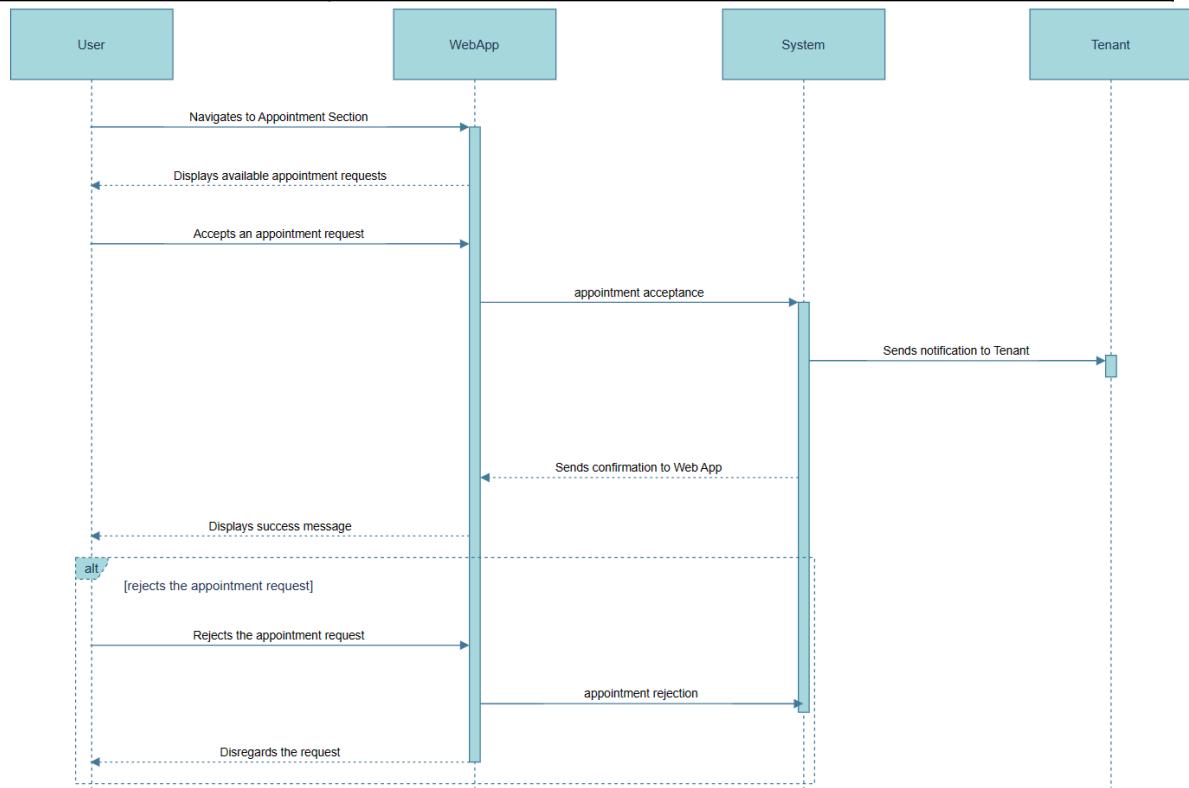
2.2.13 Use Case 13

Use Case Name:	Dashboard
Description:	Allows the user to access the dashboard, where they can view relevant information associated with their account.
Primary Actor:	Owner/Agent
Precondition:	User is logged into the web app.
Postcondition:	User successfully accesses the dashboard and views relevant account information.
Main Success Scenario:	<ol style="list-style-type: none"> 1. User navigates to the Dashboard. 2. System retrieves relevant information related to the user from the database. 3. Web app displays the Dashboard to the user.
Alternative Scenario:	None



2.2.14 Use Case 14

Use Case Name:	Appointment
Description:	Allows the user to make a decision for an appointment request sent by the tenant to view a specific property of interest.
Primary Actor:	Owner/Agent, Tenant
Precondition:	<ol style="list-style-type: none"> 1. User is logged into the web app. 2. User has at least 1 property in the system.
Postcondition:	User successfully accept/reject an appointment request.
Main Success Scenario:	<ol style="list-style-type: none"> 1. User navigates to the Appointment Section. 2. Systems show any available requests. 3. User accepts the request. 4. User is shown a message.
Alternative Scenario:	<ul style="list-style-type: none"> - If user rejects the request <ol style="list-style-type: none"> 1. The request is disregarded.

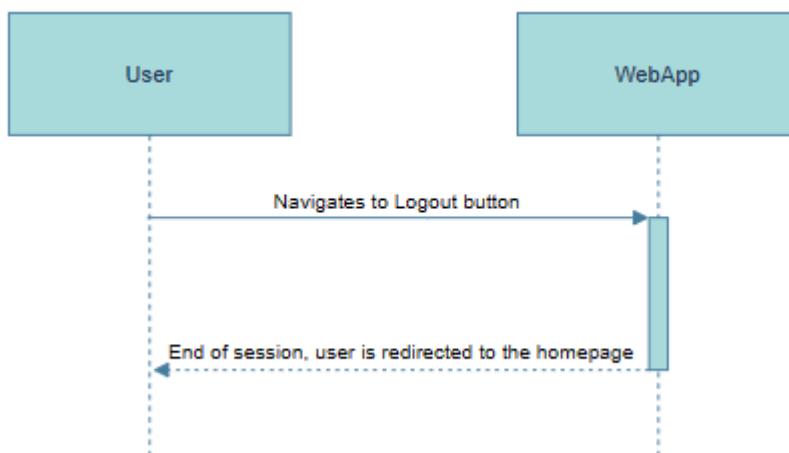


2.2.15 Use Case 15

Use Case Name:	Logout
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Description:	Allows users to logout from their own account.
Primary Actor:	Owner/Agent
Precondition:	User is logged into the web app
Postcondition:	User successfully logout from the web app.
Main Success Scenario:	<ol style="list-style-type: none"> 1. User navigates to the logout button. 2. The system logs out the user, ending the session. 3. The user is redirected back to the homepage.
Alternative Scenario:	None



2.3 Tenant

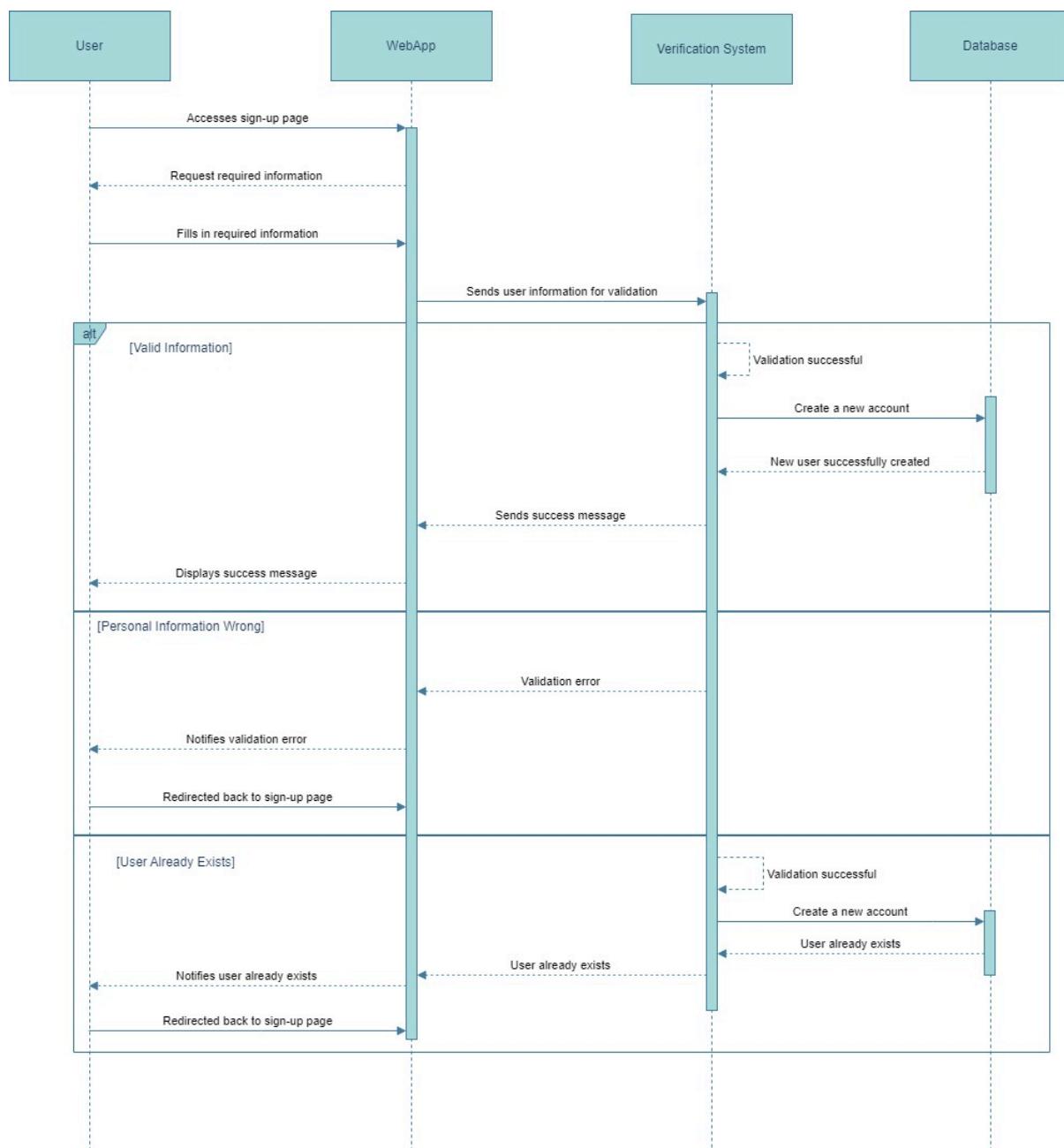
2.3.1 Use Case 1

Use Case Name:	Sign up
Description:	This use case involves a new user registering for an account within the HomeWoW web application. The actor provides fundamental personal information, including their name, email address, and password. The system verifies the entered details, and upon successful validation, the actor gains access to the features and functionalities offered by the platform.
Primary Actor:	Tenant
Precondition	<ol style="list-style-type: none"> 1. The user has access to the web application. 2. The user is not already registered with an account using the provided email address.

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Postcondition	<ol style="list-style-type: none">1. The user's provided information is validated and stored securely in the system's database.2. Successful registration grants the user access to their account and available platform features.
Main Success Scenario:	<ol style="list-style-type: none">1. The user accesses the registration or sign-up page within the web app.2. The user enters their name, email address, and desired password into the respective input fields.3. The system registers the user by storing their information securely in the database.4. A confirmation message is displayed: "Registration Successful."
Alternative Scenario:	If any entered information fails validation and if the user's data already exists, the system displays an error message prompting the tenant to correct the invalid details, and the user is required to re-enter the information until it meets the validation criteria.

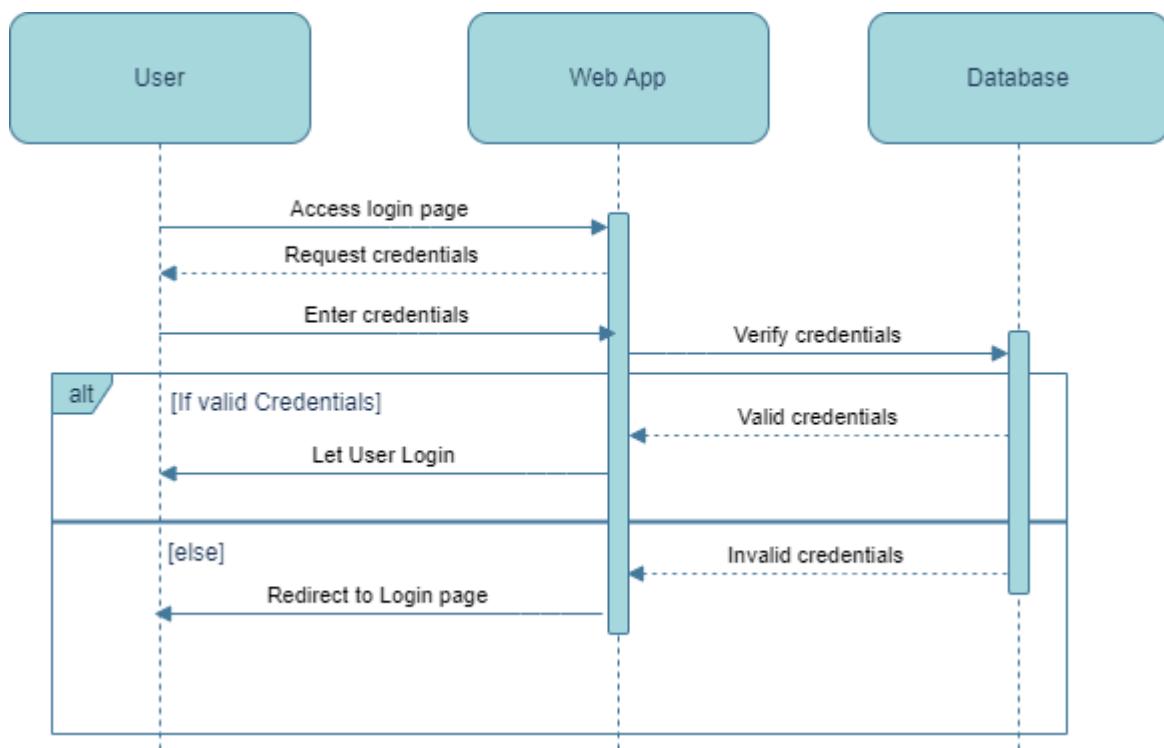
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2.3.2 Use Case 2

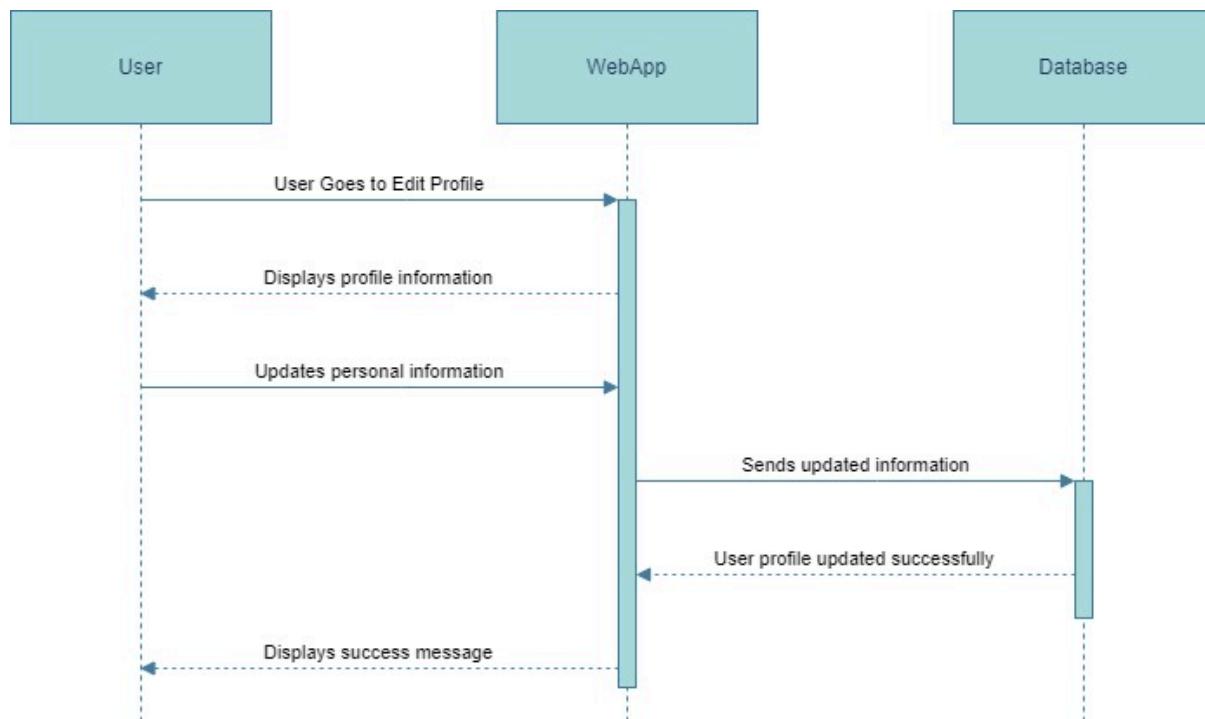
Use Case Name:	Login
Description:	This use case entails a registered actor accessing the web application by providing their previously registered credentials, which include an email address and password. The system validates the entered information to authenticate the user and grants access to the web app upon successful verification.
Primary Actor:	Tenant
Precondition	The user is already registered with an account.
Postcondition	Upon successful authentication, the user gains access to their account and the functionalities offered by the platform.
Main Success Scenario:	<ol style="list-style-type: none">1. The user navigates to the login page within the web app.2. The user enters their registered email address and associated password into the designated fields.3. The system verifies the entered credentials against the stored user data in the database4. The system displays “Login Successful!”.5. The user gains access to their account and its functionalities within the web app.
Alternative Scenario:	If the entered credentials do not match any stored data or fail validation: <ul style="list-style-type: none">• The system displays an error message indicating invalid credentials.• The user is redirected to the login page.

Software Requirements Specification for HomeWoW System



2.3.3 Use Case 3

Use Case Name:	Edit Profile
Description:	This use case enables users to manage and update their profile information within the web app. It provides functionalities to edit personal details, preferences, and other relevant information, ensuring that users can maintain up-to-date profiles.
Primary Actor:	Tenant
Precondition	The user is logged into the web app.
Postcondition	Changes made to the profile are saved and reflected in the user's updated profile information.
Main Success Scenario:	<ol style="list-style-type: none">1. The user navigates to the edit profile section2. The user selects the option to edit their profile.3. The user modifies personal details such as name, contact information, address, or any other relevant information.4. The user confirms the changes and the system validates the updated information.5. The user can view their updated profile with the edited information.
Alternative Scenario:	If any entered or modified information fails validation (e.g. incorrect format, missing required fields): <ul style="list-style-type: none">• The system displays an error message prompting the user to correct the invalid details.• The user is redirected to the edit profile page.

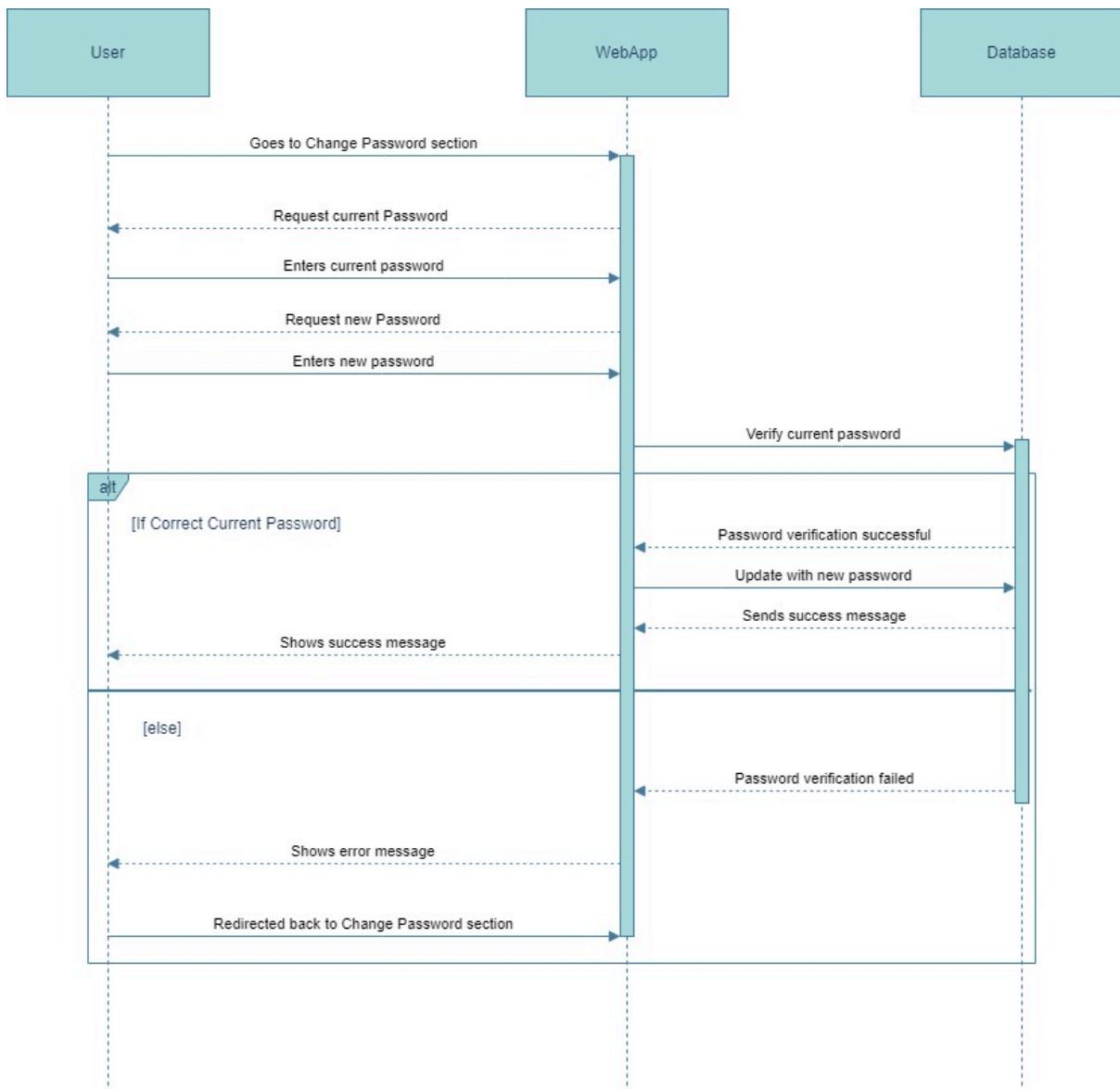


2.3.4 Use Case 4

Use Case Name:	Change Password
Description:	This use case allows user to update their existing passwords for security purposes within the web app.
Primary Actor:	Tenant
Precondition	<ul style="list-style-type: none"> 1. The user is logged into the web app. 2. The user has access to the password change functionality within their account settings.
Postcondition	The user's password is updated to the new one if validation is successful.
Main Success Scenario:	<ol style="list-style-type: none"> 1. The user navigates to the profile page and goes to the change password section. 2. The user provides their current password and specifies a new password in the designated input fields. 3. The system verifies the entered current password matches the user's stored password. 4. The system updates the user's password to the new one and a message is shown. 5. The tenant can access their account using the updated password.
Alternative Scenario:	If the entered current password is incorrect: <ol style="list-style-type: none"> 1. The system displays an error message indicating the issue with the entered passwords.

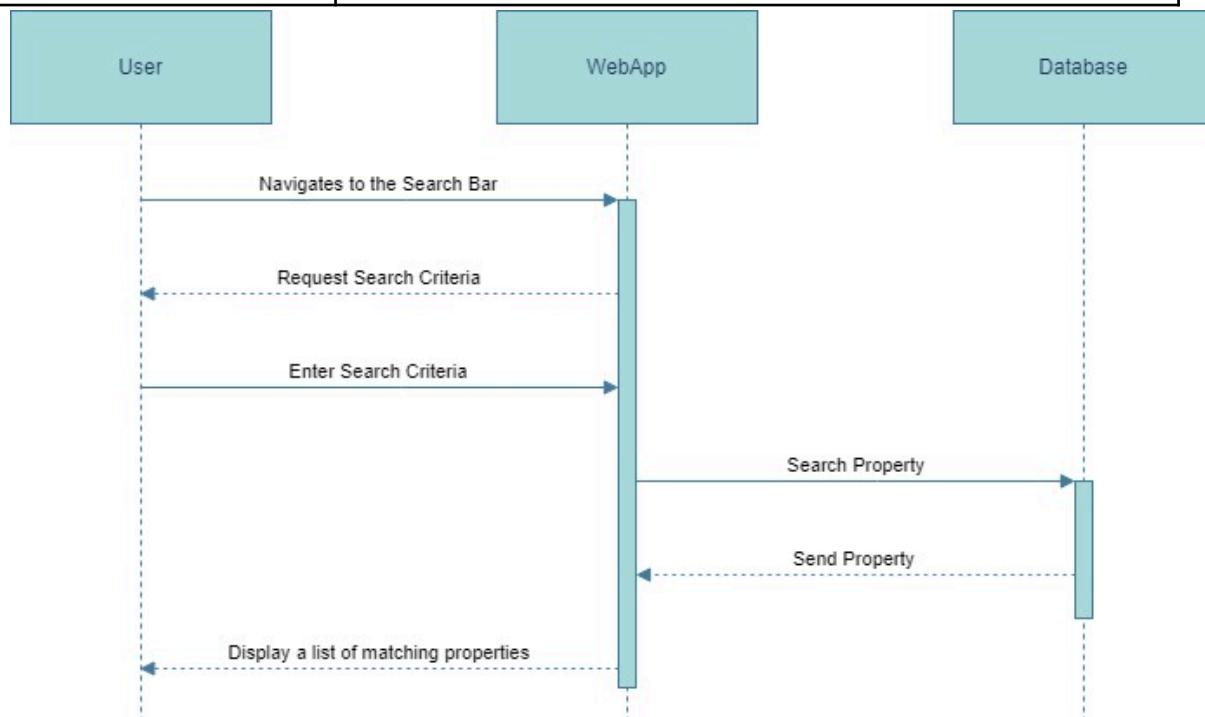
Software Requirements Specification for HomeWoW System

2. The user is redirected back to the change password section.



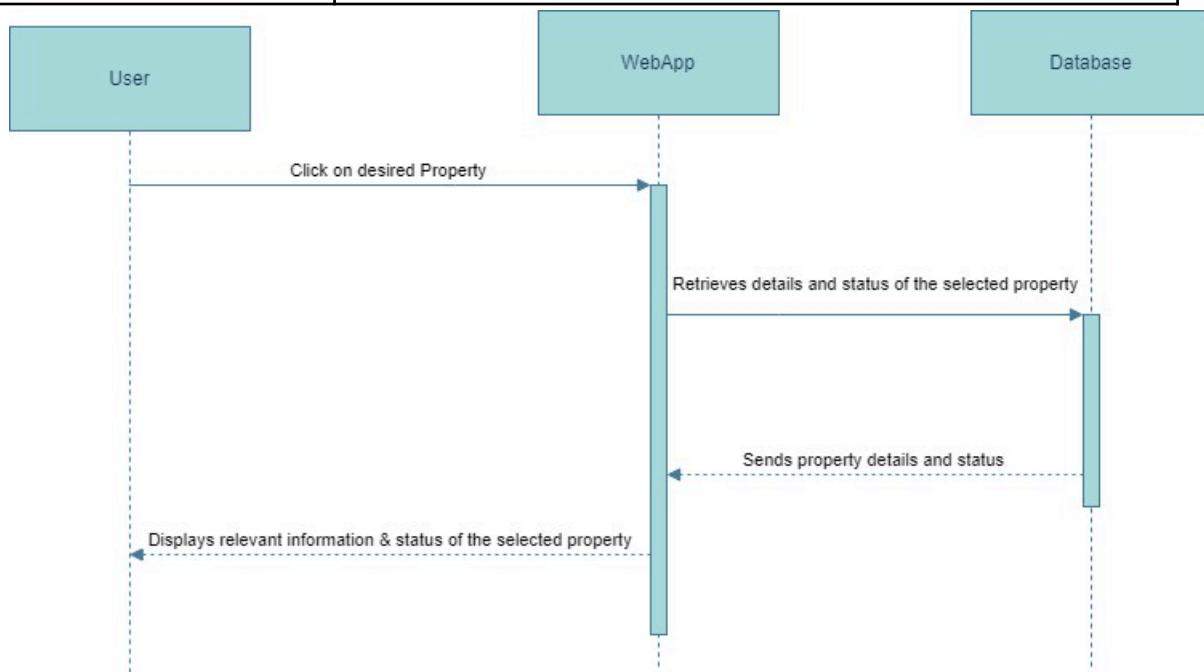
2.3.5 Use Case 5

Use Case Name:	Search Properties
Description:	This use case allows users to search for available properties within the web app based on specified criteria, including location, budget, amenities, or other relevant factors.
Primary Actor:	Tenant
Precondition	<ul style="list-style-type: none"> The tenant is logged into the web app. The tenant has moved to the property search bar within the web app.
Postcondition	The system displays a list of properties matching the specified search criteria.
Main Success Scenario:	<ol style="list-style-type: none"> The user navigates to the property search section within the web app. The user specifies search criteria such as location, preferred budget range, property type, amenities, etc. The system presents a list of properties that meet the entered search criteria.
Alternative Scenario:	None



2.3.6 Use Case 6

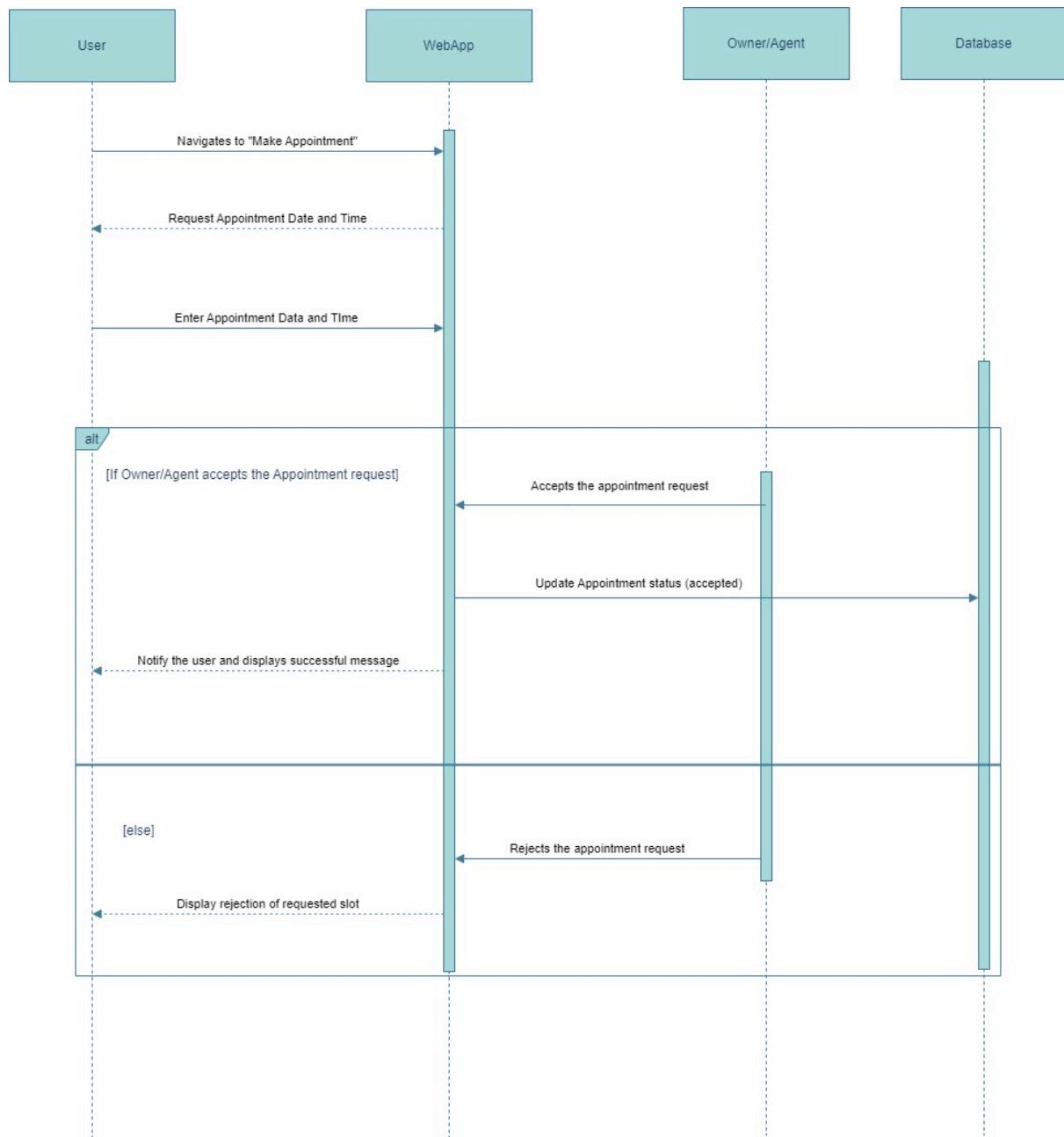
Use Case Name:	View Properties
Description:	This use case enables users to view detailed information about a specific property of interest, including descriptions, images, rent, location, and other relevant details.
Primary Actor:	Tenant
Precondition	1. The tenant is logged into the web app.
Postcondition	The system displays comprehensive details of the selected property for the tenant to review.
Main Success Scenario:	<ol style="list-style-type: none"> 1. The user selects a specific property from the search results 2. The system retrieves and displays detailed information about the selected property. 3. Information may include property descriptions, images or videos, rental amount, property type, size, amenities, location details, etc.
Alternative Scenario:	None



2.3.7 Use Case 7

Use Case Name:	Make Appointment
Description:	This use case enables the user to schedule appointments with the property owner or agent to view a specific property of interest within the web app.
Primary Actor:	tenant
Precondition	The user is logged into the web app. The user has reviewed the details of a property they wish to visit.
Postcondition	An appointment for viewing the property is scheduled between the user and the property owner/agent.
Main Success Scenario:	<ol style="list-style-type: none">1. After reviewing property details, the user expresses interest in viewing a particular property.2. The user selects “Make Appointment” to schedule a viewing appointment3. The user provides necessary details like preferred date, time, and any additional notes or preferences for the viewing.4. Upon successful confirmation from the property owner or agent, The system notifies the user about the scheduled appointment details (date, time, location)
Alternative Scenario:	If the requested appointment date/time is unavailable or the owner/agent rejects the appointment: <ol style="list-style-type: none">1. The system notifies the user about the unavailability or rejection of the requested slot.2. The tenant may be prompted to reschedule the appointment for an alternative date/time.

Software Requirements Specification for HomeWoW System

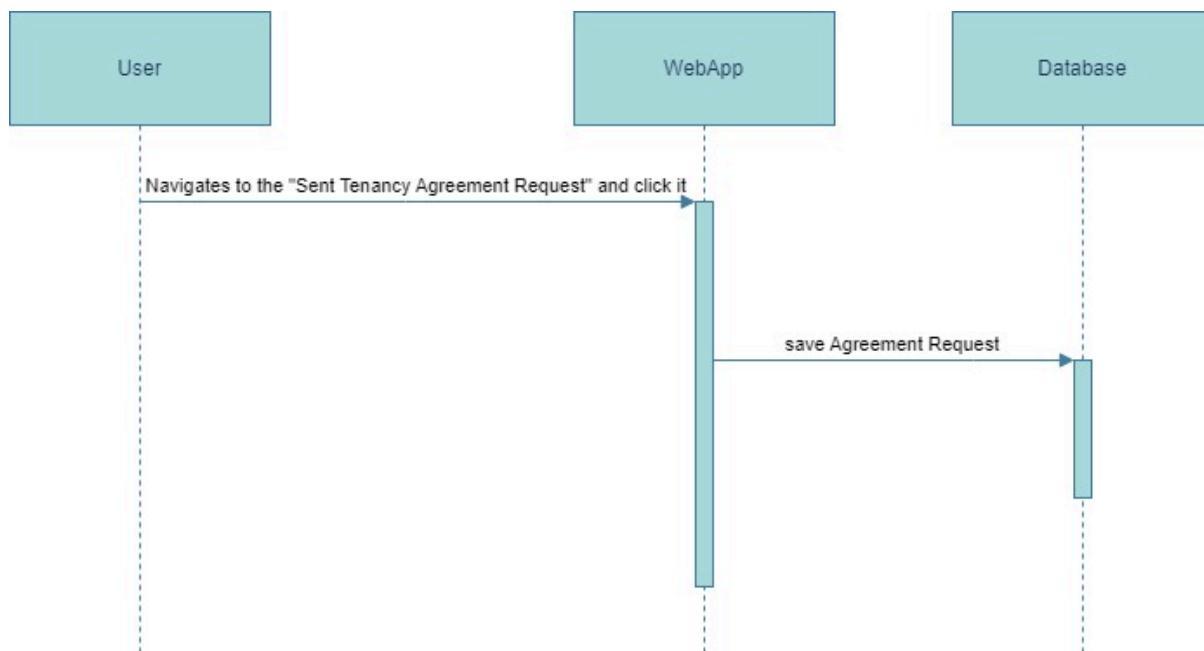


2.3.8 Use Case 8

Use Case Name:	Sent Agreement request
Description:	This use case allows the user to request access to and view the tenancy agreement not associated with a specific property.
Primary Actor:	Tenant
Precondition	<ol style="list-style-type: none"> 1. The user is logged into the web app. 2. The user has selected a specific property and wishes to review the tenancy agreement related to that property.

Software Requirements Specification for HomeWoW System

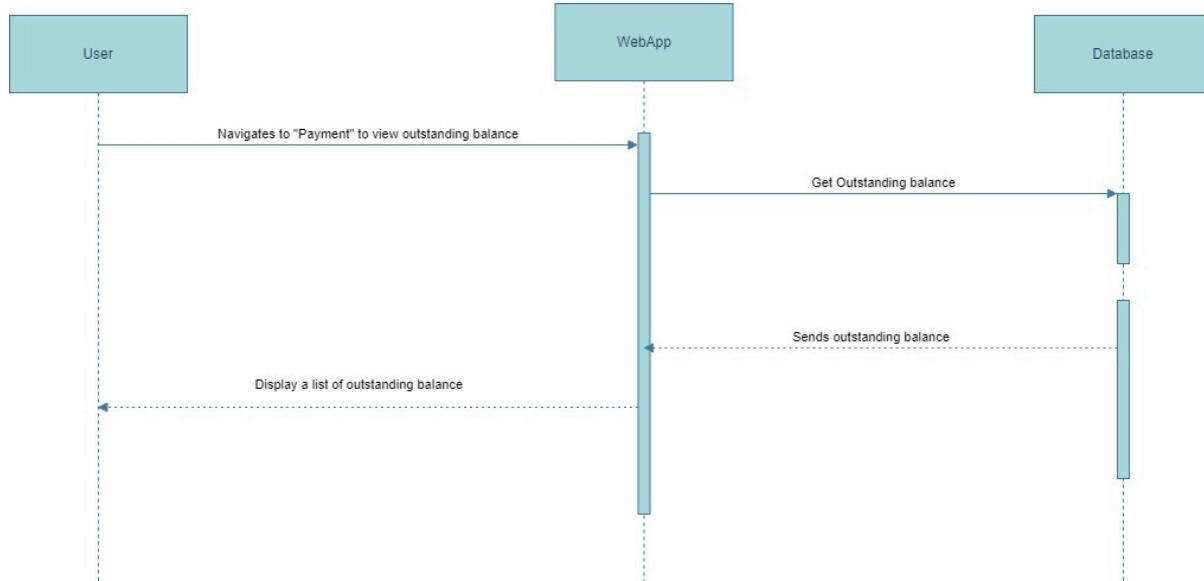
Postcondition	The system processes and forwards the user's request for access to the tenancy agreement to the property owner/agent.
Main Success Scenario:	<ol style="list-style-type: none"> 1. The user chooses a particular property they are interested in from the available property listings. 2. The user clicks the “Sent Tenancy agreement request” button to request access to the tenancy agreement. 3. The system confirms the successful submission of the request.
Alternative Scenario:	none



2.3.9 Use Case 9

Use Case Name:	View Outstanding balance
Description:	This use case enables users to access and review details regarding any outstanding balance with their tenancy within the web app
Primary Actor:	Tenant
Precondition	The user is logged into the web app.
Postcondition	The system displays the details of the outstanding balance related to the user's tenancy.
Main Success Scenario:	<ol style="list-style-type: none"> 1. The user navigates to the “Payment” section to view outstanding balances within their account.

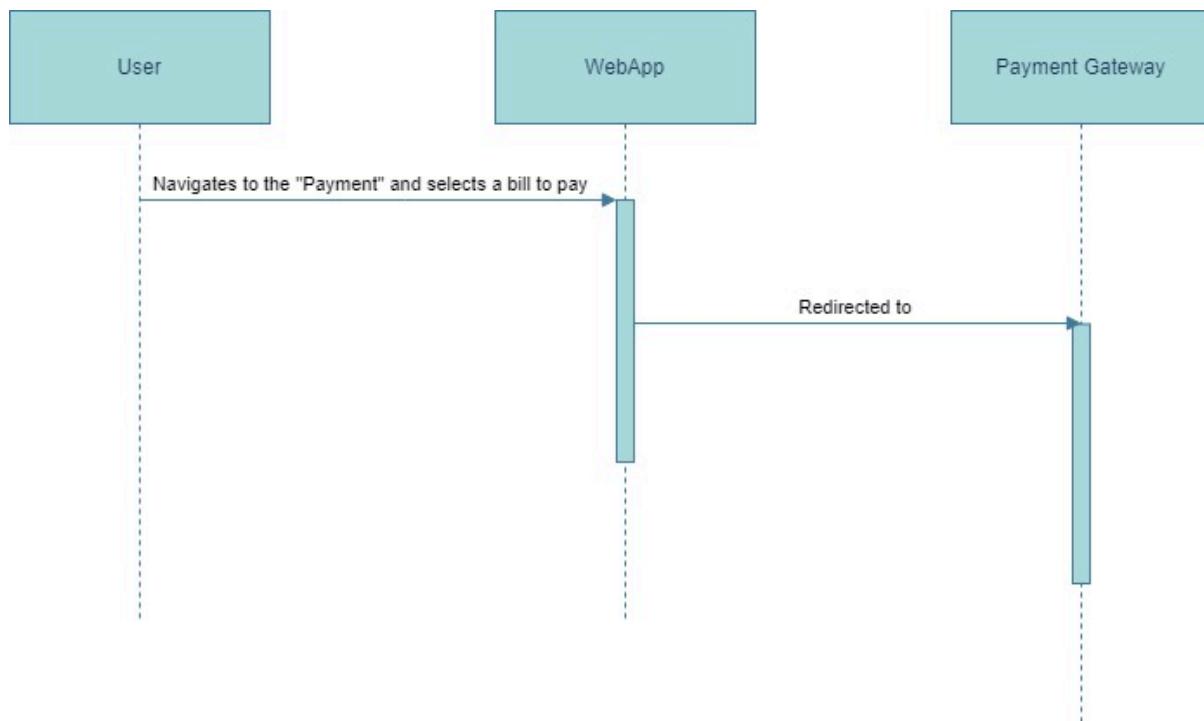
	<ol style="list-style-type: none"> 2. The system displays details regarding any outstanding balance related to the user's tenancy. 3. The user reviews the displayed information regarding outstanding balances associated with their tenancy.
Alternative Scenario:	none



2.3.10 Use Case 10

Use Case Name:	Pay bill
Description:	This use case allows users to securely make payments for bills using the integrated payment gateway.
Primary Actor:	Tenant
Precondition	The user is logged into the web app. The user has read the detailed information on outstanding bills.
Postcondition	The payment is successfully processed and recorded in the system's payment records.
Main Success Scenario:	<ol style="list-style-type: none"> 1. The tenant navigates to the section displaying the detailed information on the outstanding bills. 2. The tenant selects the specific bill that they want to pay. 3. The system redirects to the integrated payment gateway
Alternative Scenario:	none

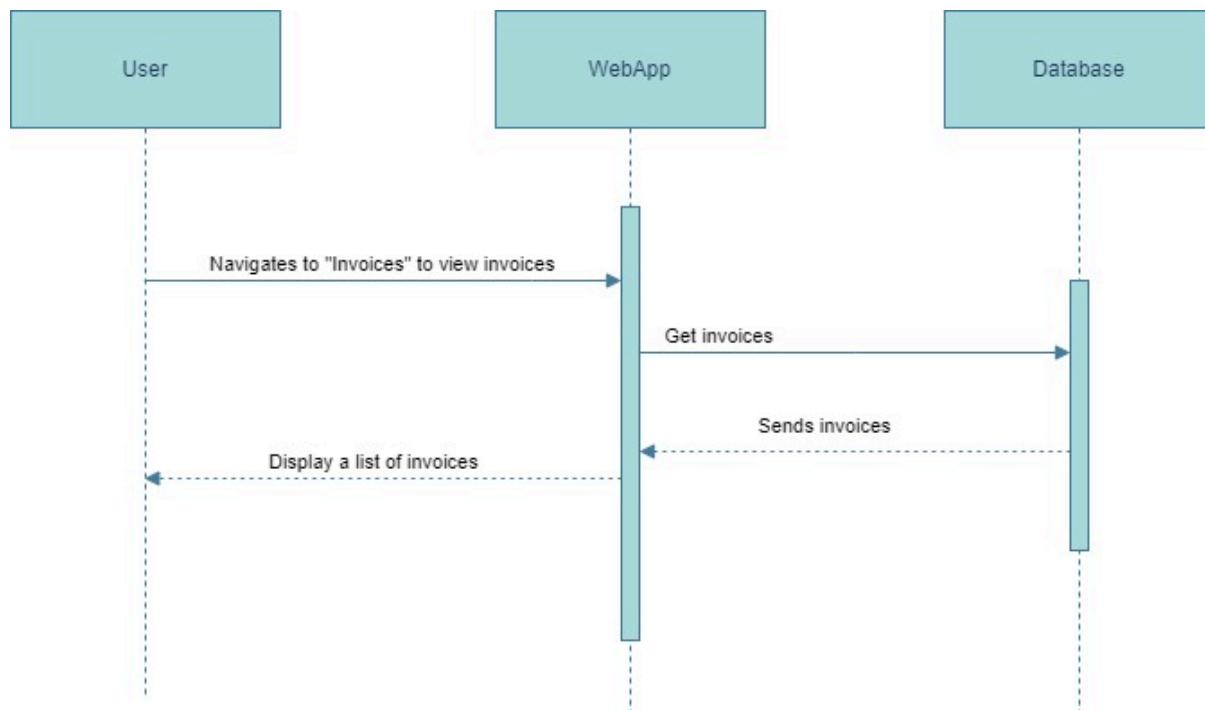
Software Requirements Specification for HomeWoW System



2.3.11 Use Case 11

Use Case Name:	View invoices
Description:	This use case allows user to access and review past invoices associated with their tenancy within the web app.
Primary Actor:	tenant
Precondition	The user is logged into the web app. The user already made a payment.
Postcondition	The system displays a list of past invoices associated with the user's account.
Main Success Scenario:	<ol style="list-style-type: none"> 1. The user navigates to the “Invoices” section 2. The system displays a list of past invoices associated with the tenant's account. 3. The user selects a specific invoice from the list to view detailed information about that transaction.
Alternative Scenario:	none

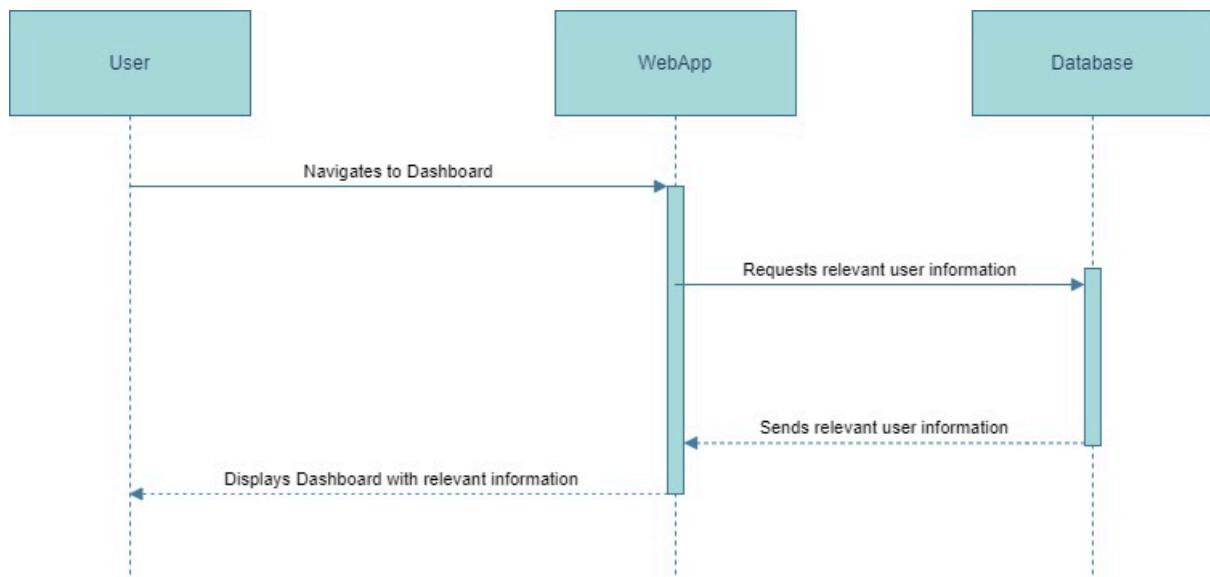
Software Requirements Specification for HomeWoW System



2.3.12 Use Case 12

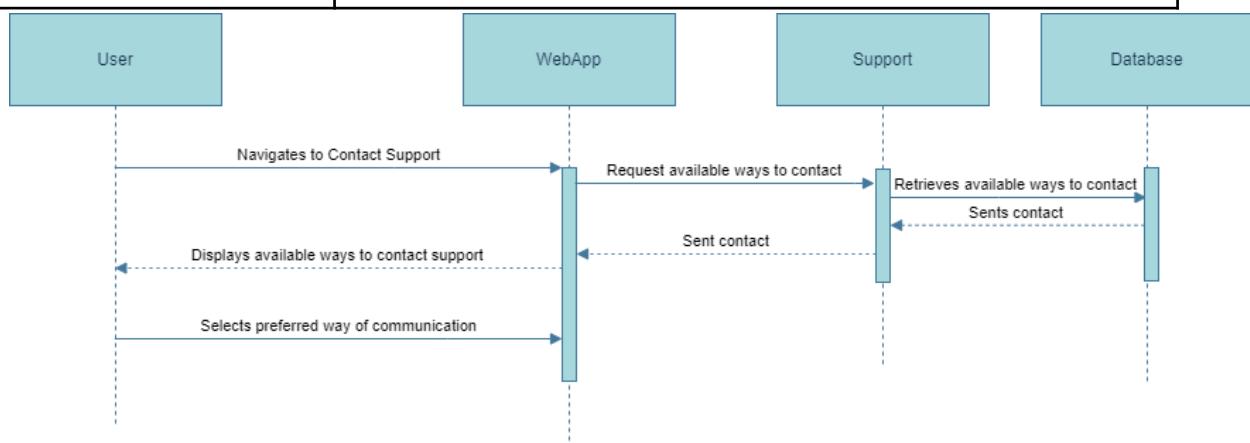
Use Case Name:	Dashboard
Description:	Allows the user to access the dashboard, where they can view relevant information associated with their account.
Primary Actor:	Tenant
Precondition:	The user is logged into the web app.
Postcondition:	Users successfully access the dashboard and view relevant account information.
Main Success Scenario:	<ol style="list-style-type: none">1. User navigates to the Dashboard.2. The system retrieves relevant information related to the user from the database.3. Web app displays the Dashboard to the user.
Alternative Scenario:	None

Software Requirements Specification for HomeWoW System



2.3.13 Use Case 13

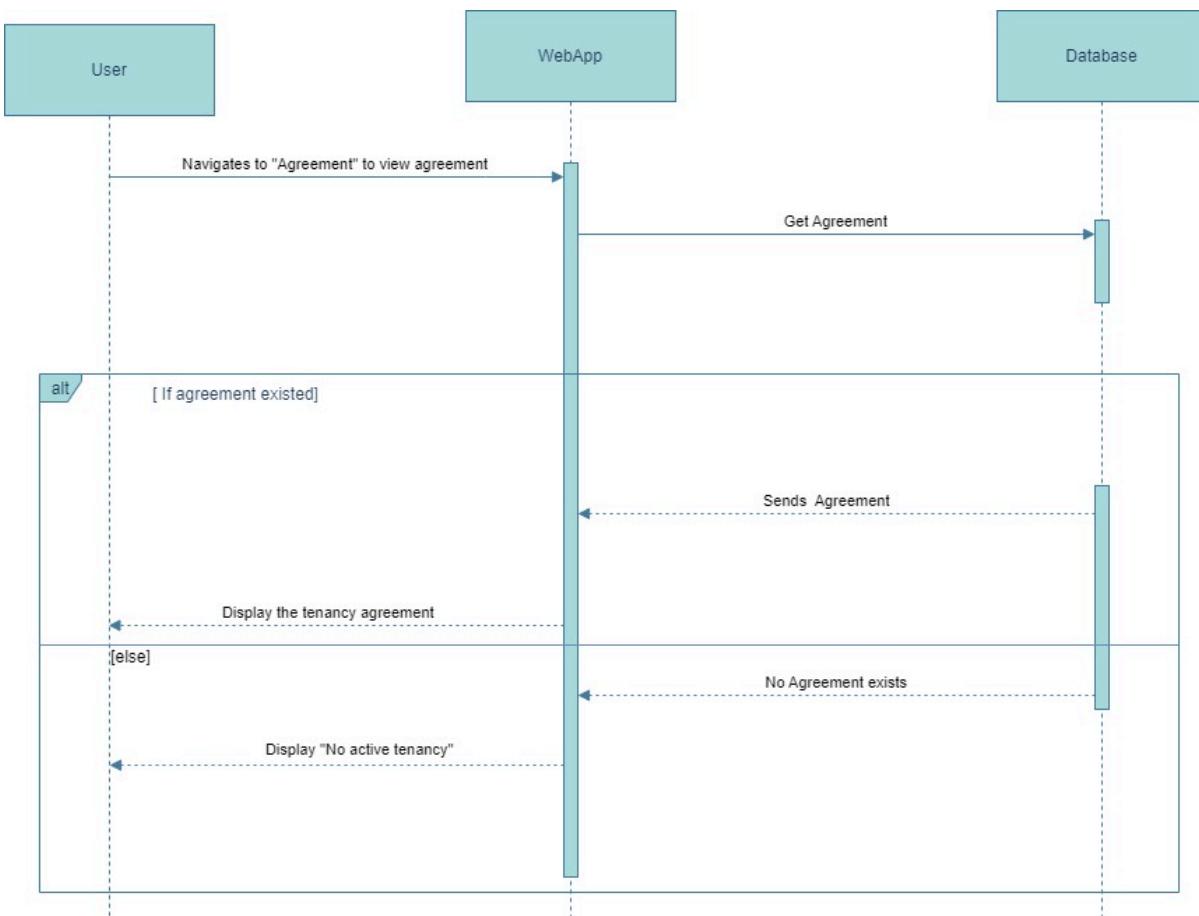
Use Case Name:	Contact Support
Description:	allows users to reach out to customer support team
Primary Actor:	Tenant
Precondition:	None
Postcondition:	User successfully interacts with the support team for assistance.
Main Success Scenario:	<ul style="list-style-type: none"> 4. User navigates to the contact support. 5. Web app displays available ways to contact support. 6. User selects his preferred way of communication.
Alternative Scenario:	None



2.3.14 Use Case 14

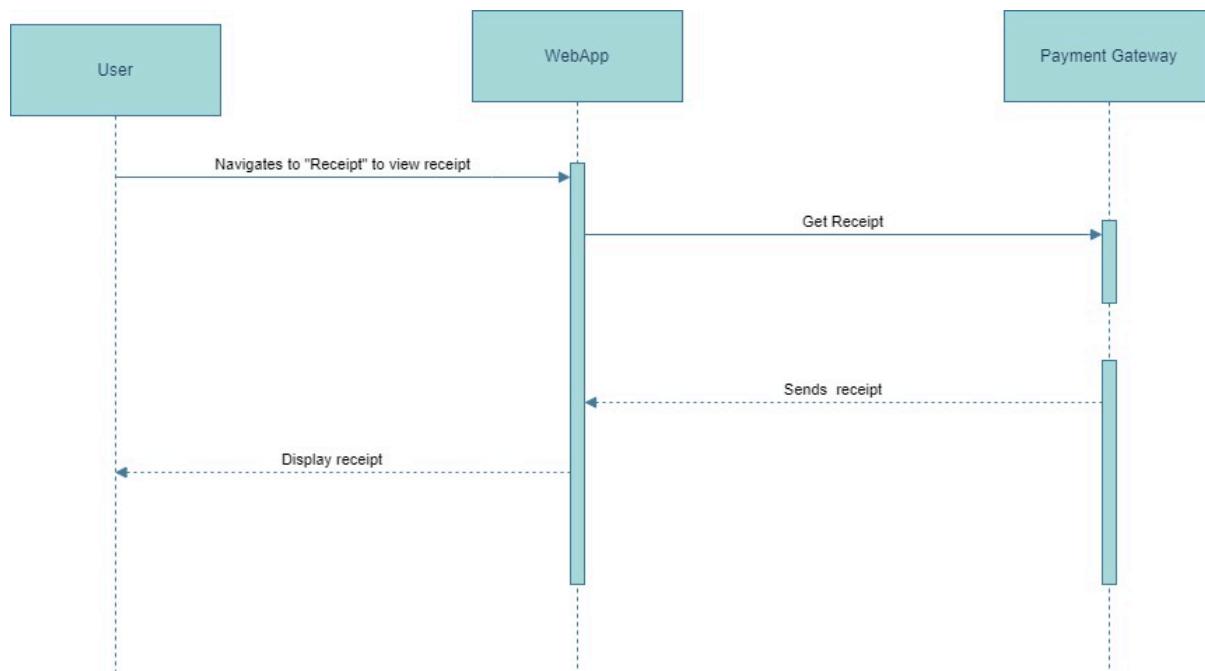
Use Case Name:	View Agreement
Description:	This use case enables users to access and review the approved tenancy agreement for a specific property after the owner/agent accepts the agreement between them.
Primary Actor:	Tenant
Precondition	<ul style="list-style-type: none">• The user is logged into the web app.• The user has previously sent a request and received approval from the owner/agent for the tenancy agreement.
Postcondition	The system displays the finalized and approved tenancy agreement for the specified property to the user.
Main Success Scenario:	<ol style="list-style-type: none">1. The user navigates to the “Agreement” section2. The system displays the approved tenancy agreement associated with the specific property.3. The user reads and reviews the entire agreement document to understand the terms and conditions agreed upon.
Alternative Scenario:	If the property owner/manager rejects the request or the user didn't request a tenancy agreement, the user won't be able to view the tenancy agreement. <ul style="list-style-type: none">• The system will show there is no active tenancy.

Software Requirements Specification for HomeWoW System



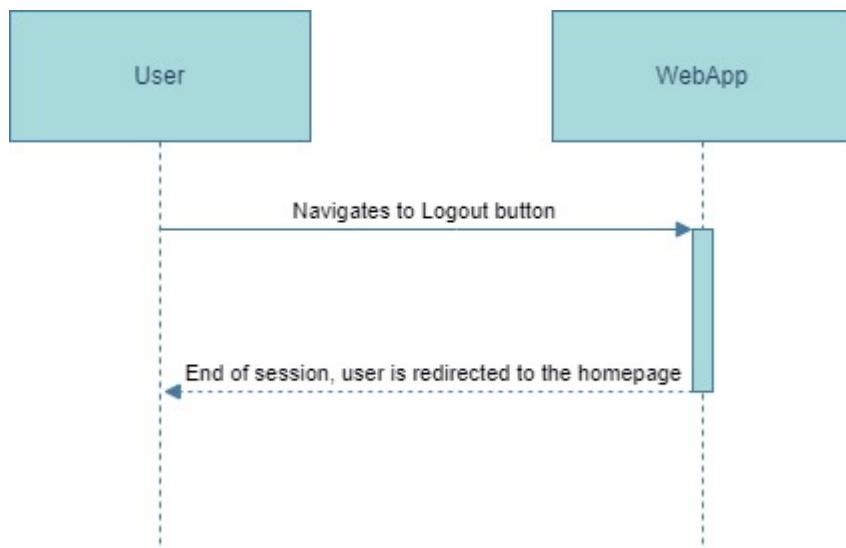
2.3.15 Use Case 15

Use Case Name:	View receipt
Description:	This use case allows user to review receipts of their past payments within the HomeWoW platform.
Primary Actor:	Tenant
Precondition	<ul style="list-style-type: none"> • The user is logged into the web app. • The user has previously made payments for bills.
Postcondition	The system displays receipts of past transactions, providing details of payments made by the user.
Main Success Scenario:	<p>The user navigates to the receipt section. The system displays a list of receipts of past transactions made by the user. The user selects a specific receipt from the list to view detailed information about that particular payment.</p>
Alternative Scenario:	none



2.3.16 Use Case 16

Use Case Name:	Logout
Description:	This use case enables users to log out from their account within the web app.
Primary Actor:	Tenant
Precondition	The user is logged into the web app.
Postcondition	The user's session is terminated, and they are redirected to the home page
Main Success Scenario:	<ol style="list-style-type: none"> 1. The user clicks on the logout button within their Profile settings. 2. The system confirms the logout action, prompting the user with a confirmation message asking if they want to log out. 3. Upon confirmation, the system terminates the user's session, logging them out from the current account and redirects the user to the home page
Alternative Scenario:	none

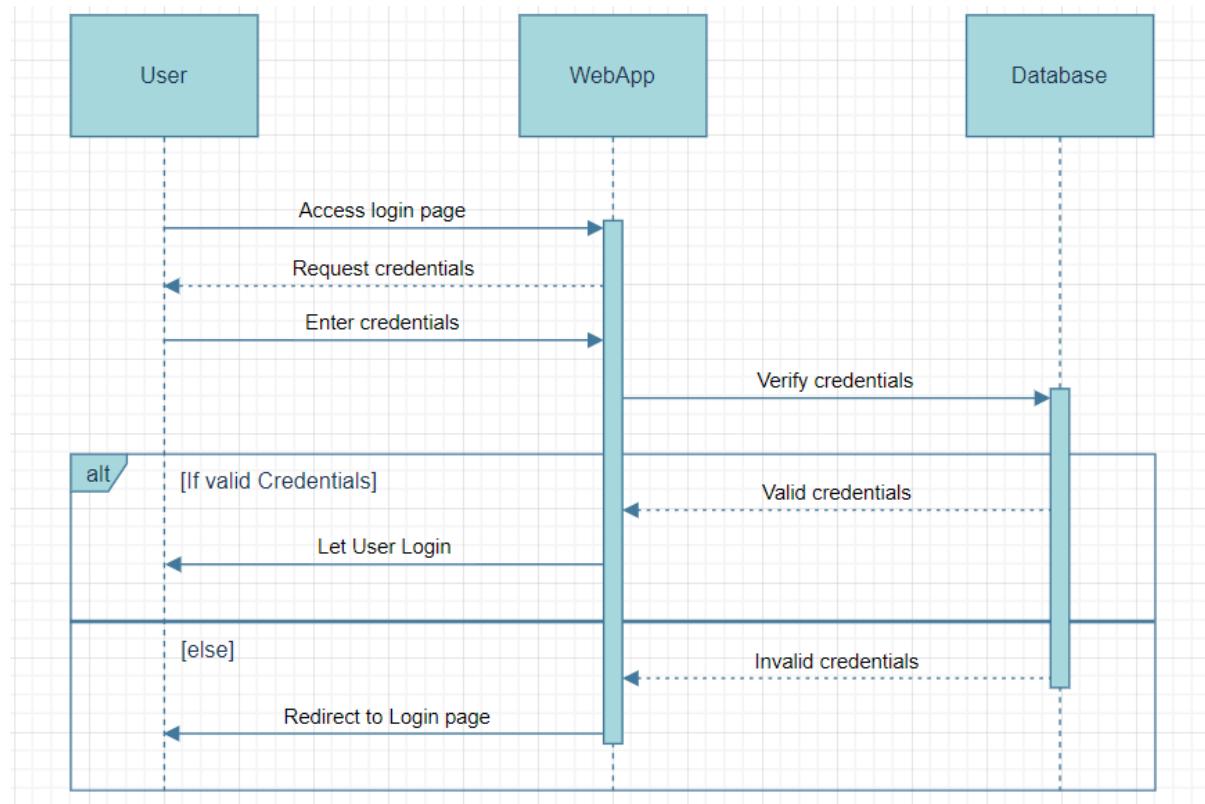


2.4 Admin

2.4.1 Use Case 1

Use Case Name:	Login
Description:	This use case involves the process of a user accessing the web app by entering their registered credentials
Primary Actor:	Admin
Precondition:	The user has registered credentials.
Postcondition:	The user is logged into the web app.
Main Success Scenario:	<ol style="list-style-type: none"> 1. The user enters their credentials in the login form. 2. The system verifies the entered credentials with the database. 3. If the credentials are valid, the system authenticates the user. 4. The web app takes the user to the HomePage.
Alternative Scenario:	<ul style="list-style-type: none"> - If credentials are invalid <ol style="list-style-type: none"> 1. The system notifies the user that the authentication failed. 2. The user is redirected to the Login Page.

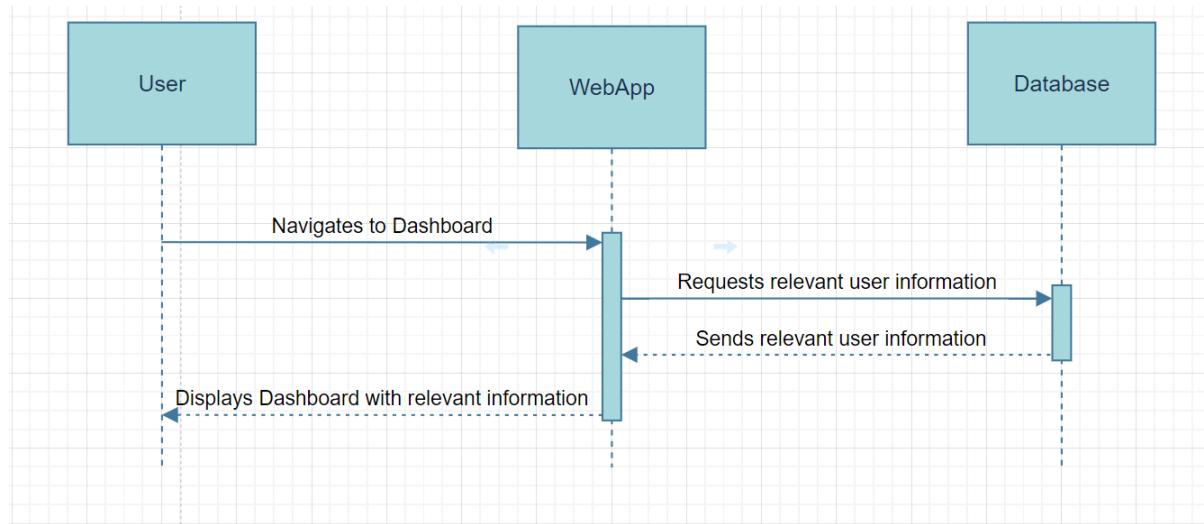
Software Requirements Specification for HomeWoW System



2.4.2 Use Case 2

Use Case Name:	Dashboard
Description:	Allows the user to access the dashboard, where they can view relevant information associated with their account.
Primary Actor:	Admin
Precondition:	User is logged into the web app.
Postcondition:	User successfully accesses the dashboard and views relevant account information.
Main Success Scenario:	<ol style="list-style-type: none"> 1. User navigates to the Dashboard. 2. System retrieves relevant information related to the user from the database. 3. Web app displays the Dashboard to the user.
Alternative Scenario:	None

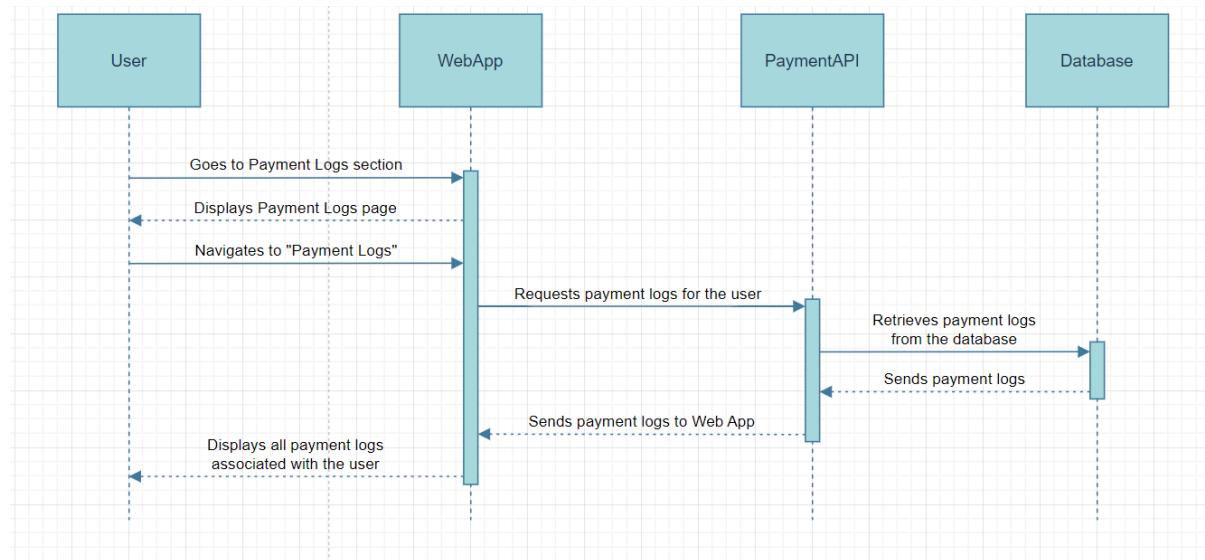
Software Requirements Specification for HomeWoW System



2.4.3 Use Case 3

Use Case Name:	Updates from Payment API
Description:	allows the user to view payment logs from the Payment Gateway system.
Primary Actor:	Admin
Precondition:	User is logged into the web app.
Postcondition:	User can see all payment logs associated with the user.
Main Success Scenario:	<ol style="list-style-type: none">1. User Navigates to the “Payment Logs” section.2. Web app displays all payment logs associated with the user from the database.
Alternative Scenario:	<ul style="list-style-type: none">- If no payment log<ul style="list-style-type: none">1. Web app displays a message.

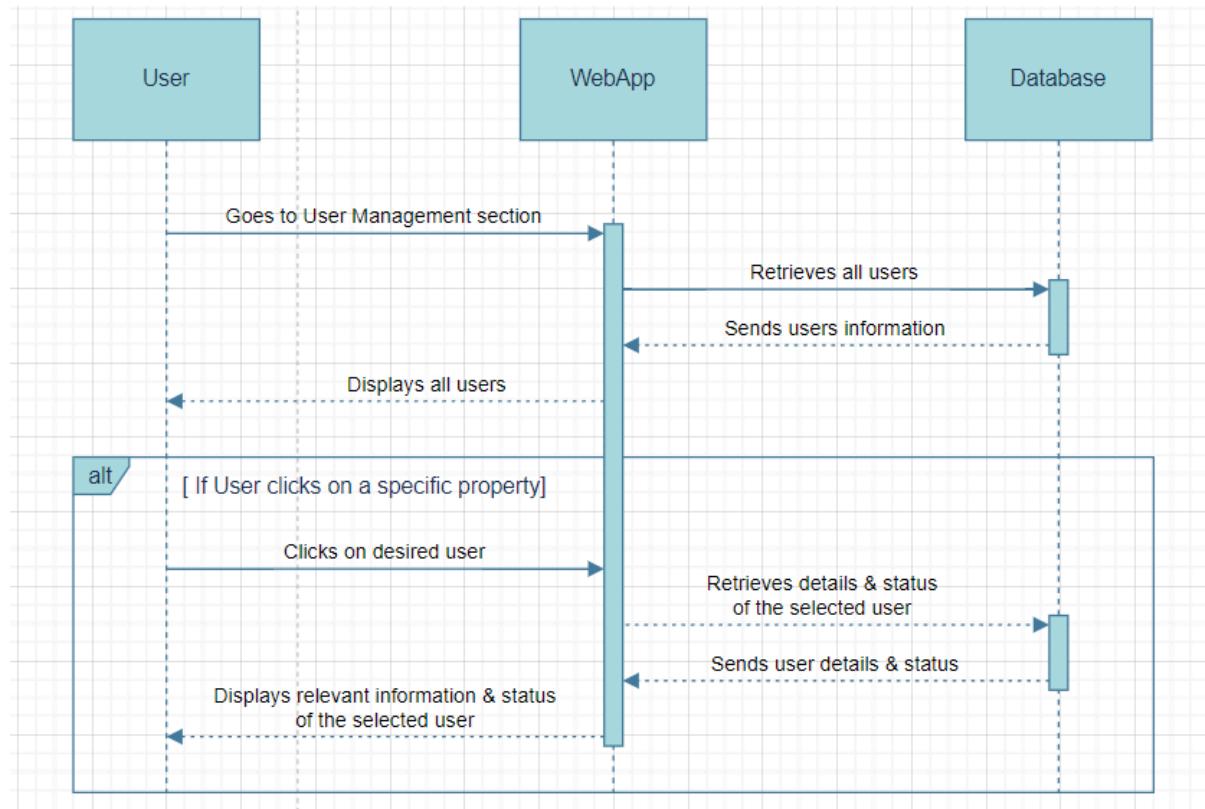
Software Requirements Specification for HomeWoW System



2.4.4 Use Case 4

Use Case Name:	View All Users (Tenant & Owner / Agent)
Description:	Allows the user to view the status and information of registered users. A list of all users will be displayed.
Primary Actor:	Admin
Precondition	User is logged into the web app.
Postcondition	User successfully accesses the user management and views all users information.
Main Success Scenario:	<ol style="list-style-type: none"> 1. User navigates to the "User Management" section. 2. Web app displays a list of all users registered in the web app
Alternative Scenario:	<ul style="list-style-type: none"> - If no registered user <ol style="list-style-type: none"> 1. Web app displays a message.

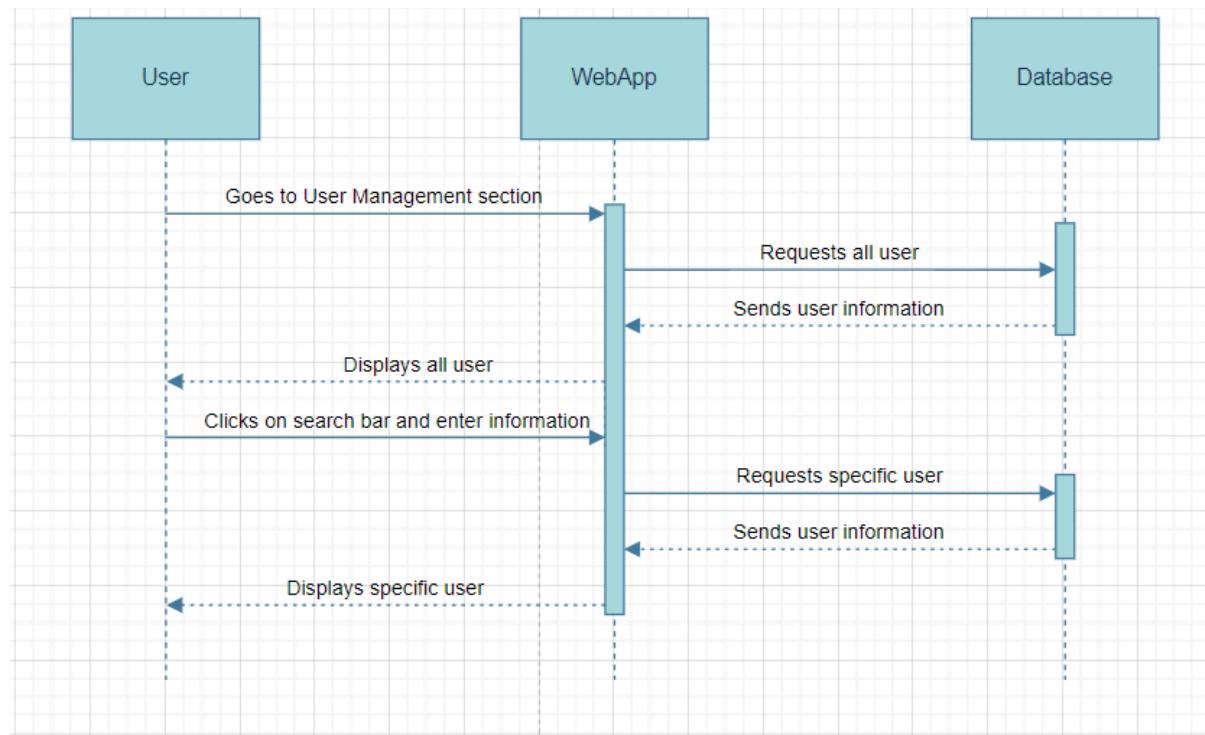
Software Requirements Specification for HomeWoW System



2.4.5 Use Case 5

Use Case Name:	Search Users (Tenant & Owner / Agent)
Description:	Allows the user to search for a specific user.
Primary Actor:	Admin
Precondition	User is logged into the web app.
Postcondition	User successfully search and able to see the specific user (tenant & owner / agent)
Main Success Scenario:	<ol style="list-style-type: none"> 1. User navigates to the “User Management” section. 2. Web app displays a list of all users registered in the web app
Alternative Scenario:	<ul style="list-style-type: none"> -If the user is not found from the database <ol style="list-style-type: none"> 1. Web app displays a message.

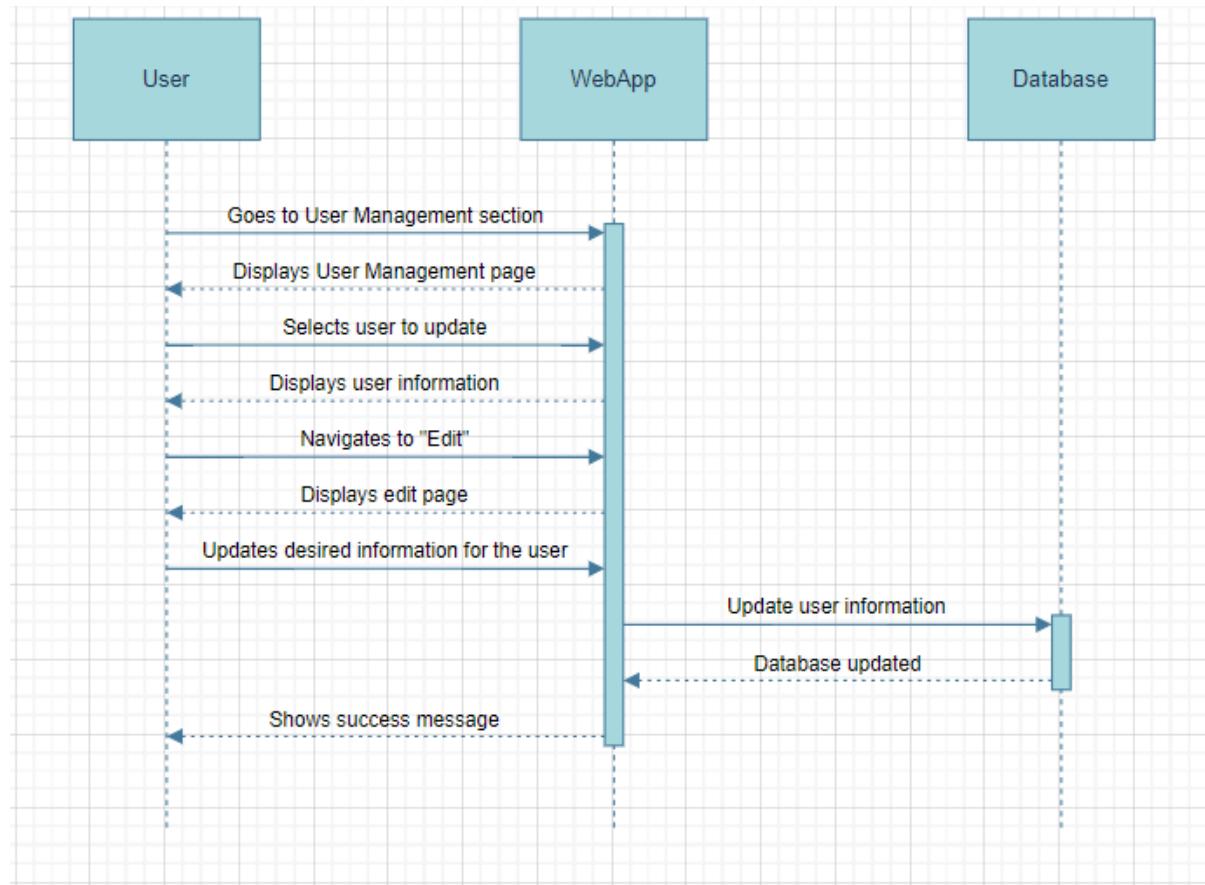
Software Requirements Specification for HomeWoW System



2.4.6 Use Case 6

Use Case Name:	Update User Info (Tenant & Owner / Agent)
Description:	Allows the user to update the information of registered users.
Primary Actor:	Admin
Precondition	User is logged into the web app.
Postcondition	User has successfully updated the information of a specific user and the updated information will be displayed.
Main Success Scenario:	<ol style="list-style-type: none"> 1. User navigates to the “User Management” section. 2. User chooses a specific user from the list. 3. User clicks on the edit button. 4. User updates the info and clicks confirm.
Alternative Scenario:	None

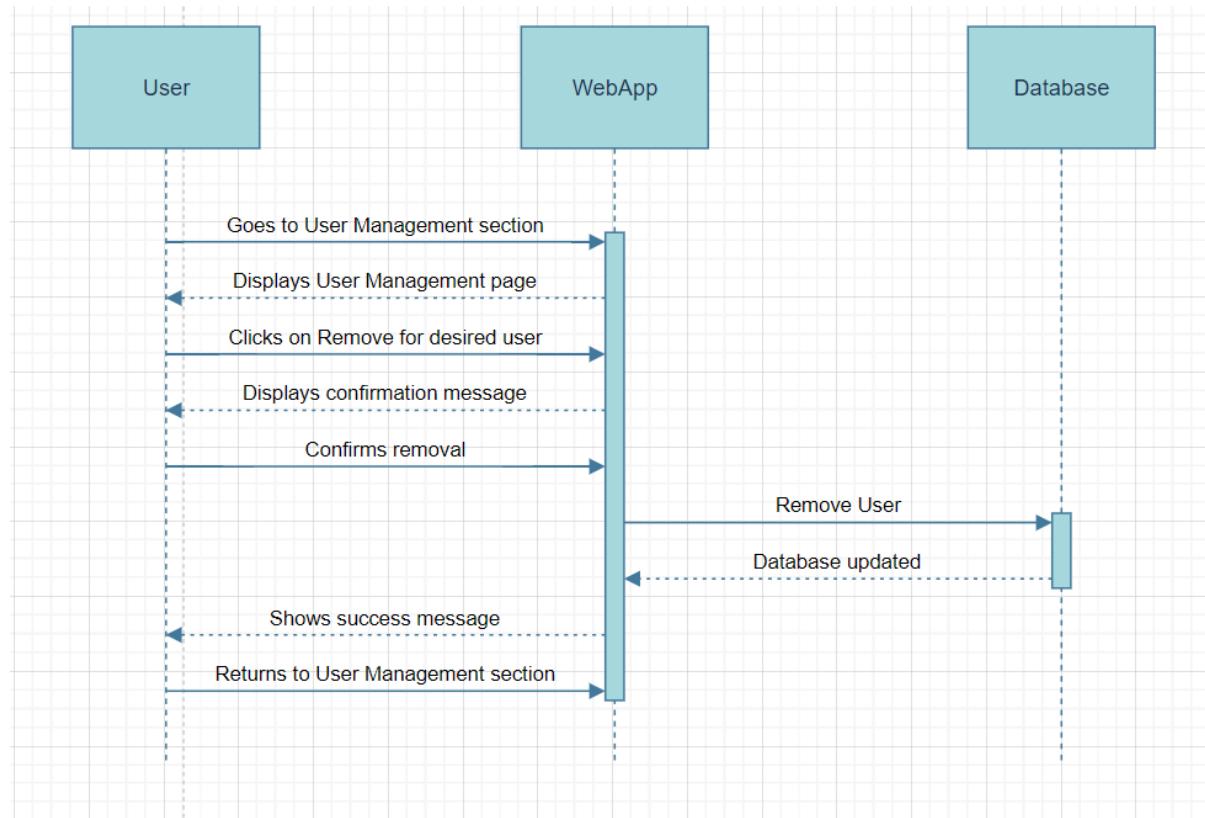
Software Requirements Specification for HomeWoW System



2.4.7 Use Case 7

Use Case Name:	Remove User
Description:	Allows user to remove a specific user that registered in the web app
Primary Actor:	Admin
Precondition	User is logged into the web app.
Postcondition	User has successfully removed a registered user from the user list.
Main Success Scenario:	<ol style="list-style-type: none"> 1. User navigates to the “User Management” section. 2. User clicks on the remove button.
Alternative Scenario:	None

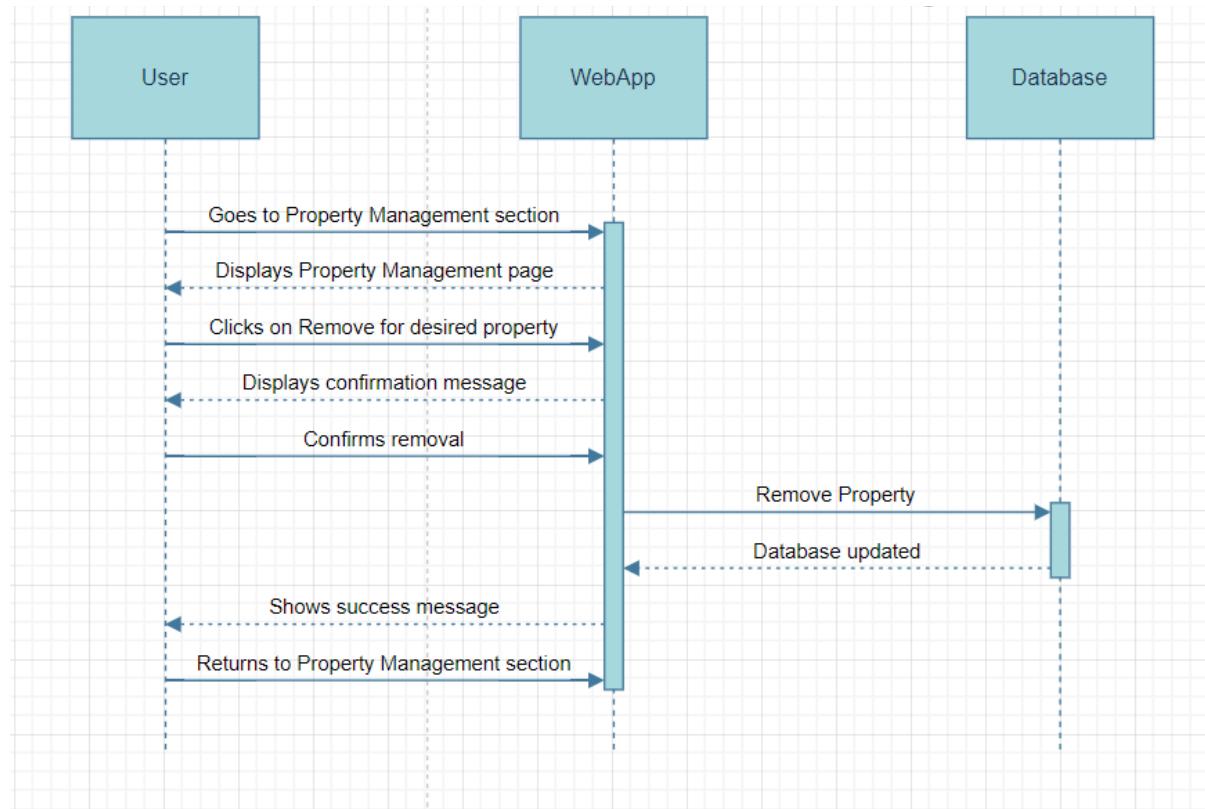
Software Requirements Specification for HomeWoW System



2.4.8 Use Case 8

Use Case Name:	Remove Property
Description:	User removes the desired property from the system.
Primary Actor:	Owner/Agent
Precondition:	1. User is logged into the web app. 2. User is in My Property Management.
Postcondition:	User successfully removes the desired property from the system.
Main Success Scenario:	1. User clicks on remove. 2. User confirms it. 3. Database is updated 4. Web app displays property removed successfully message. 5. User is back to the “Property Management” section.
Alternative Scenario:	None

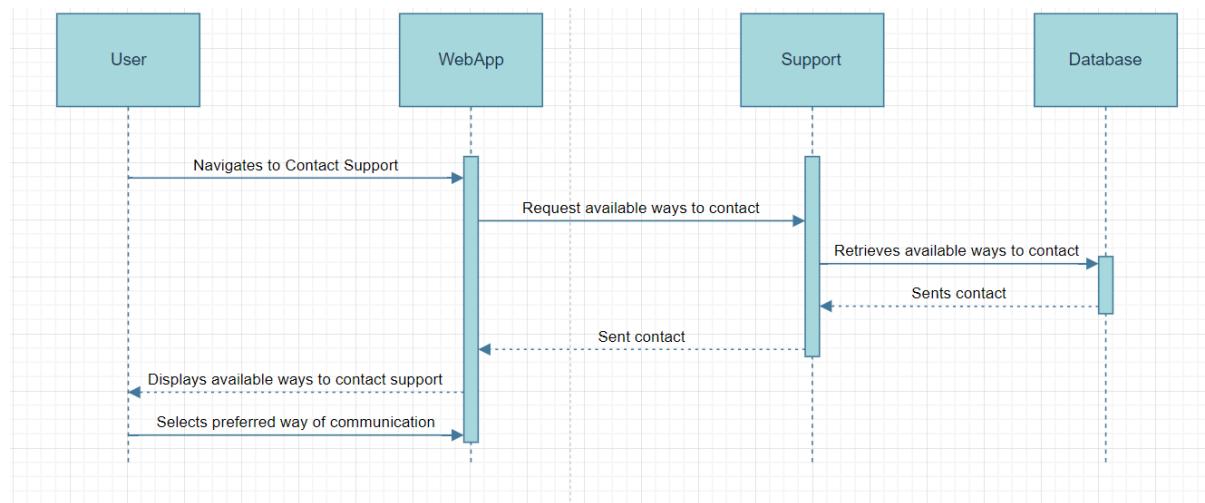
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2.4.9 Use Case 9

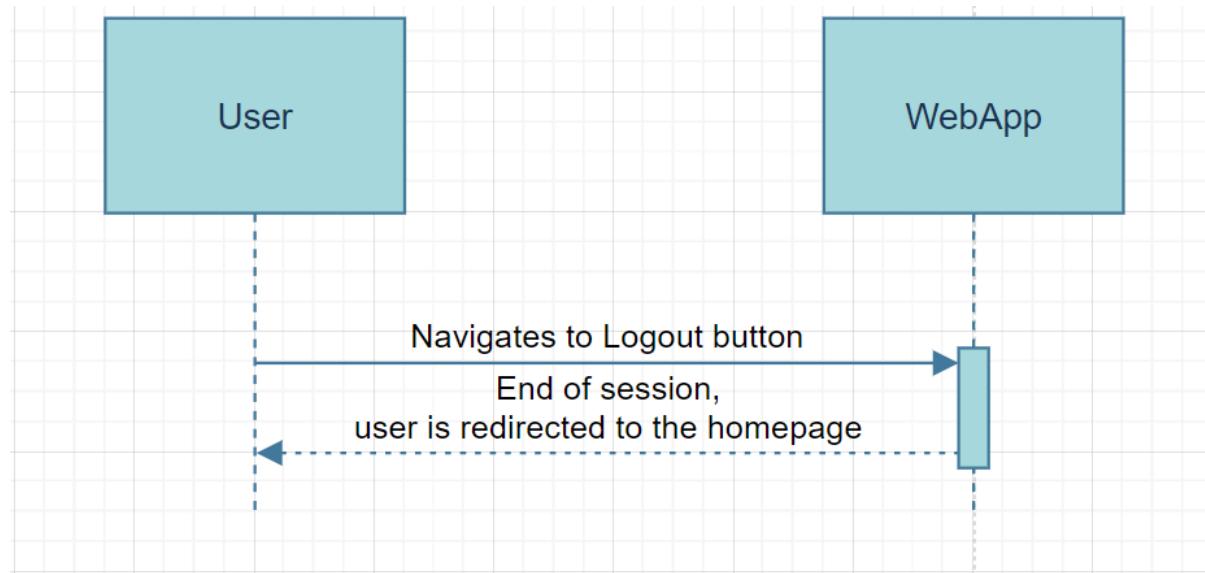
Use Case Name:	Contact Support
Description:	allows users to reach out to customer support team
Primary Actor:	Admin
Precondition:	None
Postcondition:	User successfully interact with the support team for assistance.
Main Success Scenario:	<ol style="list-style-type: none"> 1. User navigates to the contact support. 2. Web app displays available ways to contact support. 3. User selects his preferred way of communication.
Alternative Scenario:	None

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2.4.10 Use Case 10

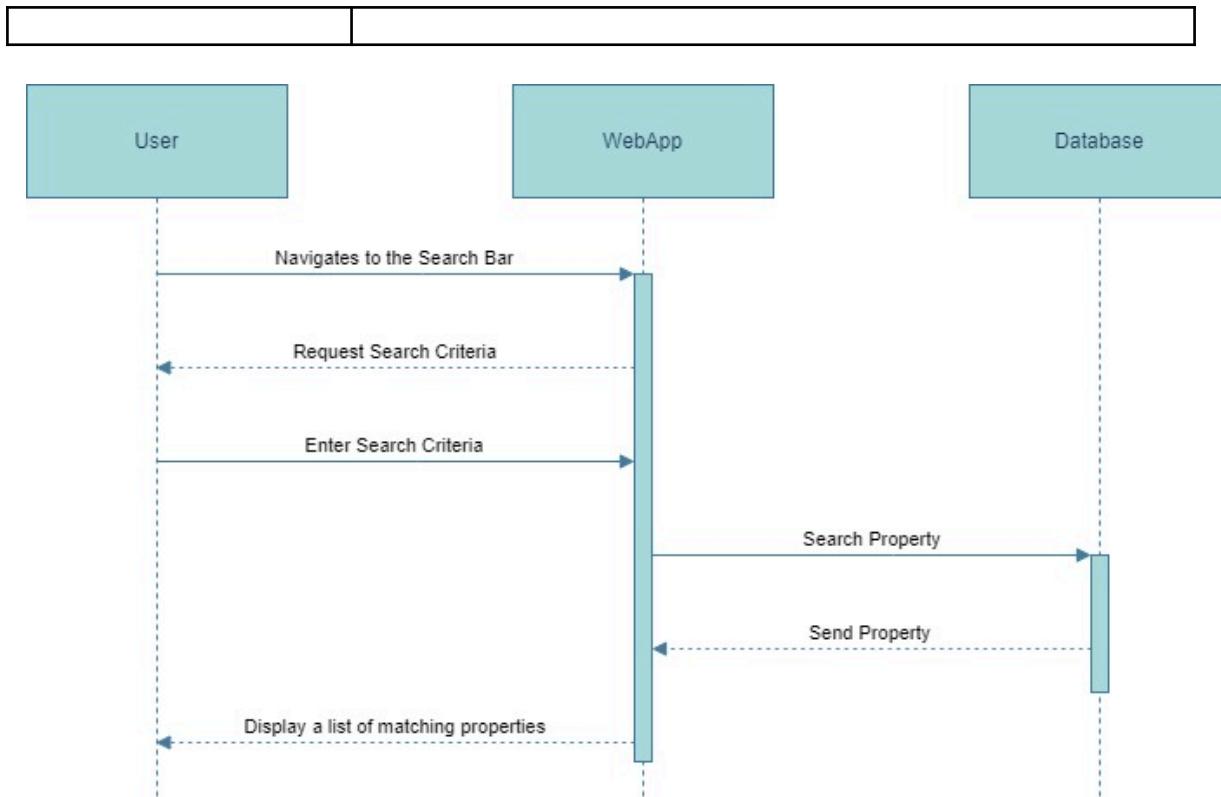
Use Case Name:	Logout
Description:	Allows users to log in from their account.
Primary Actor:	Admin
Precondition:	User is logged into the web app
Postcondition:	User successfully logs out from the web app.
Main Success Scenario:	<ol style="list-style-type: none"> 1. User navigates to the logout button. 2. The system logs out the user, ending the session. 3. The user is redirected back to the homepage.
Alternative Scenario:	None



2.5 Searcher

2.5.1 Use Case 1

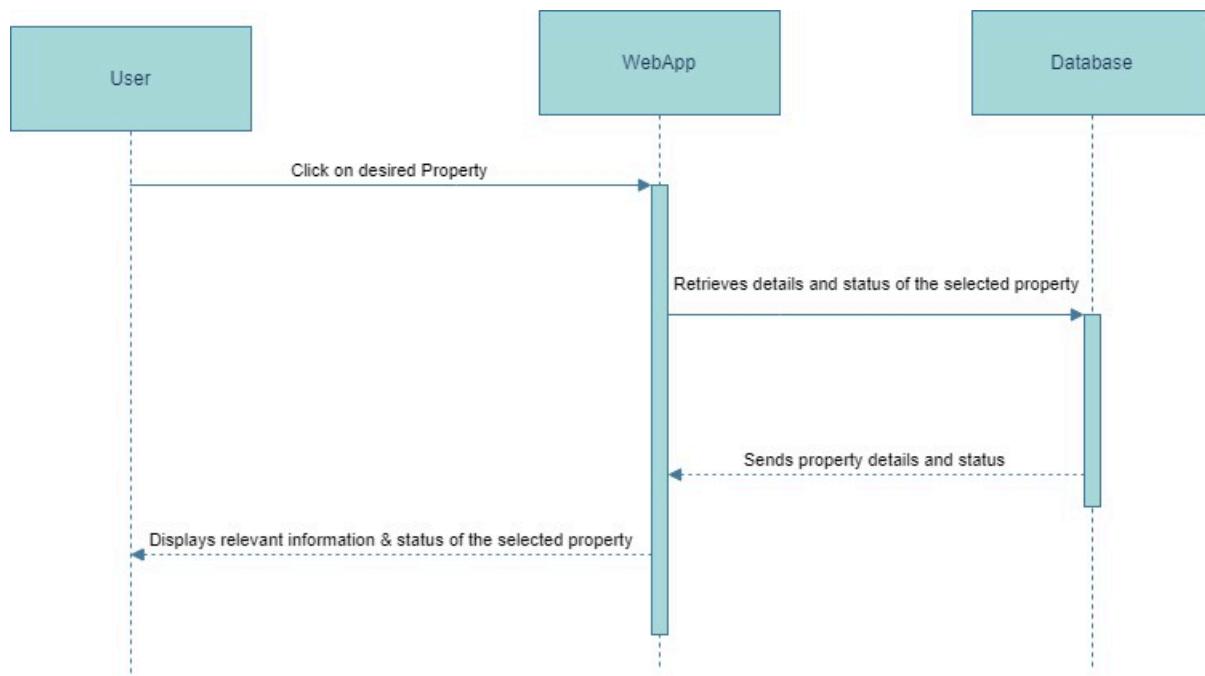
Use Case Name:	Search Properties
Description:	This use case allows users to search for available properties within the web app based on specified criteria, including location, budget, amenities, or other relevant factors.
Primary Actor:	Searcher
Precondition	The searcher has moved to the property search bar within the web app.
Postcondition	The system displays a list of properties matching the specified search criteria.
Main Success Scenario:	<ol style="list-style-type: none"> 1. The user navigates to the property search section within the web app. 2. The user specifies search criteria such as location, preferred budget range, property type, amenities, etc. 3. The system presents a list of properties that meet the entered search criteria.
Alternative Scenario:	<ol style="list-style-type: none"> 1. If the entered search criteria yield no matching properties: 2. The system displays a message indicating "No properties found matching the specified criteria." 3. The user may refine their search criteria or change filters to broaden the search.



2.5.2 Use Case 2

Use Case Name:	View Properties
Description:	Enables tenants or searchers to view detailed information about a specific property of interest, including descriptions, images, rent, location, and other relevant details.
Primary Actor:	Searcher
Precondition	<ol style="list-style-type: none"> 1. The user must be able to access the website. 2. The user has conducted a property search and selected a specific property to view its details.
Postcondition	The system displays comprehensive details of the selected property for the user to review.
Main Success Scenario:	<ol style="list-style-type: none"> 1. The user selects a specific property from the search results. 2. The system retrieves and displays detailed information about the selected property. 3. Information may include property descriptions, images or videos, rental amount, property type, size, amenities, location details, etc.
Alternative Scenario:	None

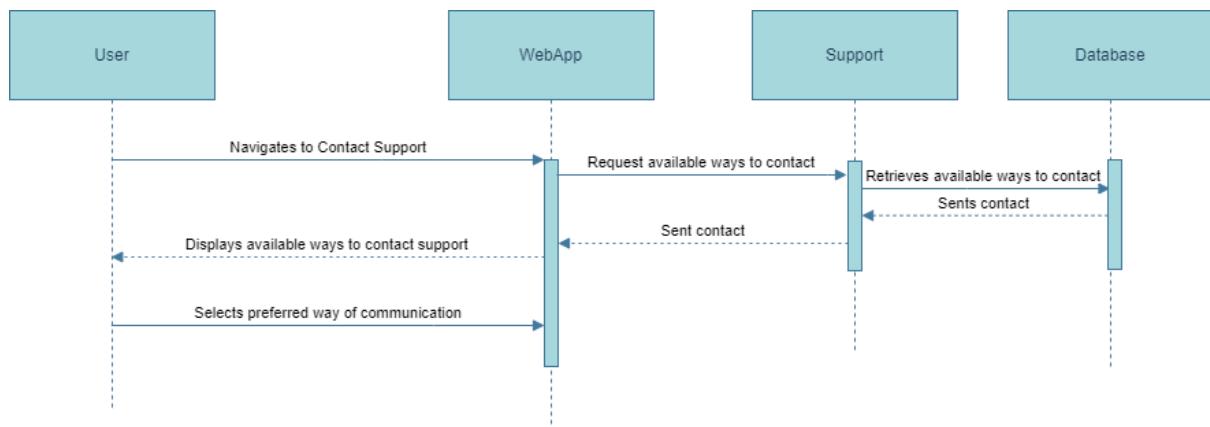
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2.5.3 Use Case 3

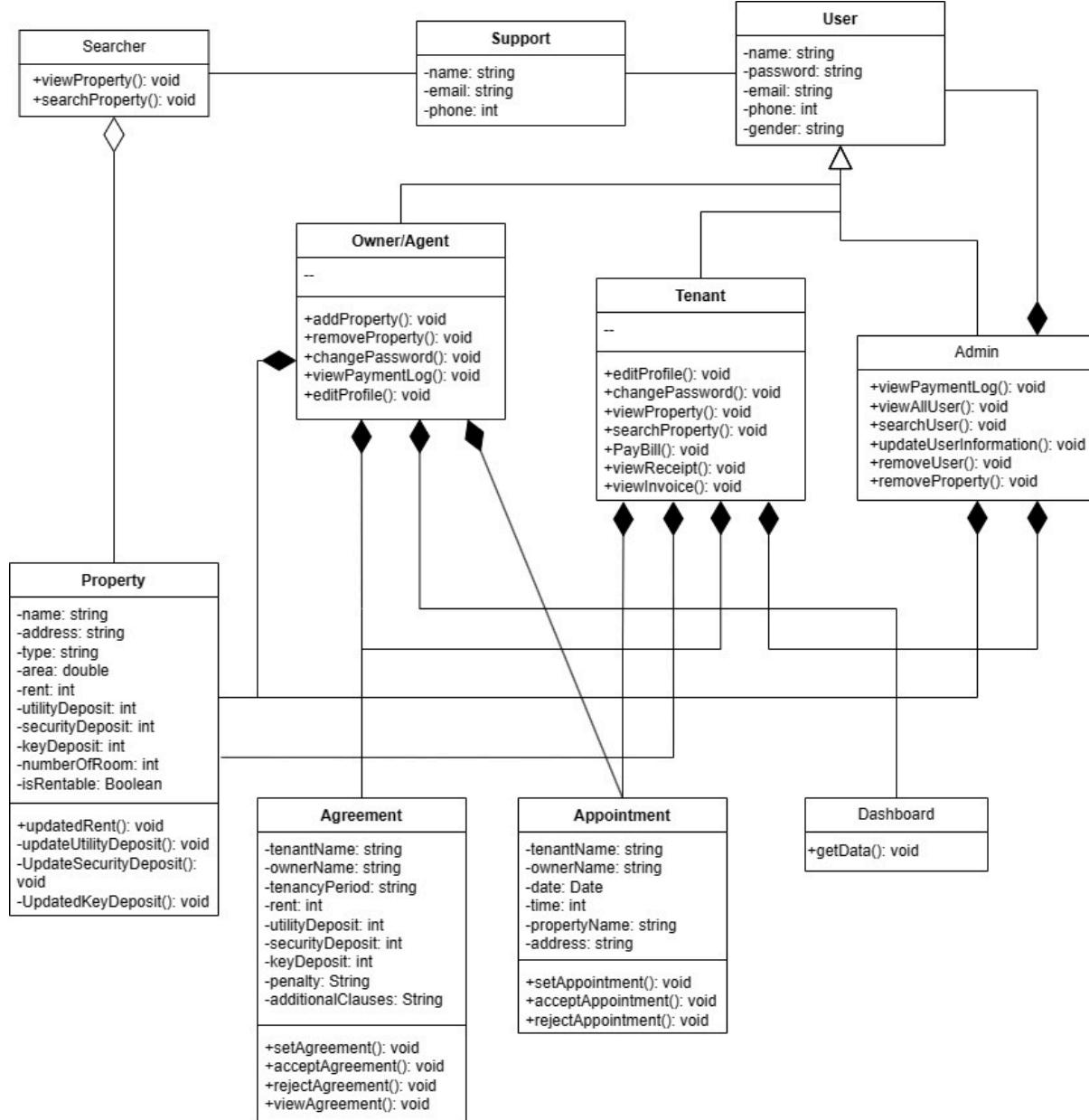
Use Case Name:	Contact Support
Description:	Allows users to reach out to the customer support team
Primary Actor:	Searcher
Precondition	None
Postcondition	The user successfully interacts with the support team for assistance.
Main Success Scenario:	<ol style="list-style-type: none"> 1. The user navigates to the contact support. 2. The web app displays available ways to contact support. 3. The user selects his preferred way of communication.
Alternative Scenario:	None

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3 Data Design

3.1 Design Class Diagram



Class	Description
User	The User class serves as the superclass, encapsulating common attributes and behaviors shared by all users within the system. This includes essential information such as username, email, and contact details. It forms the foundation for more specialized user types.

Software Requirements Specification for HomeWoW System

Tenant	The Tenant subclass extends the User class and represents individuals seeking to rent properties. Tenants have attributes associated with their tenancy, including Agreement class through composition. They utilize the system to search for and apply to rent properties listed by OwnerAgents.
OwnerAgent	Extending the User class, the OwnerAgent subclass represents property owners or agents. OwnerAgents not only manage their profiles but also utilize the Agreement class through composition. This composition implies that OwnerAgents have an association with Agreement instances, allowing them to manage agreements with Tenants.
Admin	Admins, extending the User class, have elevated privileges for system management. They remove user accounts, properties in the system, etc.
Property	The Property class encapsulates essential attributes and functionalities related to properties within the system. This class includes details such as property type, location, size, amenities, and rental terms. Owners or agents (OwnerAgents) utilize instances of this class to create and manage property listings, providing a comprehensive view for potential tenants. The class facilitates essential operations like property addition, editing, and status updates. Through composition, instances of the Property class are associated with OwnerAgent, Tenant & Admin class.
Agreement	The Agreement class is composed of both OwnerAgent and Tenant subclasses. It encapsulates the details of agreements between property owners (OwnerAgents) and tenants. This class includes attributes such as terms, conditions, and duration, facilitating an organized approach to managing agreements within the system.
Dashboard	The Dashboard class is designed to enhance user experience. Implemented by OwnerAgents, Tenants, and Admins. It offers valuable insights and functionalities tailored to each user's role within the system.
Support	The Support class establishes a vital association with the User class, facilitating efficient communication and issue resolution within the system. It serves as the backbone for user assistance, ensuring that queries, concerns, and concerns are effectively addressed. Users, including OwnerAgents, Tenants, and Admins, can leverage the Support class to seek help, report problems, and receive timely responses from the support team.
Searcher	The Searcher class is a specialized user class designed for individuals who focus on exploring available properties

	within the system. By utilizing an aggregation relationship with the Property class, it is also associated with the Support class, providing users with the capability to easily contact support for assistance, report issues, or seek clarification during their property exploration journey.
Appointment	The Appointment class represents scheduled appointments between tenants and property owners (OwnerAgents). It encapsulates the details of each appointment, including the tenant involved, the corresponding property, and the scheduled date. This class facilitates an organized approach to managing appointments within the system.

3.2 Data Dictionary

Our data dictionary serves as a pivotal document ensuring data integrity and promoting a clear understanding of your system's structure. In this report, we present a detailed overview to enhance your comprehension. Organized into sections such as tables, fields, and data types, the data dictionary provides a systematic approach to understanding the intricacies of your database. Each table is introduced with a succinct purpose statement.

User Collection

This table outlines essential attributes for user information. Each attribute is defined by its name, contents, data type, format, length, and whether it is a required field. The 'User' collection encapsulates details crucial for user identification and classification.

Understanding the nature of data in this collection is pivotal for user authentication, access control, and personalized user experiences.

Collection Name	Attribute Name	Contents	Type	Format	Length	Required
User	name	Name of the User	String	Xxxxx	50	Y
	password	Password of the User	String	Xxxxx	20	Y
	email	Email of the user	String	Xxxxx	20	Y
	phone	Phone number of the User	Integer	9999999	20	Y
	gender	Gender of the user	String	Xxxxx	6	Y
	userType	User Type	String	Xxxxx	6	Y

Property Collection

This table encompasses essential attributes for property details, including its name, address, type, dimensions, pricing, and deposit information. The 'Property' collection is vital for managing and classifying real estate assets. Understanding these attributes is crucial for property management, tenant interactions, and financial planning related to real estate.

Software Requirements Specification for HomeWoW System

Collection Name	Attribute Name	Contents	Type	Format	Length	Required
Property	name	name of the property	String	Xxxxxxx	50	Y
	address	address of the property	String	Xxxxxxx	50	Y
	type	type of the property	String	Xxxxxxx	20	Y
	area	area of the property	Double	9999.99	20	Y
	rent	price of the property	Integer	99999999	10	Y
	utilityDeposit	utility deposit of the property	Integer	99999999	10	Y
	securityDeposit	security deposit of the property	Integer	99999999	10	Y
	keyDeposit	key deposit of the property	Integer	99999999	10	Y
	numberOfRoom	number of room for property	Integer	99999999	10	Y
	numberOfBathroom	number of bathroom for property	Integer	99999999	8	Y
	isRentable	does the property have active tenant	Boolean	True/false	-	Y

Support Collection

This table encapsulates fundamental attributes for the 'Support' collection, detailing the contact team's name, email, and phone number. It serves as a central point of communication for addressing user inquiries or concerns. Understanding these attributes is critical for maintaining effective communication channels, providing support, and ensuring prompt resolution of user issues.

Collection Name	Attribute Name	Contents	Type	Format	Length	Required
Support	Name	The name of the contact team	String	Xxxxxxxxxx xx	30	Y
	Email	The email of the contact team	String	Xxxxxxxxxx xx	20	Y
	Phone	The phone number of contact team	Integer	99999999	11	Y

Agreement Collection

This table outlines crucial attributes for rental agreements, including tenant and owner details, tenancy period, financial terms, and additional clauses. The 'Agreement' collection is essential for managing and documenting rental agreements effectively. Understanding these attributes is pivotal for legal compliance, financial tracking, and dispute resolution in the context of rental agreements.

Software Requirements Specification for HomeWoW System

Collection Name	Attribute Name	Contents	Type	Format	Length	Required
Agreement	tenantName	Name of tenant	String	Xxxxxxxx	50	Y
	ownerName	Name of owner	String	Xxxxxxxx	50	Y
	tenancyPeriod	Fixed period of time which the tenant is renting the place	String	Xxxxxxxx	10	Y
	Rent	price of the property	Integer	99999999	10	Y
	utilityDeposit	utility deposit of the property	Integer	99999999	10	Y
	securityDeposit	security deposit of the property	Integer	99999999	10	Y
	keyDeposit	key deposit of the property	Integer	99999999	10	Y
	Penalty	Include late payment fees and damages	String	Xxxxxxxx	10	Y
	additionalClauses	Extra conditions that are not covered by standard terms.	String	Xxxxxxxx	10	Y

Appointment Collection

This table delineates key attributes for managing appointments, including tenant and owner details, date and time, property information, and the address where the appointment takes place. The 'Appointment' collection is essential for scheduling and coordinating property-related activities. Understanding these attributes is crucial for organizing appointments efficiently, facilitating communication between tenants and owners, and maintaining a systematic approach to property management.

Collection Name	Attribute Name	Contents	Type	Format	Length	Required
Appointment	tenantName	Name of tenant	String	Xxxxxxxx	30	Y
	OwnerName	Name of owner	String	Xxxxxxxx	30	Y
	Date	Date of the Appointment	date	YYYY-mm-dd	-	Y
	Time	Time of the Appointment	time	HH:MM:ss	-	Y
	propertyName	Name of property	String	Xxxxxxxx	30	Y
	address	Name of address	String	Xxxxxxxx	50	Y

4 Architecture Design

4.1 Software Architecture

The HomeWoW system comprises seven distinct subsystems: Financial, User Management, Authentication, Profile Management, Information display, Property Management, and Communication. Each subsystem plays a specific role in the overall system. All system users must log in to access these respective subsystems, except for the searcher who can navigate without logging in.

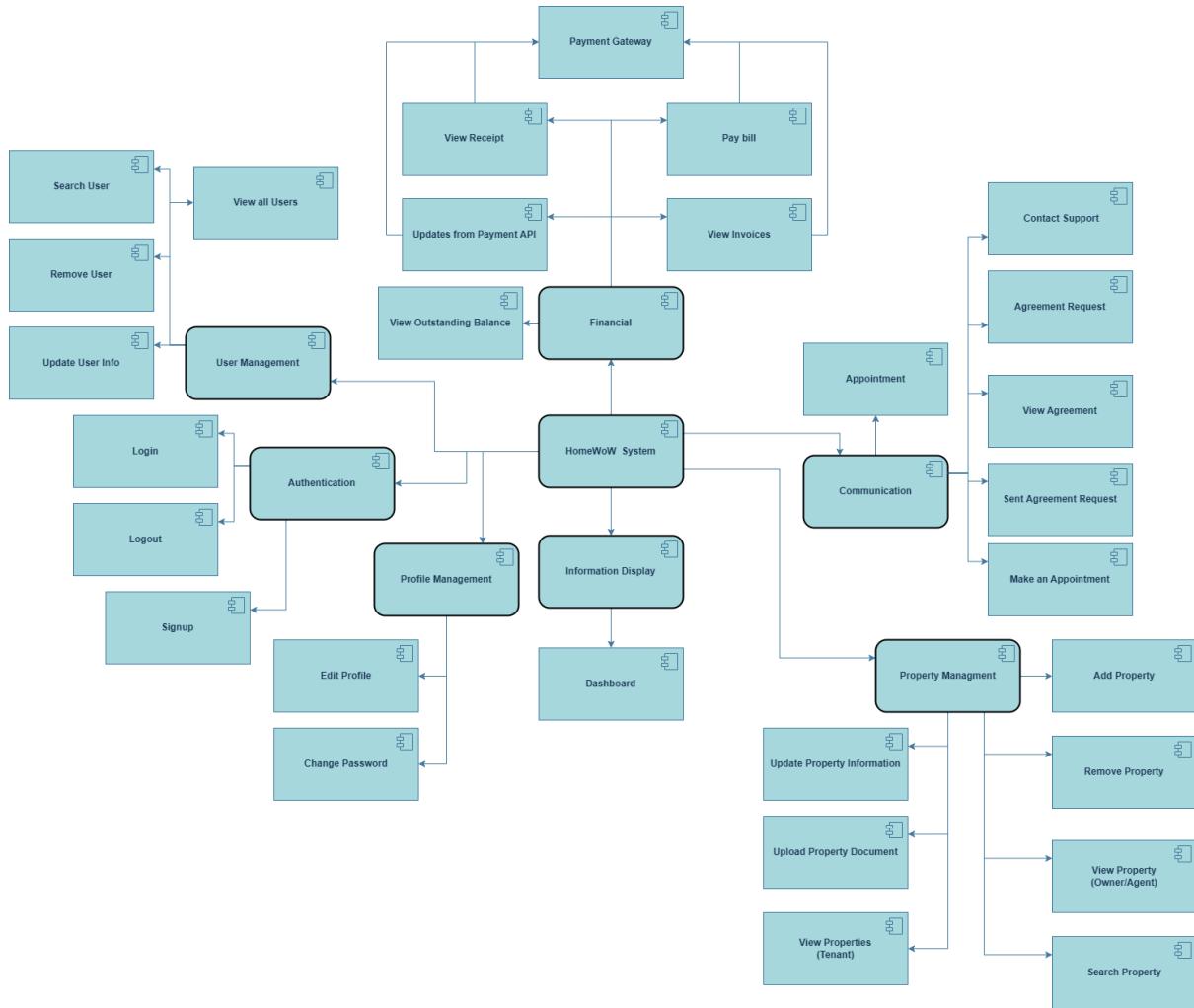


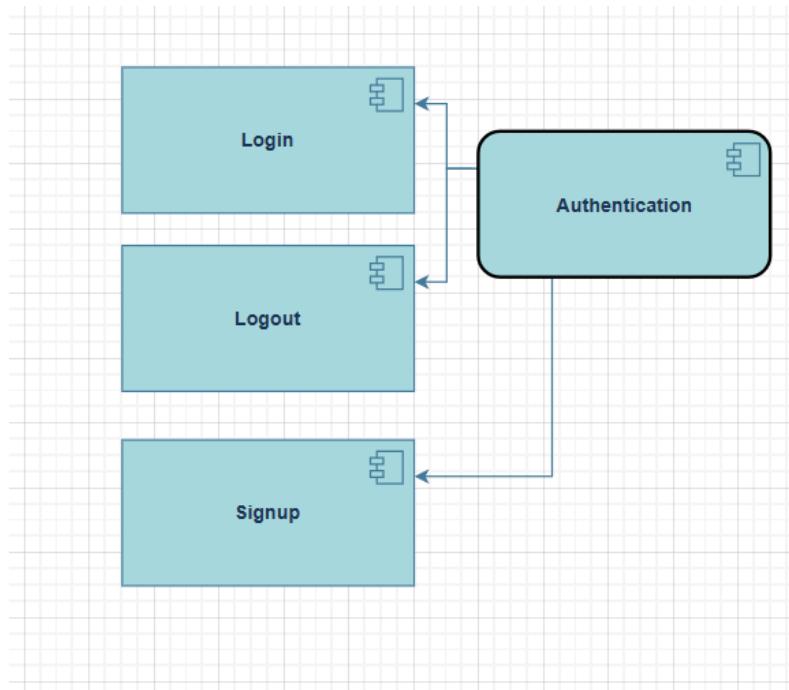
Table: Assigned Subsystem

SADMAN ZULFIQUER	Authentication & Property Management
TAN TENG HUI	Profile Management & Communication
TENG WEI JOE	User Management
HO TECK FUNG	Financial & Dashboard

Software Requirements Specification for HomeWoW System

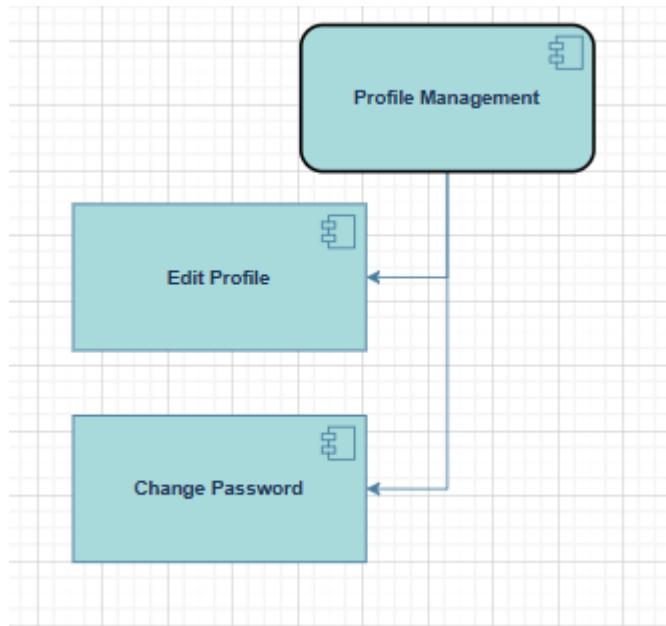
4.1.1 Authentication Subsystem

The Authentication subsystem is used for authenticating users during login, logout, and signup processes.



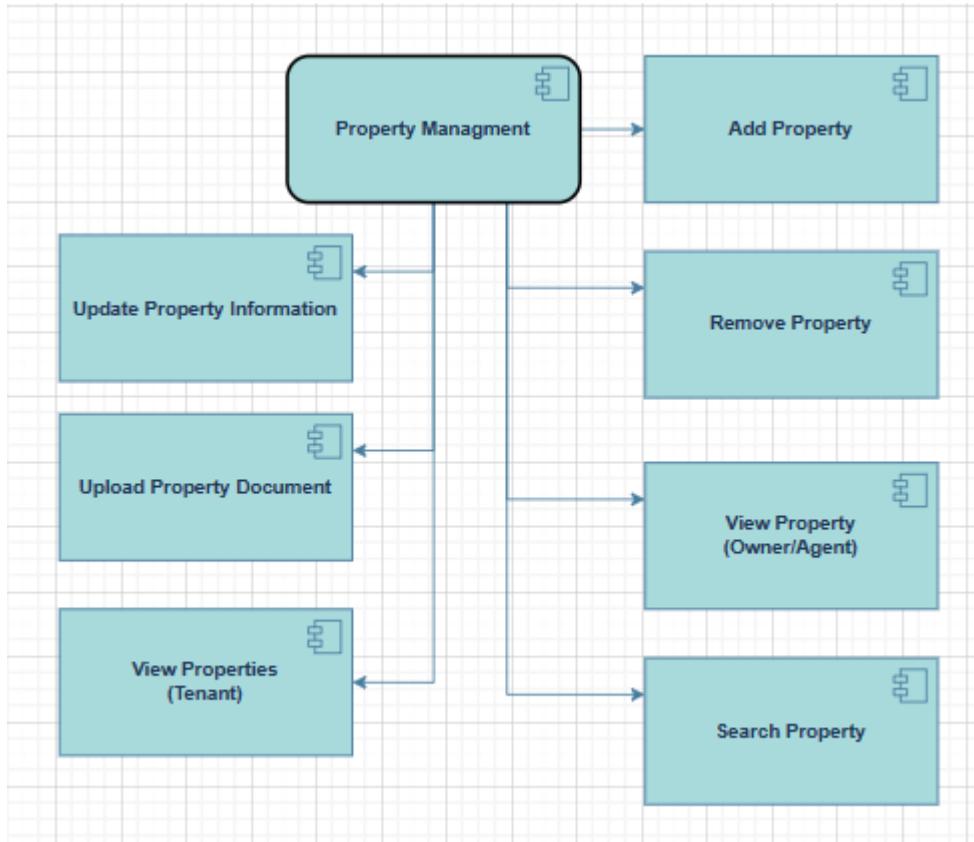
4.1.2 Profile Management Subsystem

The Profile Management Subsystem is used to manage user profiles, preferences, personal information and includes operations related to changing user's passwords for enhanced security.



4.1.3 Property Management Subsystem

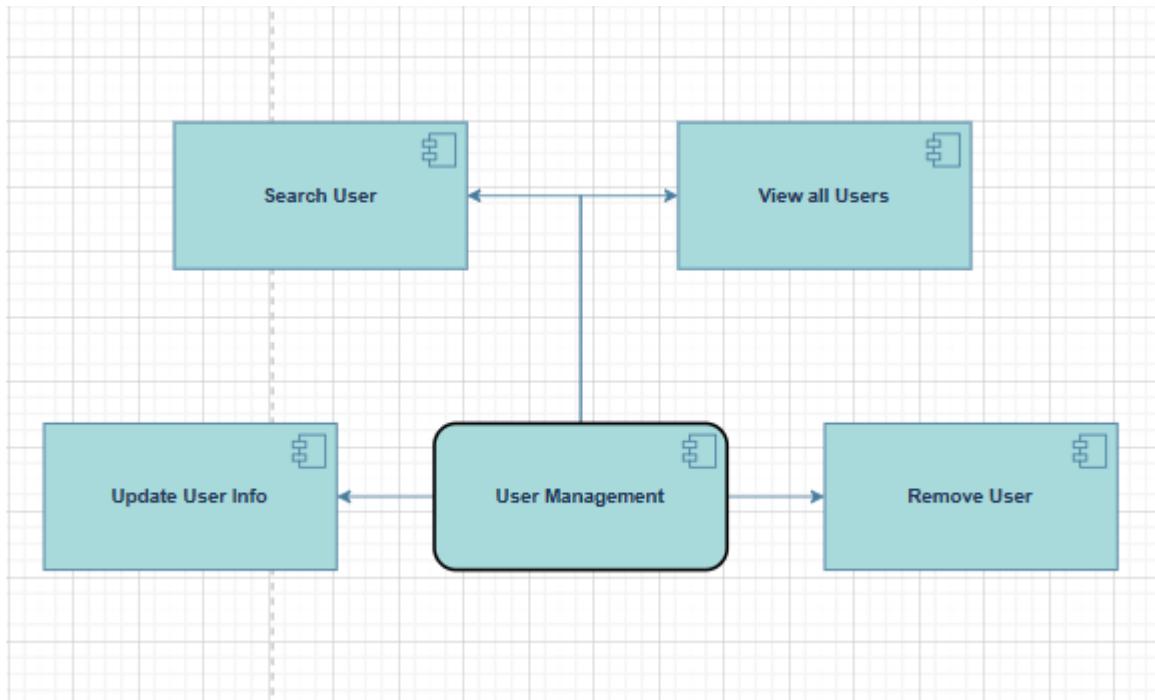
The Property Management Subsystem allows property owners to add new properties and remove property from the system. It also provides search functionality for users (tenants) to find properties based on specific criteria. Tenants will be able to view available properties within the system and the property owners to view and manage their own properties. The Subsystem also supports the upload of property information, including details like descriptions, images, and amenities, and facilitates the upload of property-related documents.



Software Requirements Specification for HomeWoW System

4.1.4 User Management Subsystem

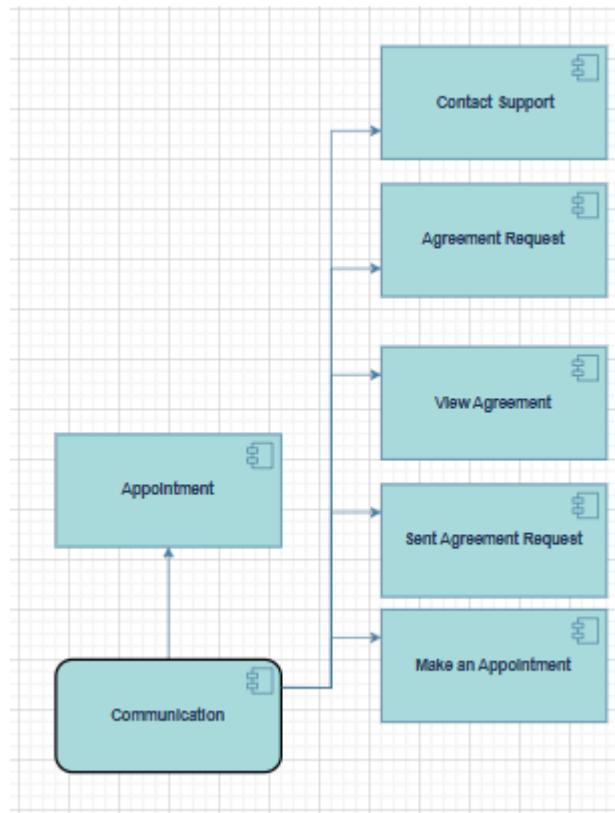
The User Management Subsystem allows the administrators to search for specific users and provides a view of all users within the system. It also supports the update of user information, including profile details and preferences. Furthermore, administrators also can remove user's accounts.



4.1.5 Communication Subsystem

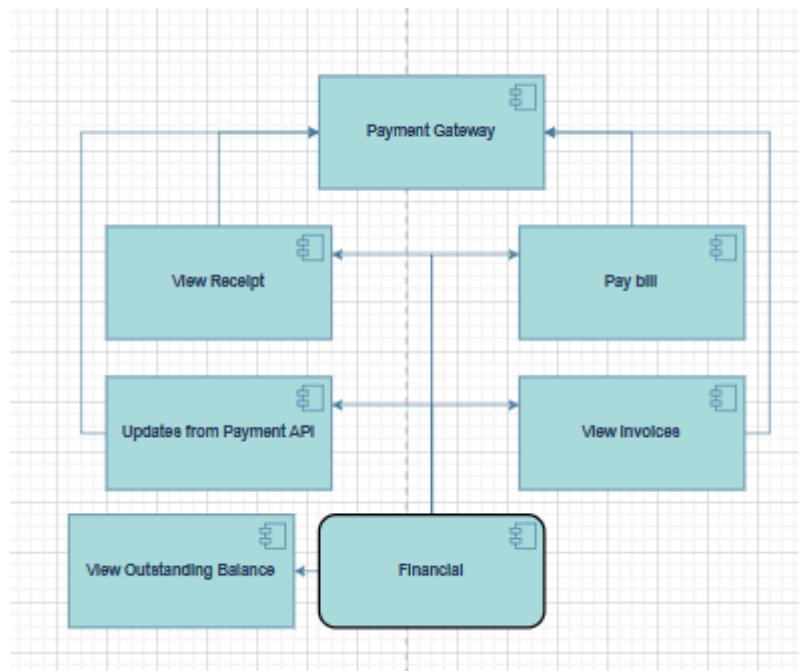
The communication subsystem allows users to contact support for assistance. The tenant can send an agreement request and view the agreement. The Owner can view and choose to accept and send the agreement or reject the request. The subsystem also supports the scheduling of appointments for property viewings and facilitates the confirmation of appointments, typically by property owners.

Software Requirements Specification for HomeWoW System



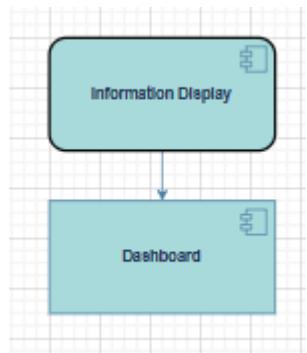
4.1.6 Financial Subsystem

The Financial Subsystem allows users to view detailed receipts of past payments and provides the ability to view invoices, payment history, and records of bills. The subsystem also supports updating financial records from a Payment API and facilitates secure payment of bills through an integrated Payment Gateway. Lastly, users can view details of outstanding balances related to their tenancy.



4.1.7 Information Display Subsystem

The Information Display Subsystem provides a centralized view for users to access a summarized overview of their account, agreements, payments, and other relevant information.



5 Interface Design

5.1 General

- 5.1.1 Main Page (Before Login)

This is the main page of the web app. This page displays the properties available. Users are able to search for a specific property using the search bar. The Login button on the top right allows the user to login into the web app with their account. A contact support button is placed at the bottom right of the page.



- 5.1.2 Main Page (After Login)

The button on the top right will show a pop-up box when the user clicks on it, and the user can choose to edit their profile, change password or logout from their account (not included for admin). The button on the middle left will show the panel for each

Software Requirements Specification for HomeWow System

user (for either owner / agent or tenant or admin).



- 5.1.3 Login

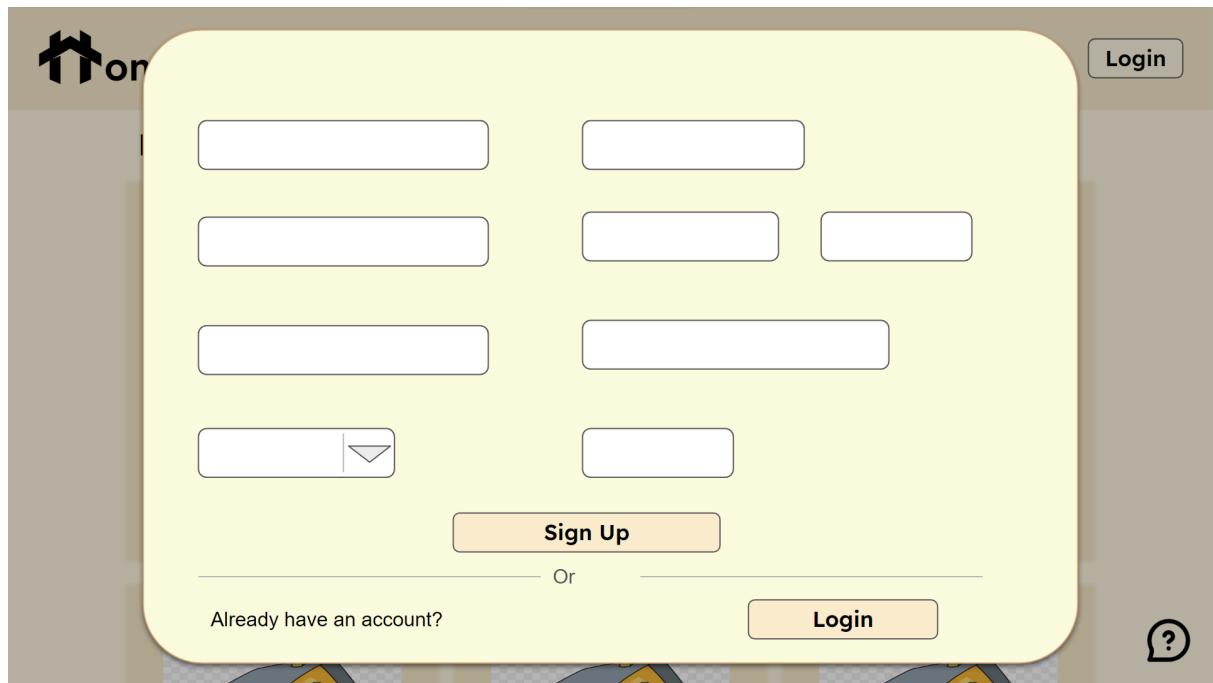
The user enters their credentials to login into the web app, if the user does not have an account, they can click on the 'Sign Up'.



Software Requirements Specification for HomeWow System

- 5.1.4 Sign Up

The user enters their credentials for sign up or clicks on the 'Login' if they already have an account registered on the web app.



- 5.1.5 Profile Management

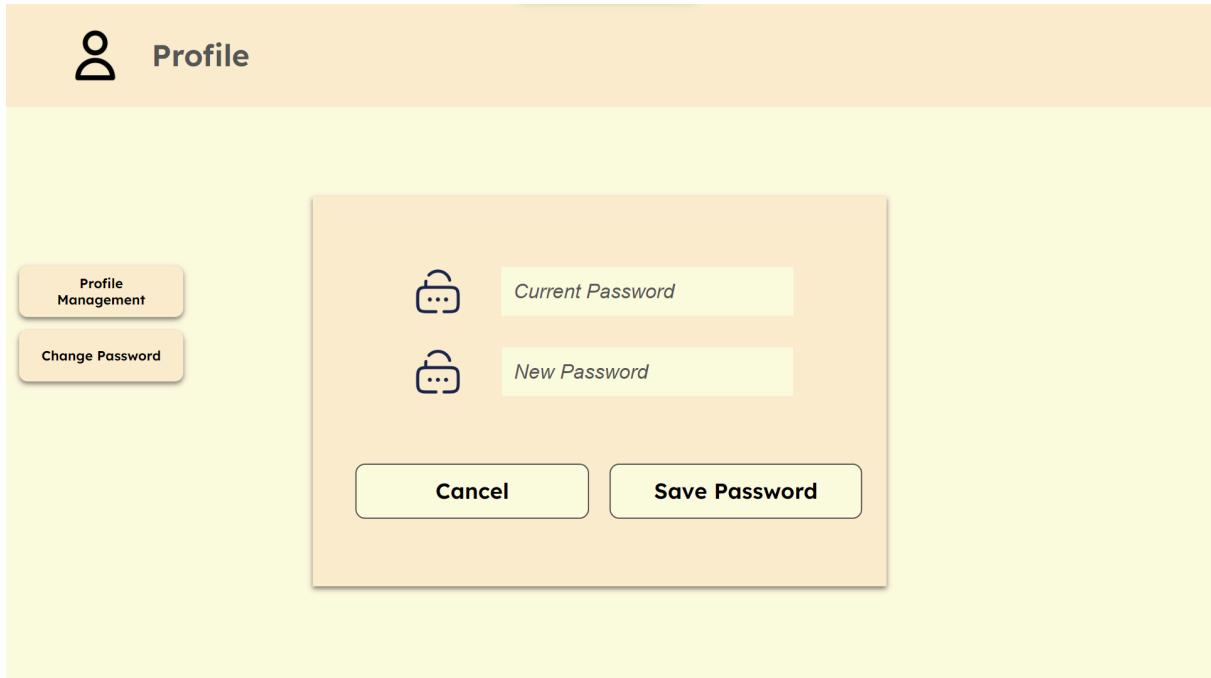
The user can edit their account information in this page and save the changes when they are done or cancel if they do not want to edit their profile.

A screenshot of a web application's profile management page. At the top left is a user icon with the letter "D" and the word "Profile". On the left side, there are two buttons: "Profile Management" and "Change Password". The main area contains five input fields arranged in two columns of two, with an additional single column below. Each input field has an "X" icon to its left. At the bottom are two buttons: "Cancel" on the left and "Save Changes" on the right.

Software Requirements Specification for HomeWoW System

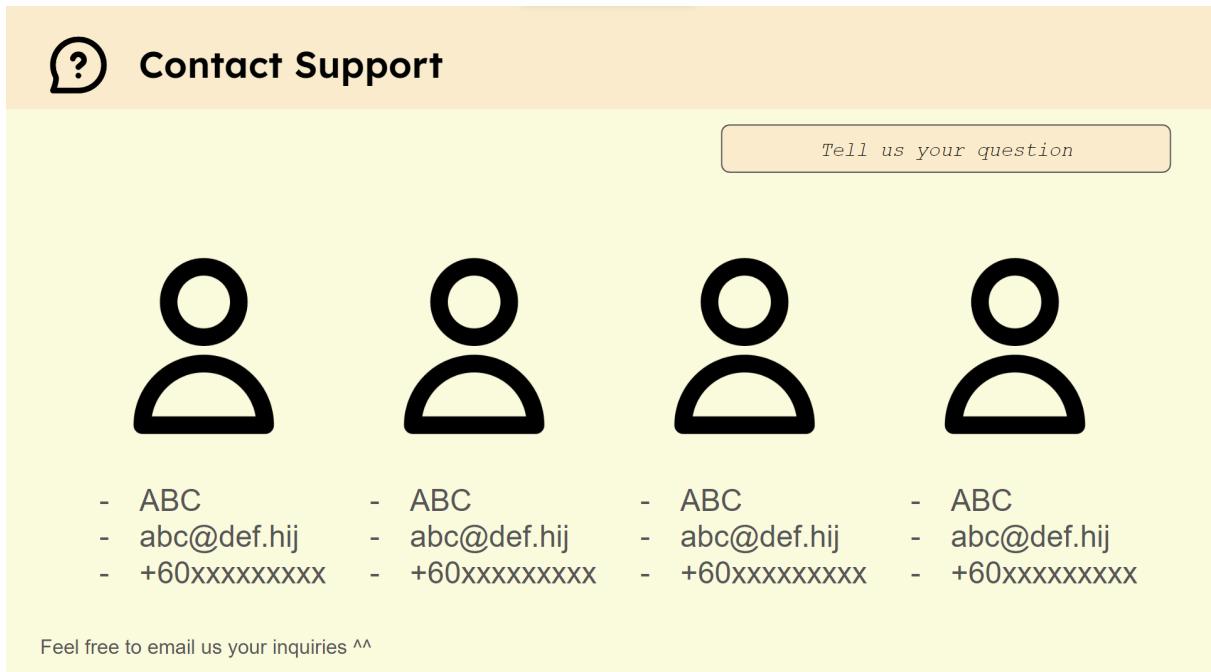
- 5.1.6 Change Password

The user enters their current password and new password, and saves the password or cancels it if they do not want to change their password.



- 5.1.7 Contact Support

This page displays the available contact details. The user can enter their question through the text box as well.

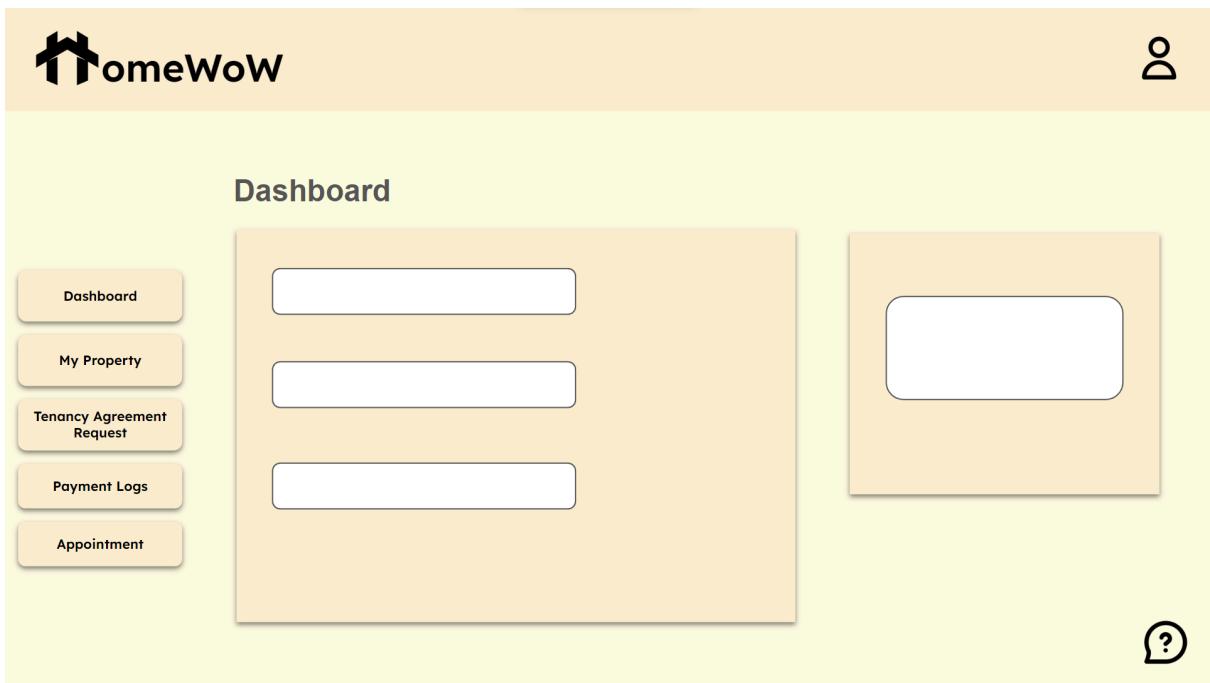


Software Requirements Specification for HomeWow System

5.2 Owner / Agent

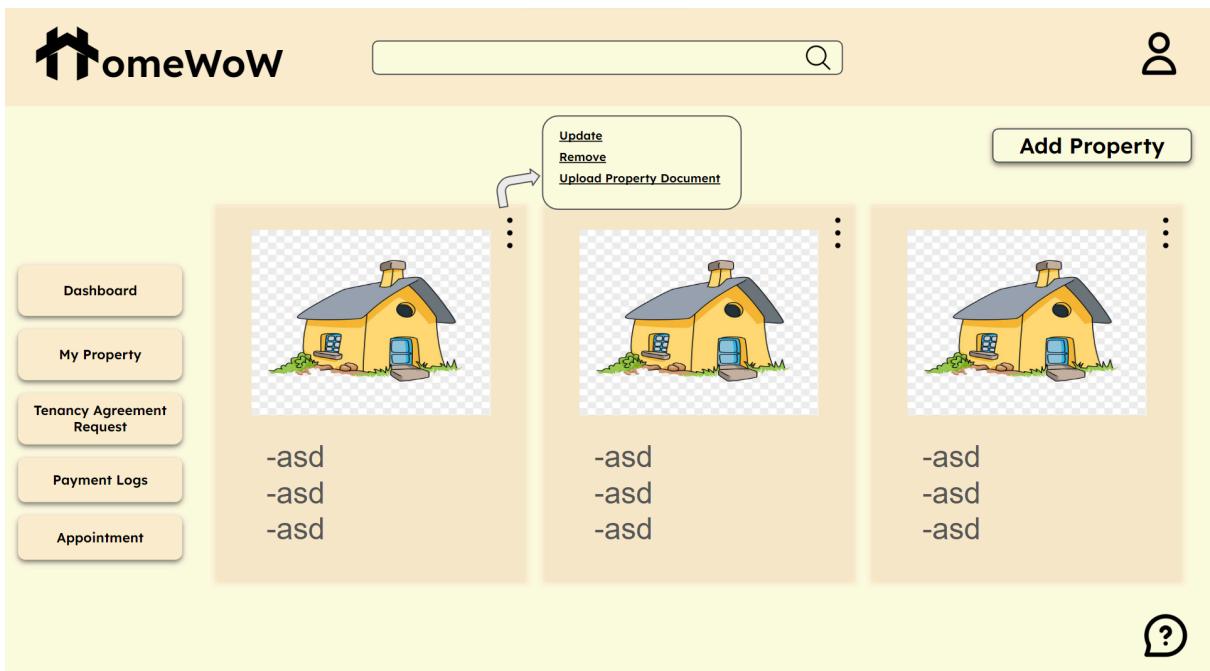
- 5.2.1 Dashboard

In the Dashboard section, the user can view the relevant information associated with their account.



- 5.2.2 My Property

In the My Property section, the user can view their properties, as well as to update, remove, or to upload the property document by clicking on the “three dots” and a pop-up box will appear. The user can also add a new property.



Software Requirements Specification for HomeWow System

- 5.2.3 Add Property

After the user chooses to add a new property, they can enter the information needed and save the changes when they are done or cancel if they do not want to add a new property.

The screenshot shows the HomeWow application interface. At the top is a navigation bar with the HomeWow logo and a user icon. Below the logo is a title 'Add Property'. On the left, there is a vertical sidebar with five buttons: 'Dashboard', 'My Property' (which is highlighted in orange), 'Tenancy Agreement Request', 'Payment Logs', and 'Appointment'. The main area contains five input fields, each preceded by a red 'X' button. At the bottom are 'Cancel' and 'Confirm' buttons, and a help icon (a question mark in a speech bubble) in the bottom right corner.

- 5.2.4 Update Property

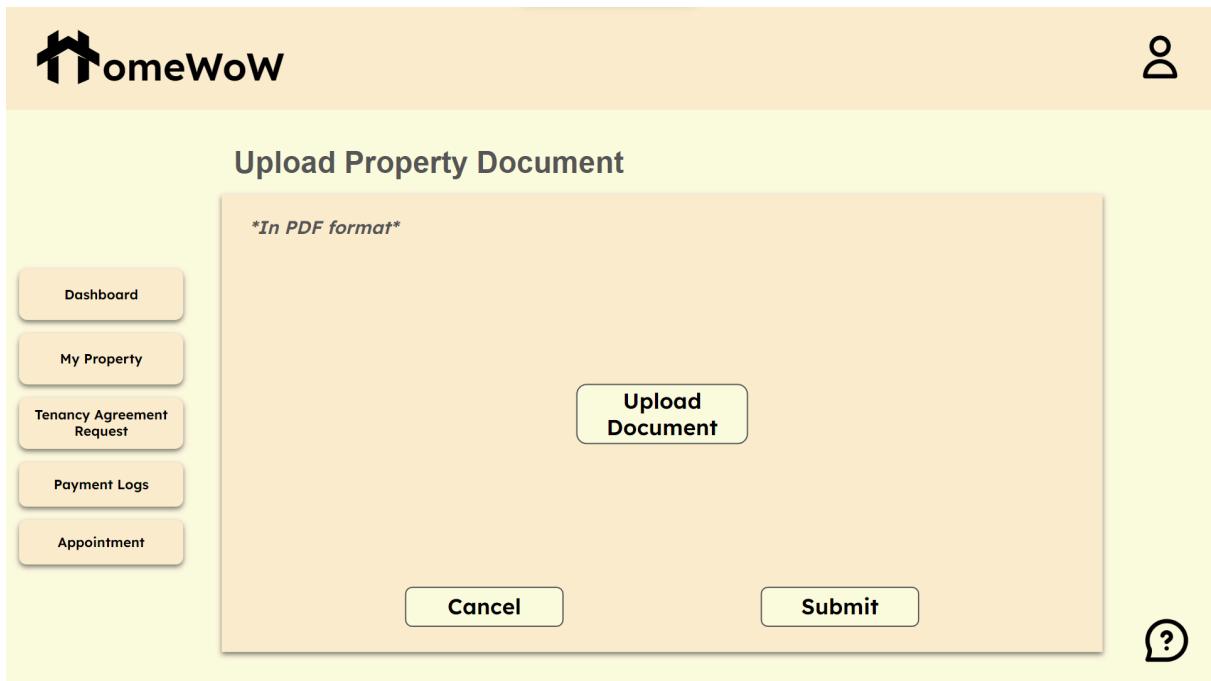
After the user chooses to update their property, they can edit the information and save the changes when they are done or cancel if they do not want to update their property.

The screenshot shows the HomeWow application interface, similar to the 'Add Property' screen but with a different title. At the top is a navigation bar with the HomeWow logo and a user icon. Below the logo is a title 'Update Property'. On the left, there is a vertical sidebar with five buttons: 'Dashboard', 'My Property' (which is highlighted in orange), 'Tenancy Agreement Request', 'Payment Logs', and 'Appointment'. The main area contains five input fields, each preceded by a red 'X' button. At the bottom are 'Cancel' and 'Confirm' buttons, and a help icon (a question mark in a speech bubble) in the bottom right corner.

Software Requirements Specification for HomeWoW System

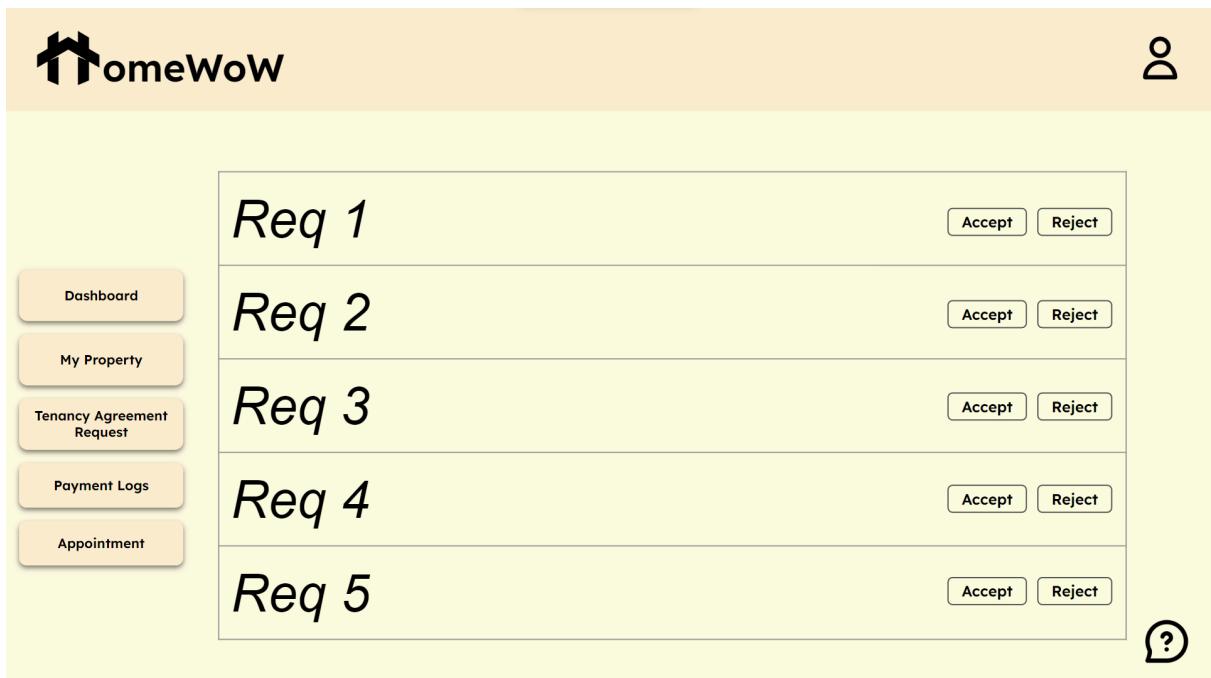
- 5.2.5 Upload Property Document

After the user chooses to upload the property document, they can choose the document to upload or cancel if they do not want to upload the property document.



- 5.2.6 Receive Agreement Request

In the Tenancy Agreement Request section, the user can view the available agreement requests and to choose whether they want to accept or reject it.



Software Requirements Specification for HomeWoW System

- 5.2.7 Payment Logs

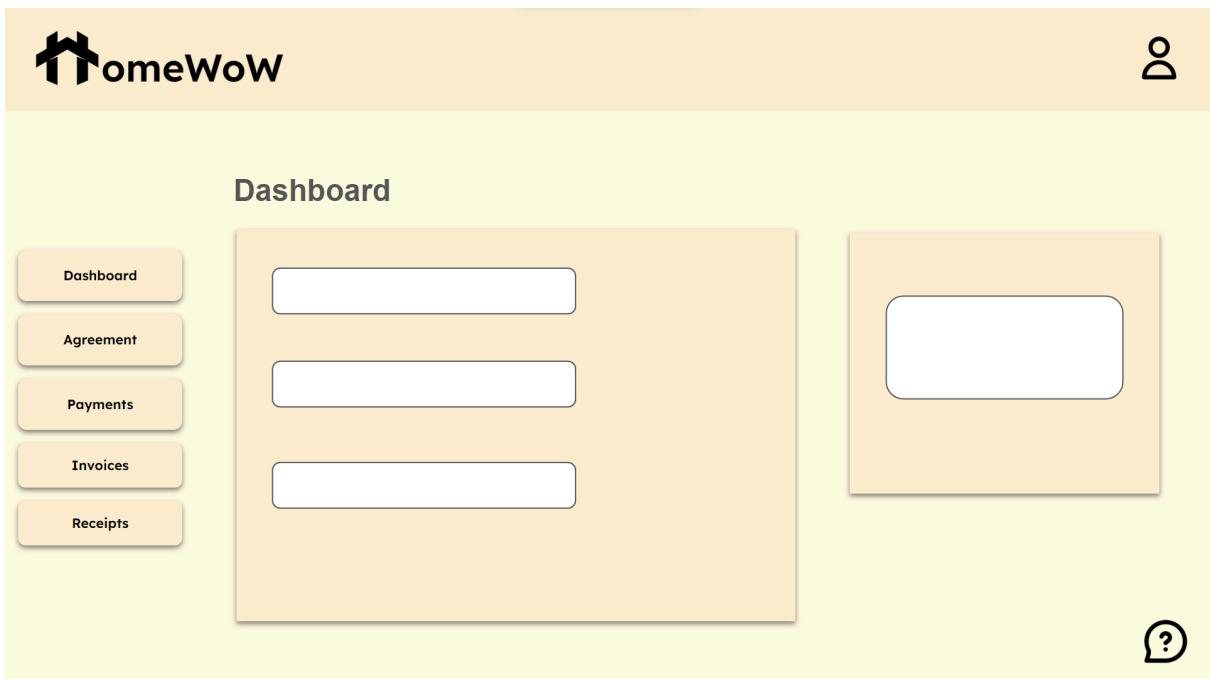
In the Payment Logs section, the user can view the payments records and the details of it.



5.3 Tenant

- 5.3.1 Dashboard

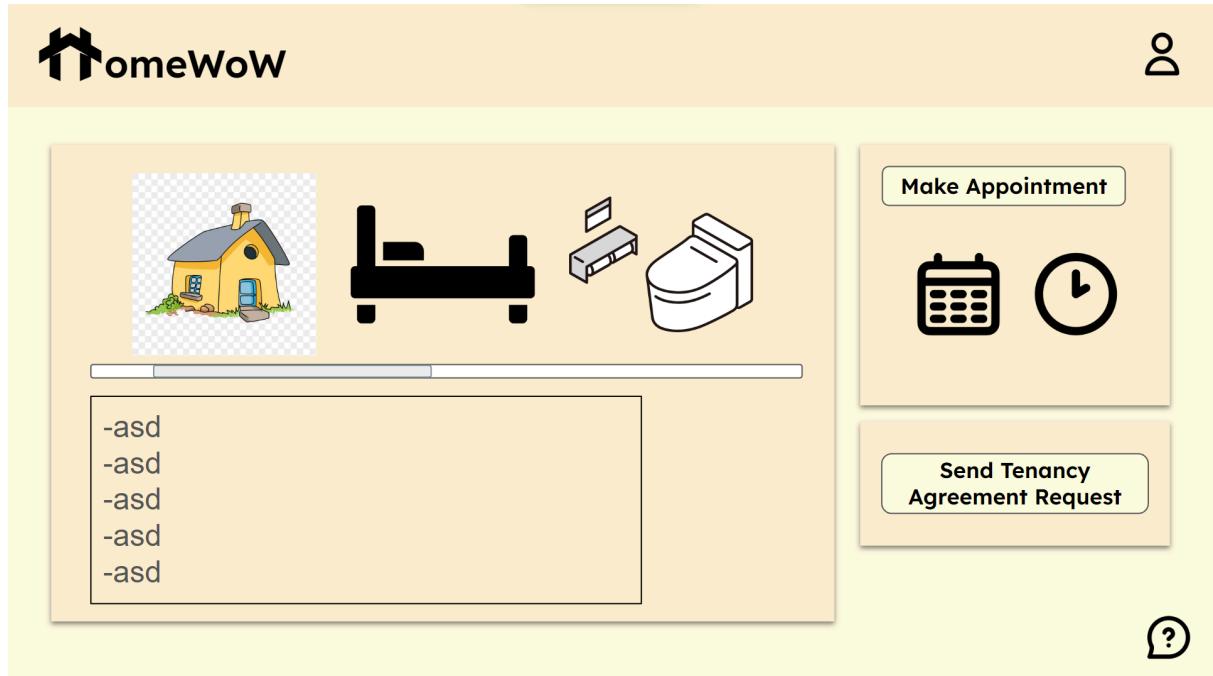
In the Dashboard section, the user can view the relevant information associated with their account.



Software Requirements Specification for HomeWow System

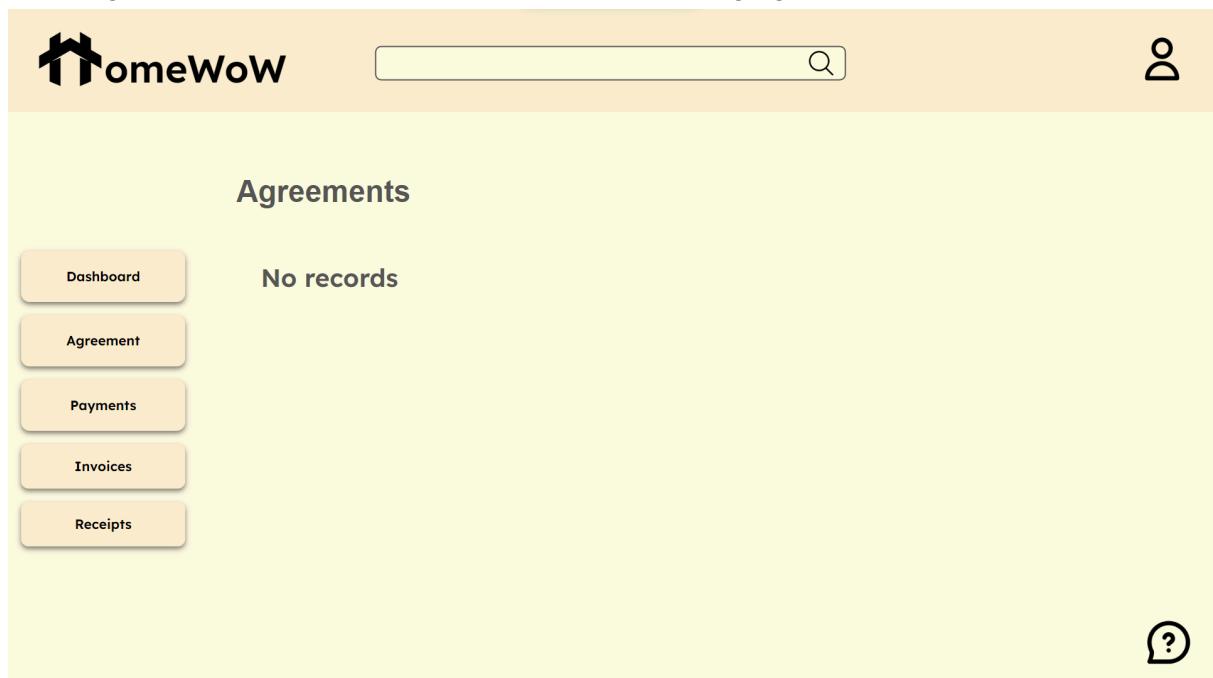
- 5.3.2 Property Details

The user clicks on a specific property on the main page and will be brought to this page, this page shows the property details. Besides, the user can make an appointment by choosing the date and time. The user can also send a tenancy agreement request to the owner / agent of the property.



- 5.3.3 View Agreements

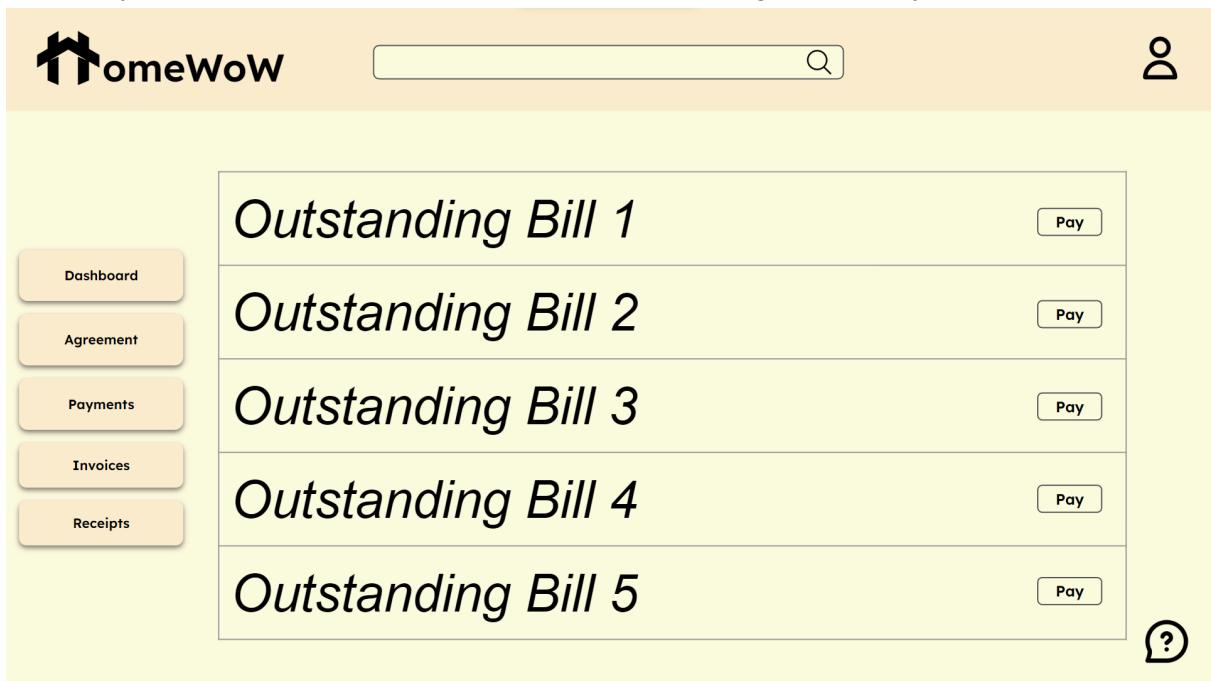
In the Agreement section, the user can view their existing agreement.



Software Requirements Specification for HomeWow System

- 5.3.4 View Outstanding Balance

In the Payment section, the user can view their outstanding bill and pay for the bill.



- 5.3.5 Payment Gateway

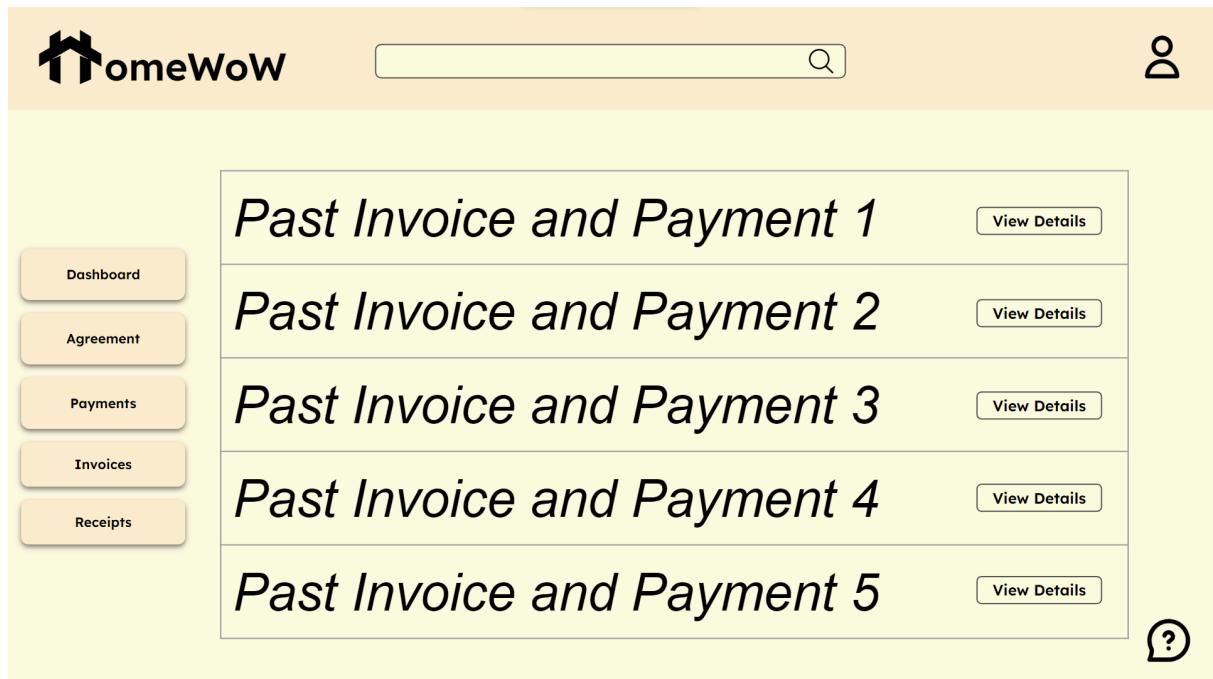
After the user chooses the bill to pay, they will be brought to this payment gateway page. The user enters the information needed and confirms the payment or cancels if they do not want to make the payment.



Software Requirements Specification for HomeWow System

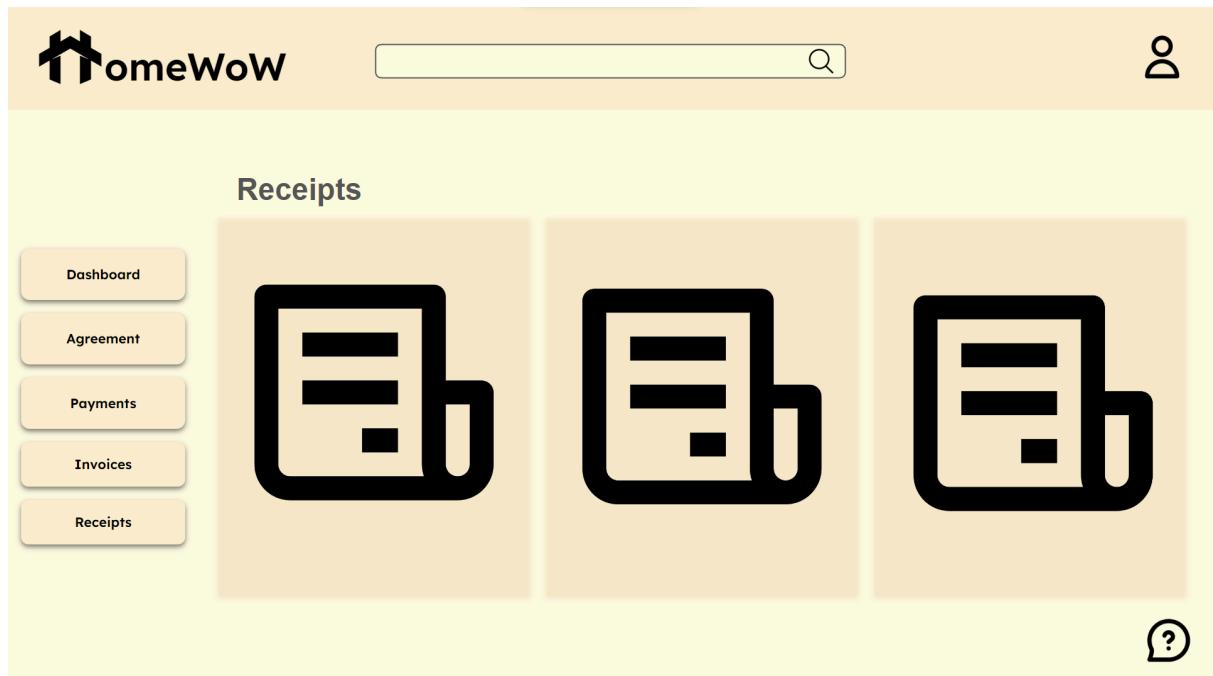
- 5.3.6 View Invoices

In the Invoices section, the user can view the past invoices and payments they made and the details of it.



- 5.3.7 View Receipts

In the Receipts section, the user can view the receipts available in their account.

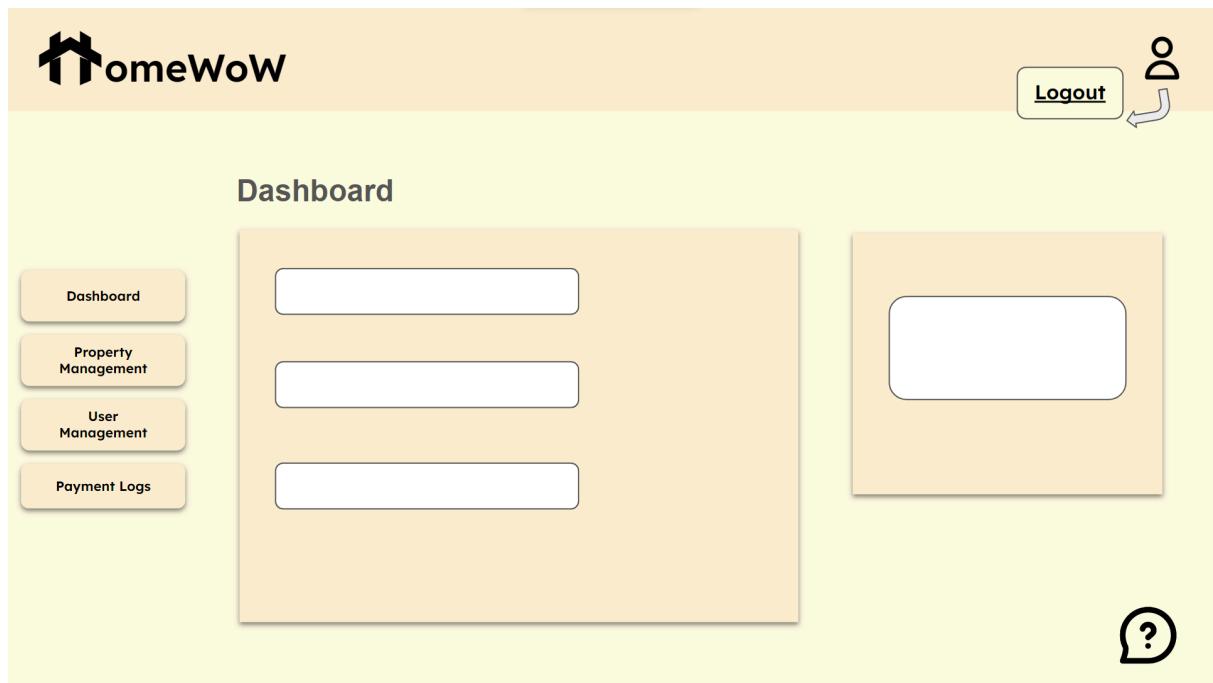


Software Requirements Specification for HomeWow System

5.4 Admin

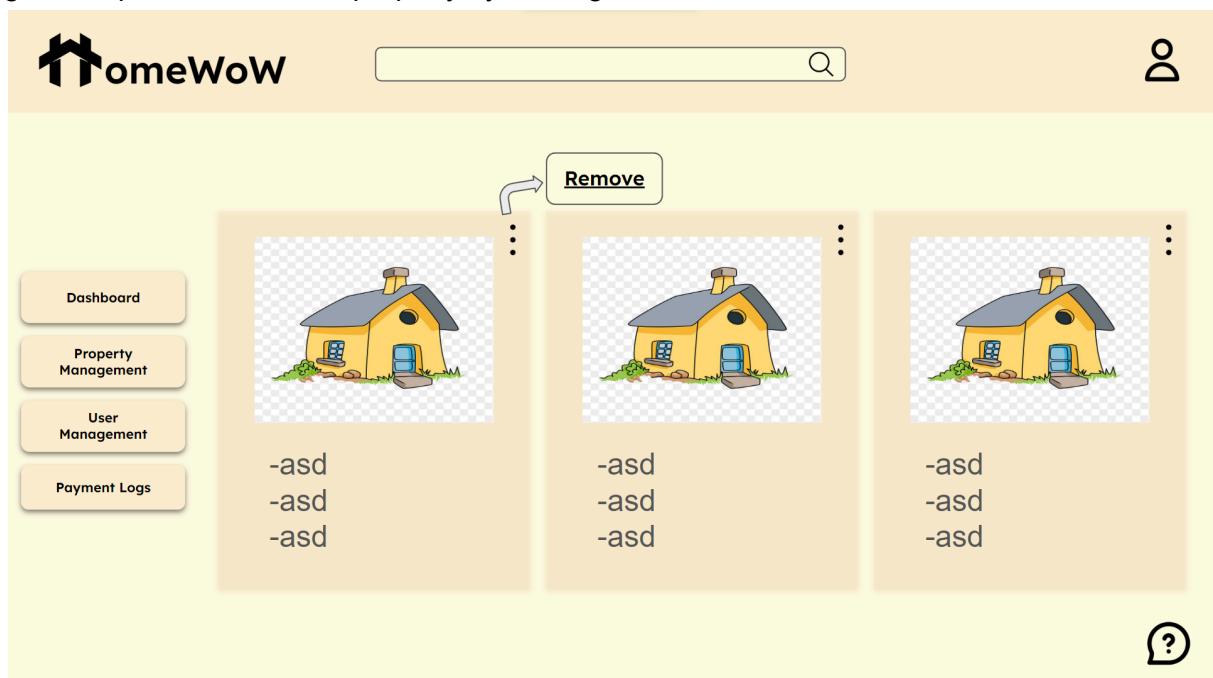
- 5.4.1 Dashboard

In the Dashboard section, the admin can view the relevant information associated with their account.



- 5.4.2 Property Management

In the Property Management section, the admin can view the existing properties and get the option to remove a property by clicking the “three dots”.



Software Requirements Specification for HomeWow System

- 5.4.3 User Management

In the User Management section, the admin can view the registered users and can choose to edit the user information or to remove a user.

The screenshot shows the HomeWow application's User Management page. At the top, there is a navigation bar with the HomeWow logo, a search bar, and a user profile icon. On the left, a sidebar menu includes options like Dashboard, Property Management, User Management (which is currently selected and highlighted in orange), and Payment Logs. The main content area is titled "User Info" and displays five user entries, each with a "User Info" sub-section. To the right of each sub-section are "Edit" and "Remove" buttons. A question mark icon is located in the bottom right corner of the main content area.

- 5.4.4 Edit User Info

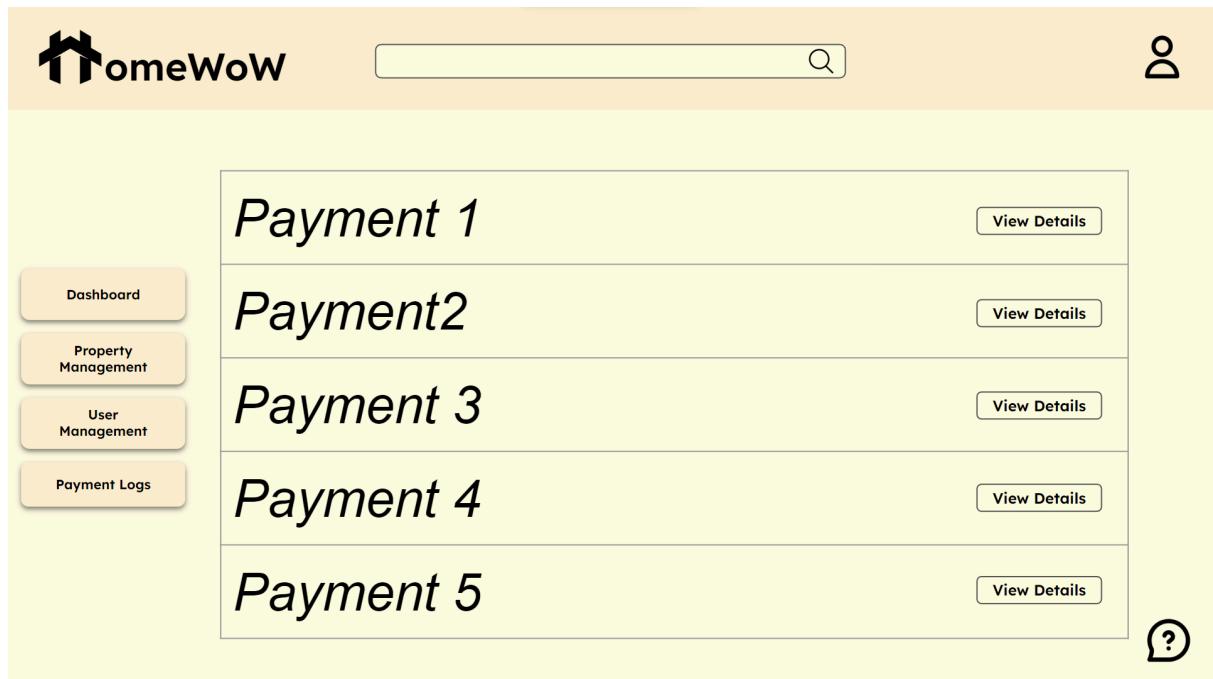
After the admin chooses to edit the user information, they can edit the information and save the changes when they are done or cancel if they do not want to edit the user information.

The screenshot shows the "Edit User Info" dialog box. At the top, it has the HomeWow logo, a search bar, and a user profile icon. The main area is titled "Edit User Info". It contains five input fields, each preceded by an "X" button. Below the input fields are two buttons: "Cancel" and "Confirm". The sidebar menu on the left is identical to the one in the previous screenshot.

Software Requirements Specification for HomeWow System

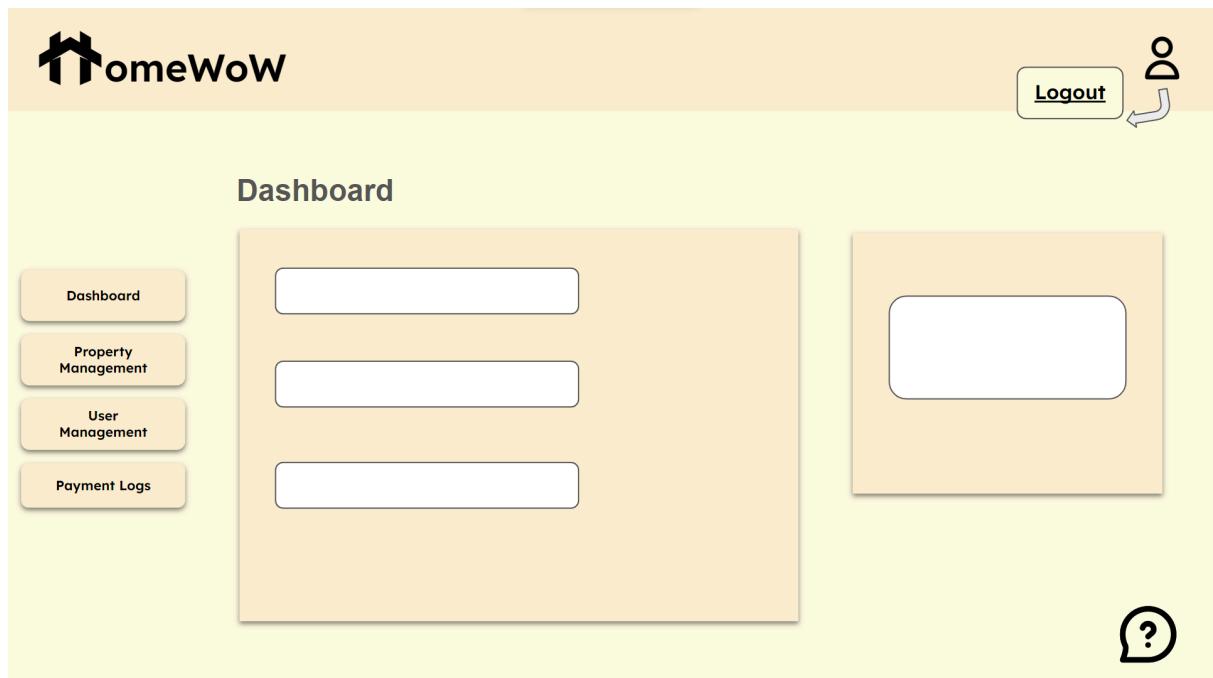
- 5.4.5 Payment Logs

In the Payment Logs section, the admin can view the payments records and the details of it.



- 5.4.6 Logout

The admin clicks on the top right button and a pop-up box will appear and the admin can click on the 'Logout' to logout from their account.



6 Component Design

6.1 Main Components

Subsystem	Description
Authentication	The Authentication subsystem is used for authenticating users during login, logout, and signup processes.
Profile Management	The Profile Management Subsystem is used to manage user profiles, preferences, personal information and includes operations related to changing user's passwords for enhanced security.
Property Management	The Property Management Subsystem allows property owners to add new properties and remove property from the system. It also provides search functionality for users (tenants) to find properties based on specific criteria. Tenants will be able to view available properties within the system and the property owners to view and manage their own properties. The Subsystem also supports the upload of property information, including details like descriptions, images, and amenities, and facilitates the upload of property-related documents.
User Management	The User Management Subsystem allows the administrators to search for specific users and provides a view of all users within the system. It also supports the update of user information, including profile details and preferences. Furthermore, administrators also can remove user's accounts.
Communication	The communication subsystem allows users to contact support for assistance. The tenant can send an agreement request and view the agreement. The Owner can view and choose to accept and send the agreement or reject the request. The subsystem also supports the scheduling of appointments for property viewings and facilitates the confirmation of appointments,

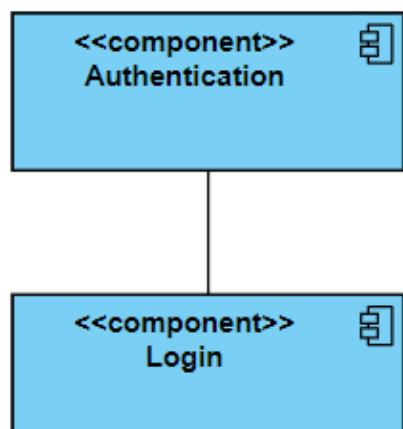
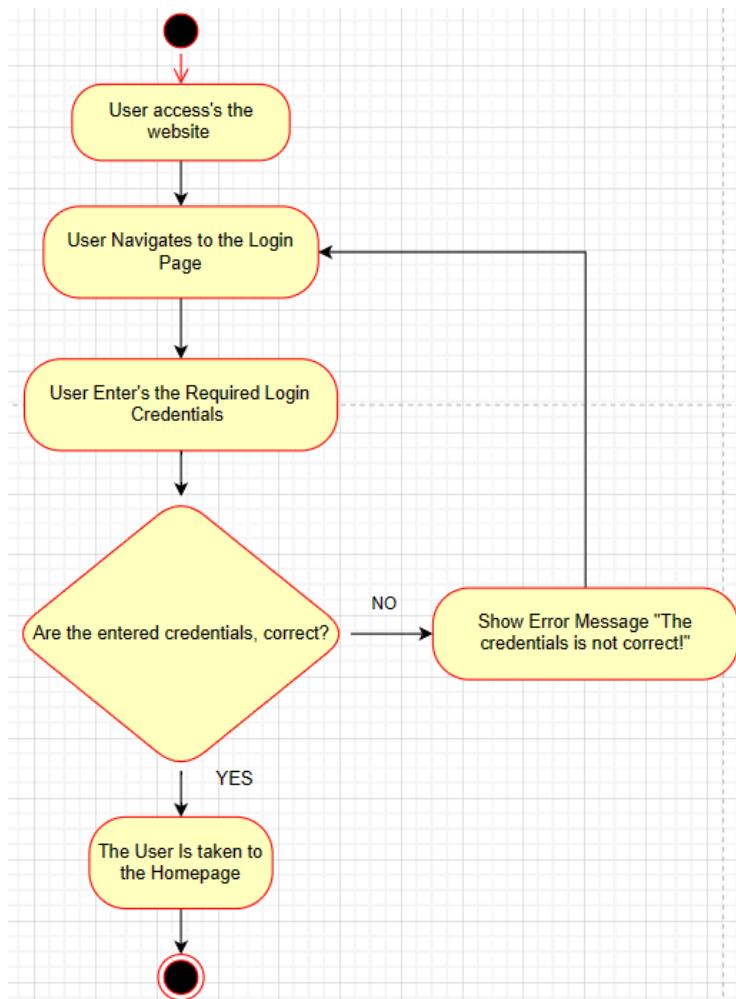
Software Requirements Specification for HomeWoW System

	typically by property owners.
Financial	The Financial Subsystem allows users to view detailed receipts of past payments and provides the ability to view invoices, payment history, and records of bills. The subsystem also supports updating financial records from a Payment API and facilitates secure payment of bills through an integrated Payment Gateway. Lastly, users can view details of outstanding balances related to their tenancy.
Information Display	The Information Display Subsystem provides a centralized view for users to access a summarized overview of their account, agreements, payments, and other relevant information.

Subsystem	Components
Authentication	1. Login 2. Logout 3. Signup
Profile Management	4. Edit Profile 5. Change Password
Property Management	6. Add Property 7. Remove Property 8. View Property (Owner/Agent) 9. Search Property 10. Update Property Information 11. Upload Property Document 12. View Properties (Tenant & Searcher)
User Management	13. Search User 14. View all users 15. Update User Information 16. Remove User
Communication	17. Contact Support 18. Agreement Request 19. View Agreement 20. Sent Agreement Request 21. Make an Appointment (Tenant) 22. Appointment (Owner/Agent)
Financial	23. Pay Bill 24. View Invoices 25. View Receipt 26. Updated from Payment API 27. View Outstanding Balance

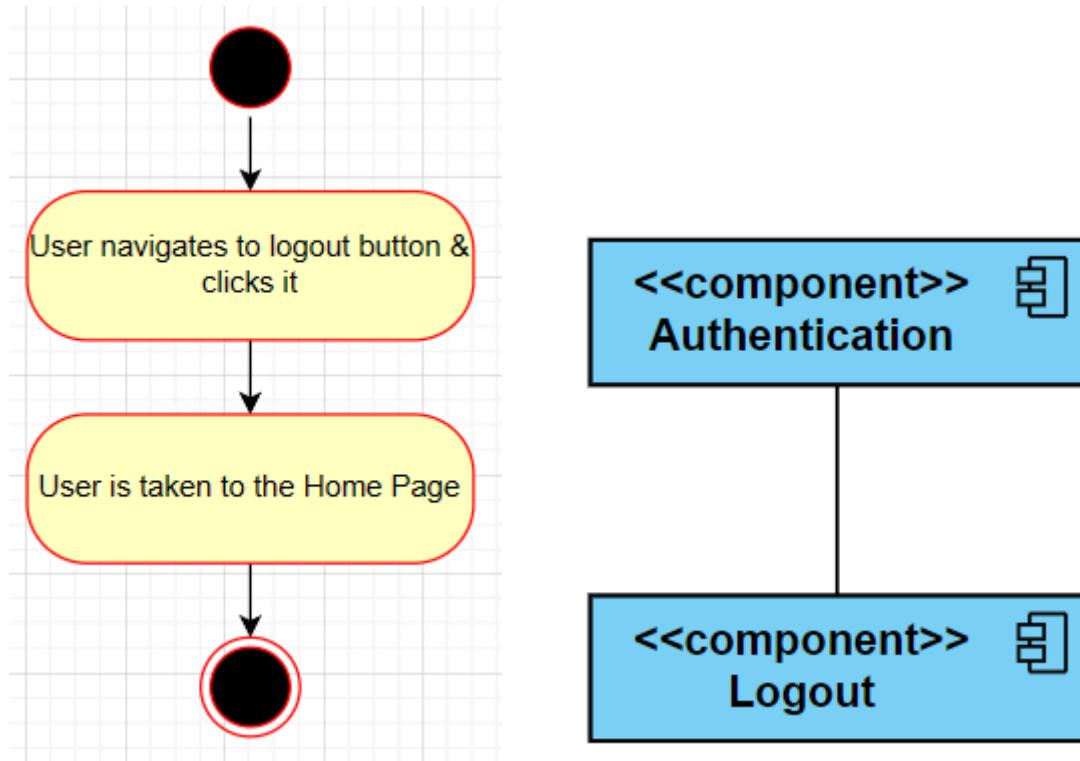
6.1.1 Login(Owner/Agent,Tenant,Admin)

The user will use the authentication component to login into the website.



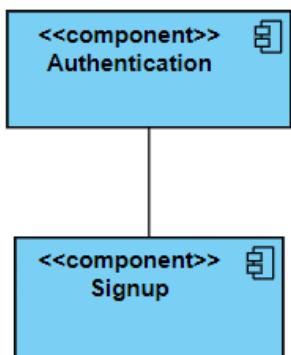
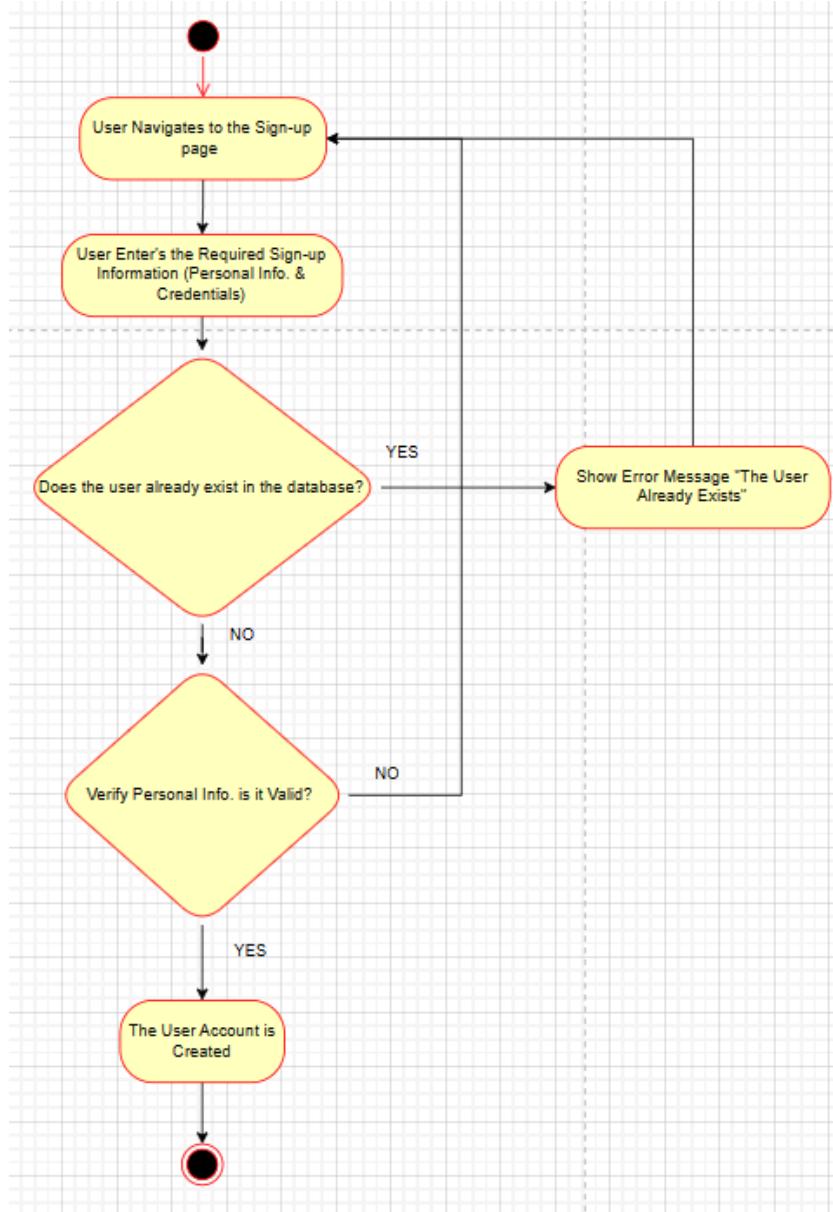
6.1.2 Logout(Owner/Agent, Tenant,Admin)

The user will use the authentication component to logout the website and redirected to the home page.



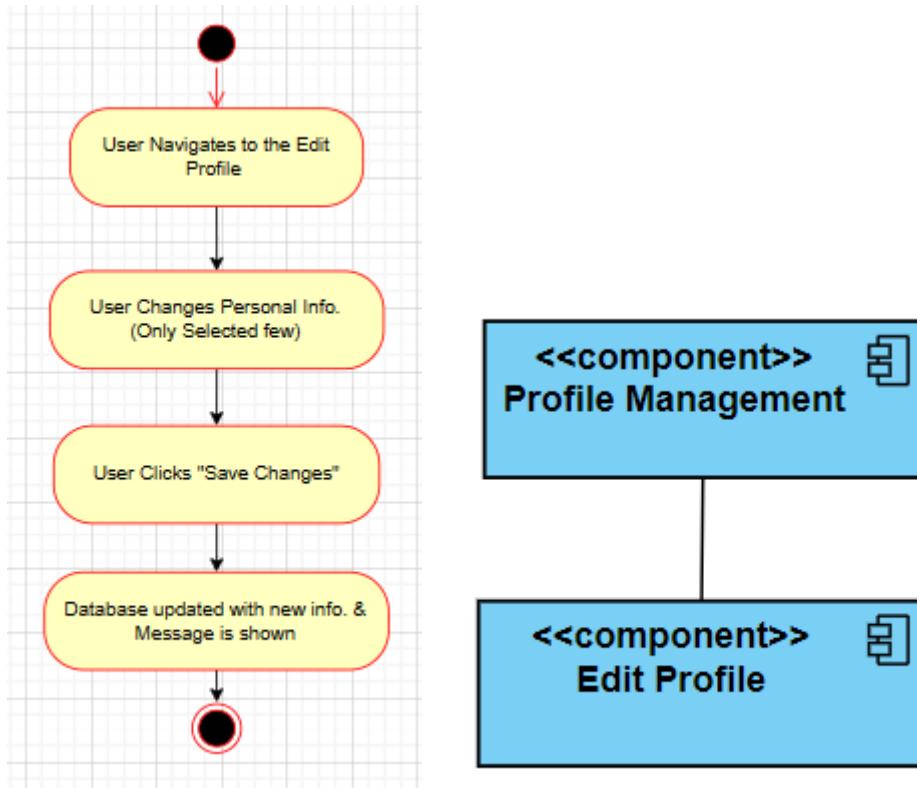
6.1.3 Signup

The user uses the authentication component to register an account.



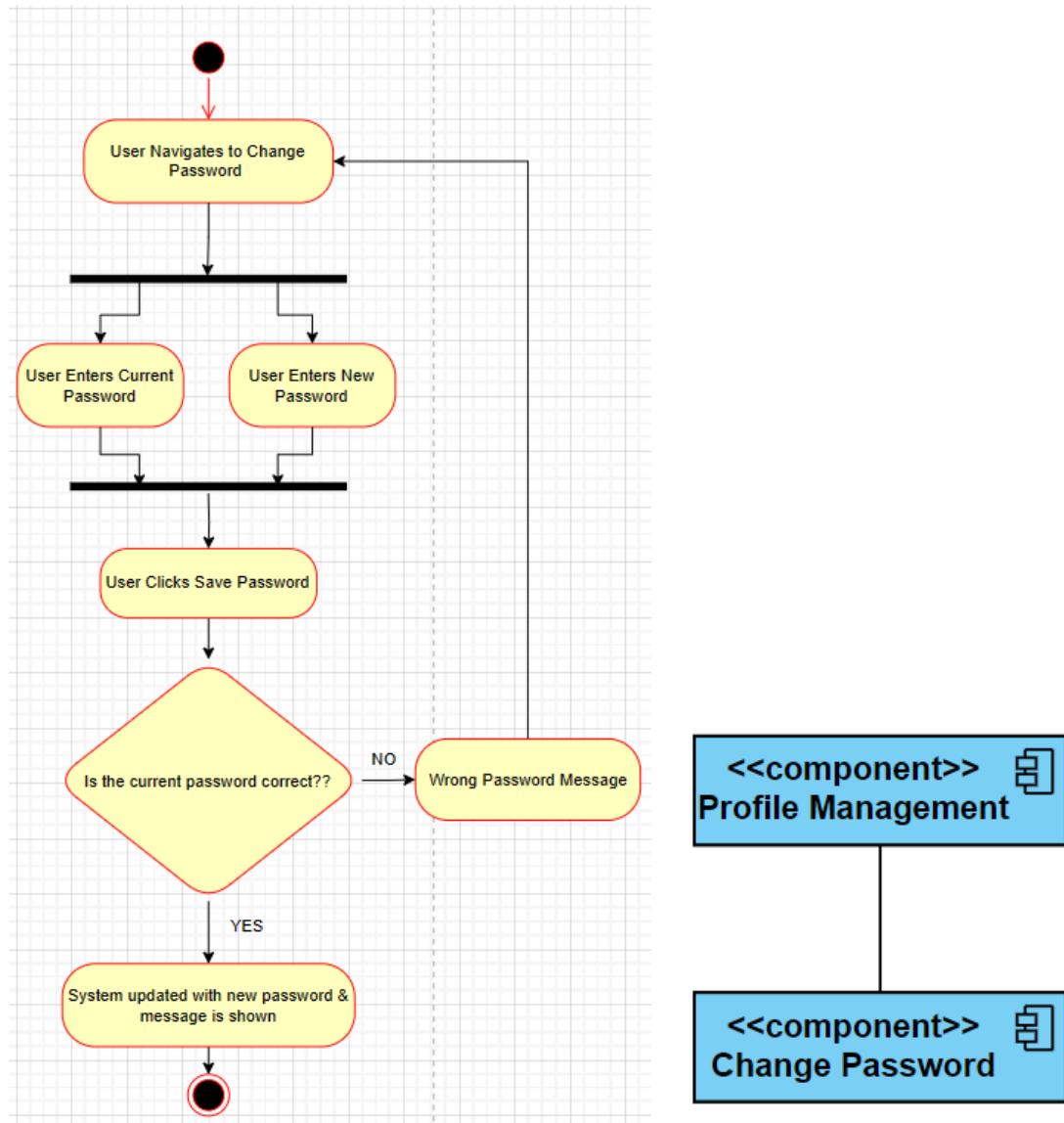
6.1.4 Edit Profile (Owner,Tenant)

The user will use the Profile Management component to edit personal details, preferences, and other relevant information to keep their profiles up to date.



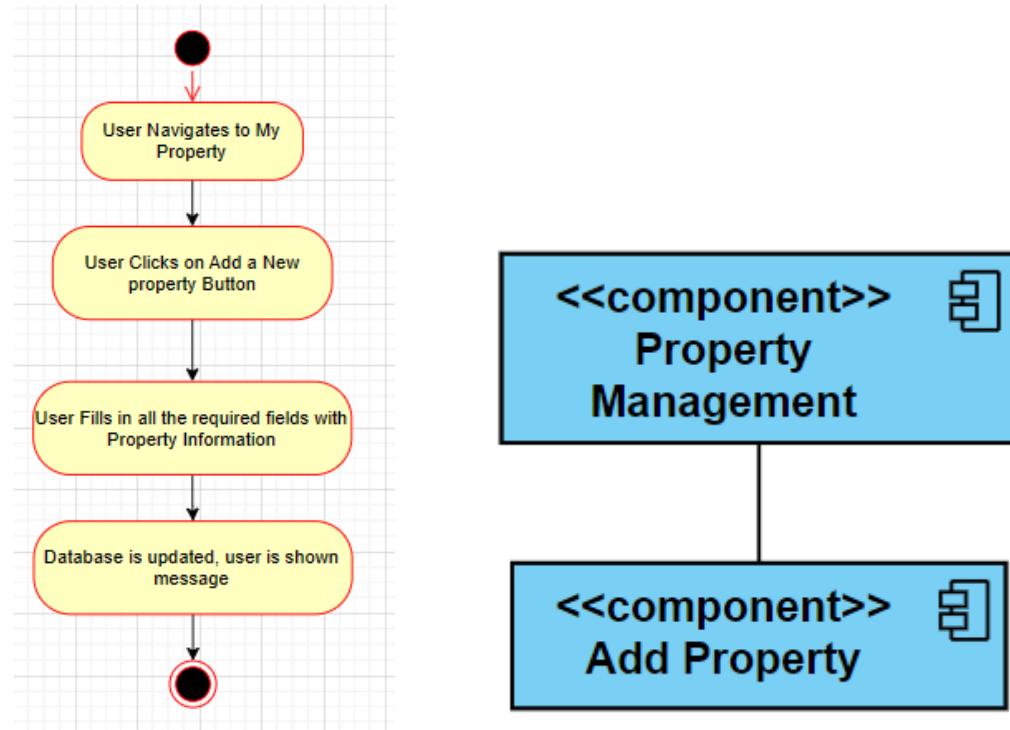
6.1.5 Change Password(Owner/Agent,Tenant)

The user will use the Profile Management component to modify their existing password for security reasons, enhancing the security of their account.



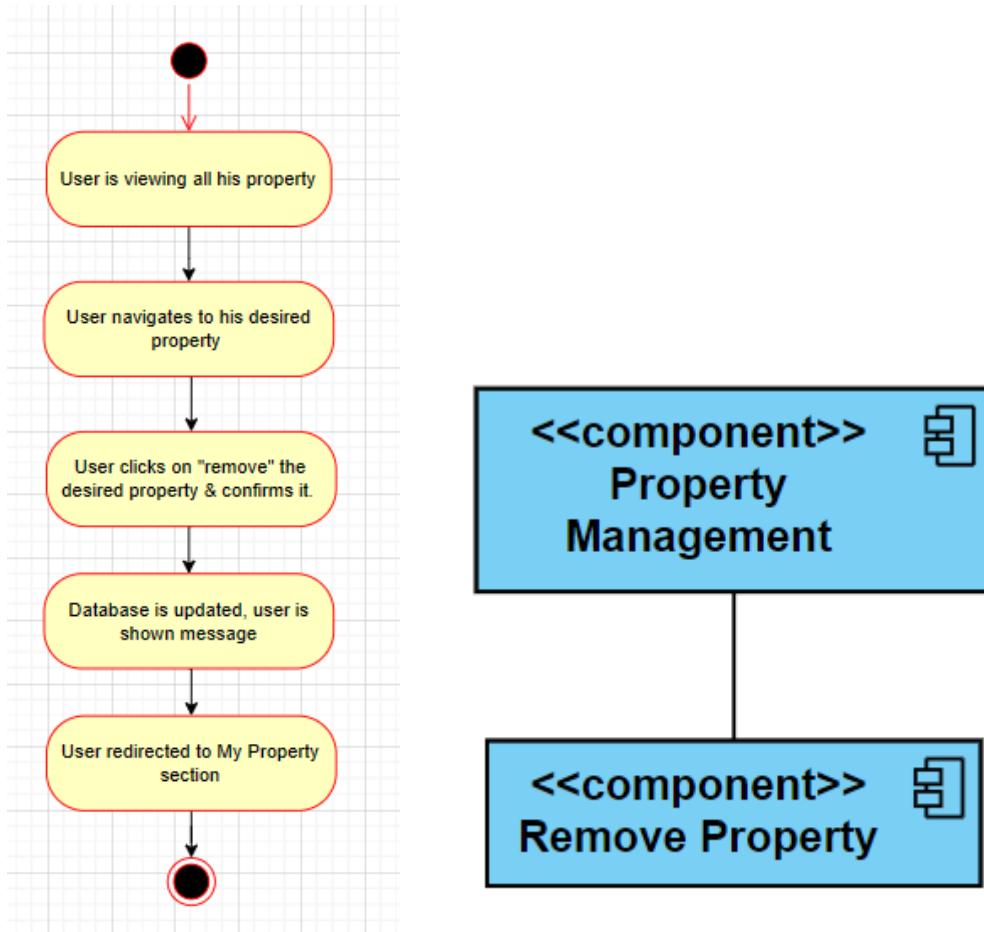
6.1.6 Add Property (Owner/Agent)

The user will use the Property Management component to add property with all the required information in the system which is only visible to this user.



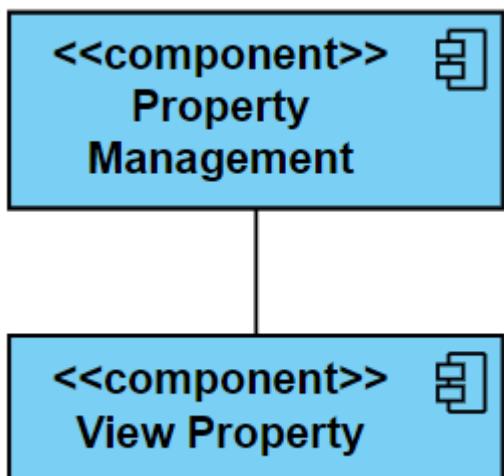
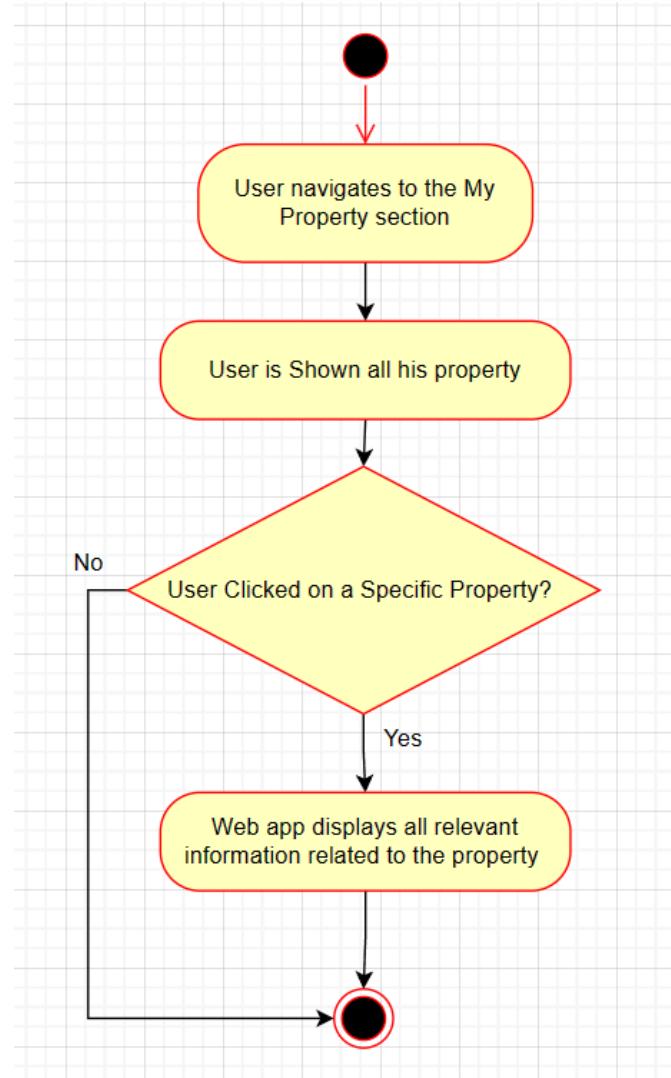
6.1.7 Remove Property(Owner/Agent)

The user will use the Property Management component to removes the desired property from the system.



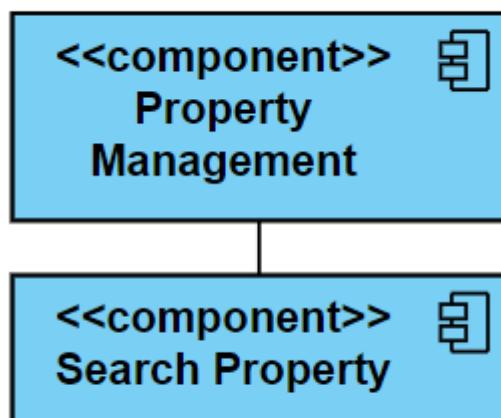
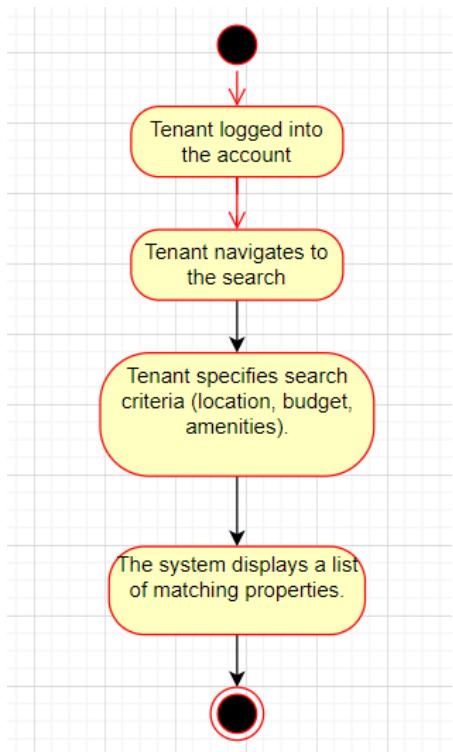
6.1.8 View Property (Owner/Agent)

The user will use the Property Management component to view all his properties in the system with details & status.



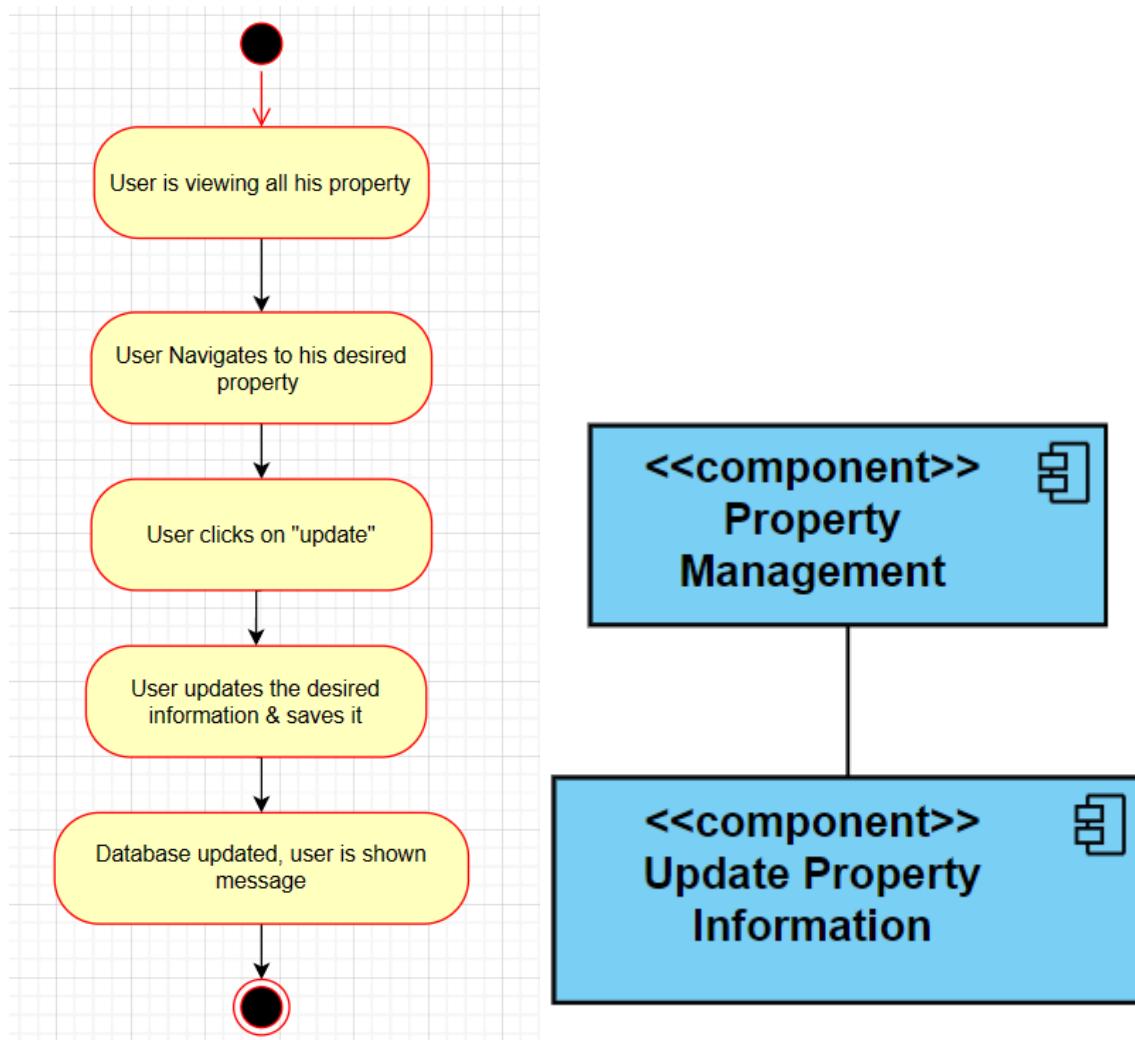
6.1.9 Search Property(Tenant)

The user will use Property Management component to search properties based on specific criteria.



6.1.10 Update Property Information(Owner/Agent)

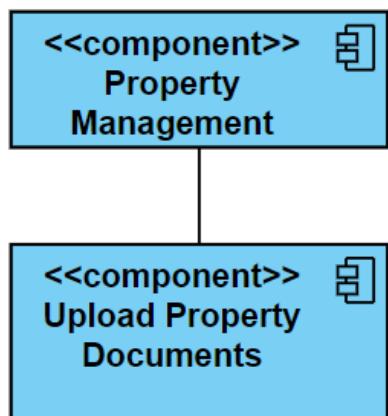
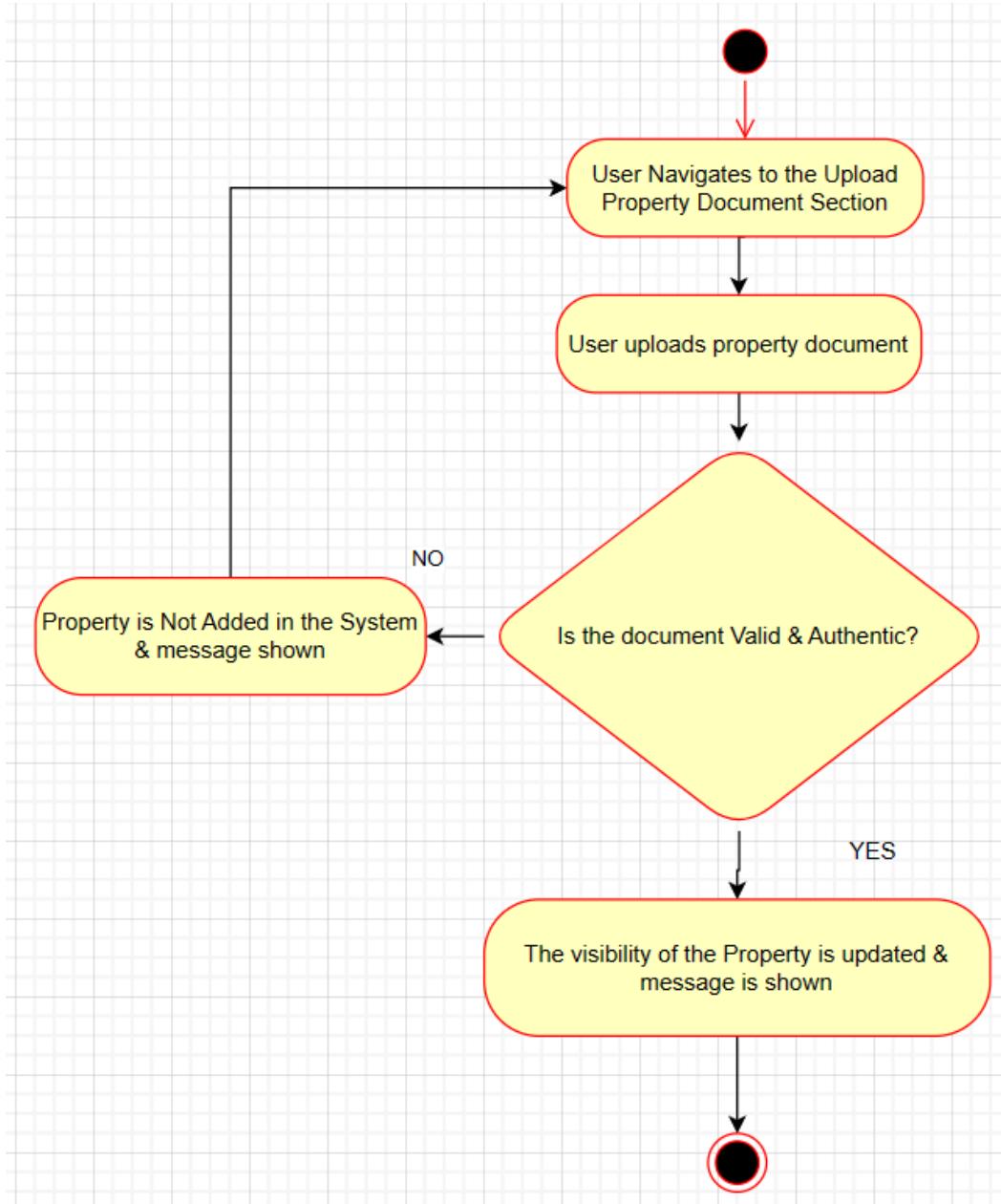
The user will use Property Management component to update any existing property information in the system.



6.1.11 Upload Property Document(Owner/Agent)

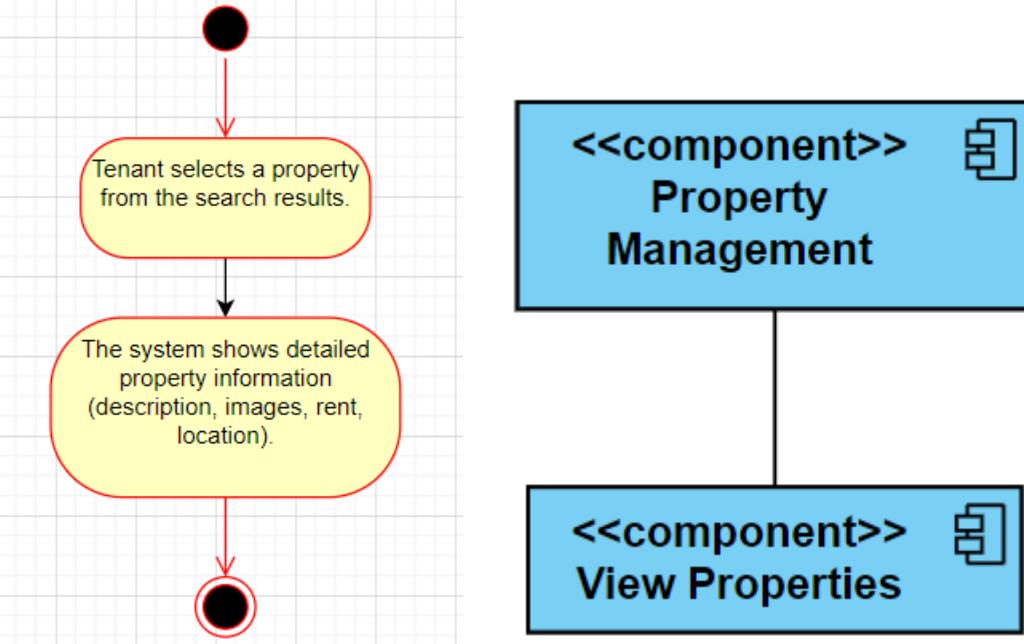
The user will use the Property Management component to upload property documents for verification.

Software Requirements Specification for HomeWoW System



6.1.12 View Properties (Tenant & Searcher)

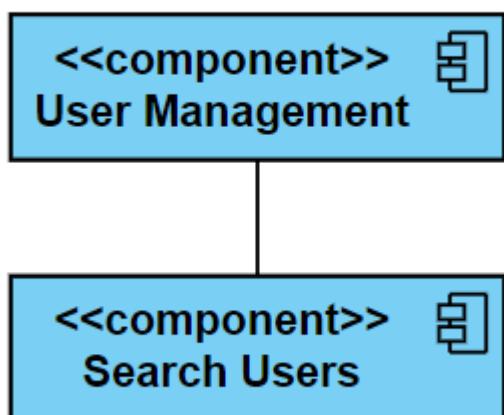
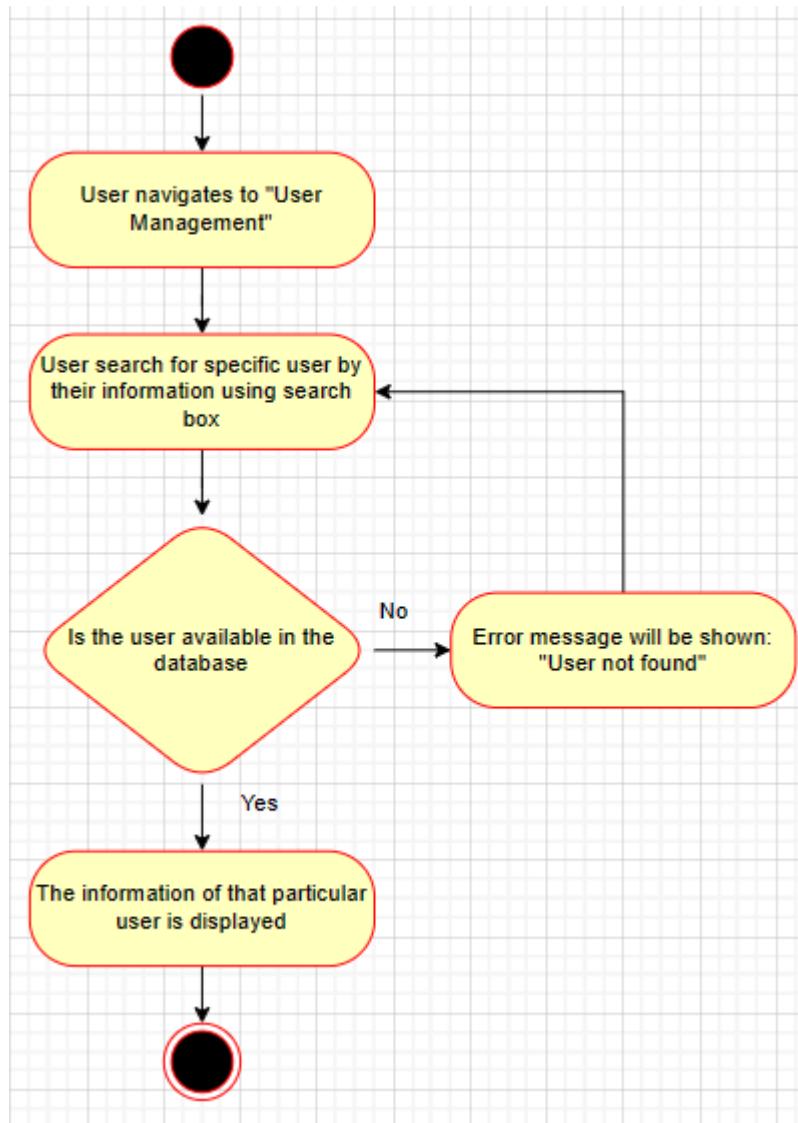
The user will use the Property Management component to view detailed information about a specific property of interest, including descriptions, images, rent, location, and other relevant details.



6.1.13 Search User(Admin)

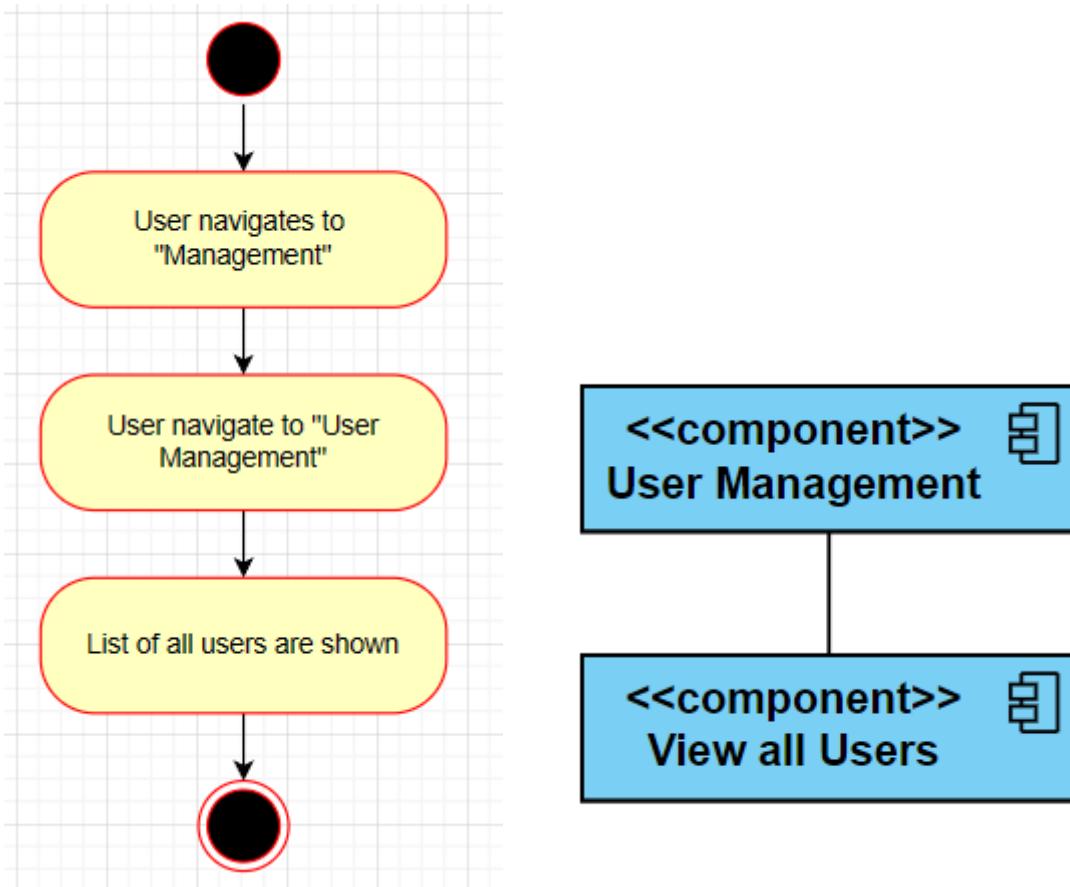
The user will use the User Management component to search for specific users.

Software Requirements Specification for HomeWoW System



6.1.14 View all Users(Admin)

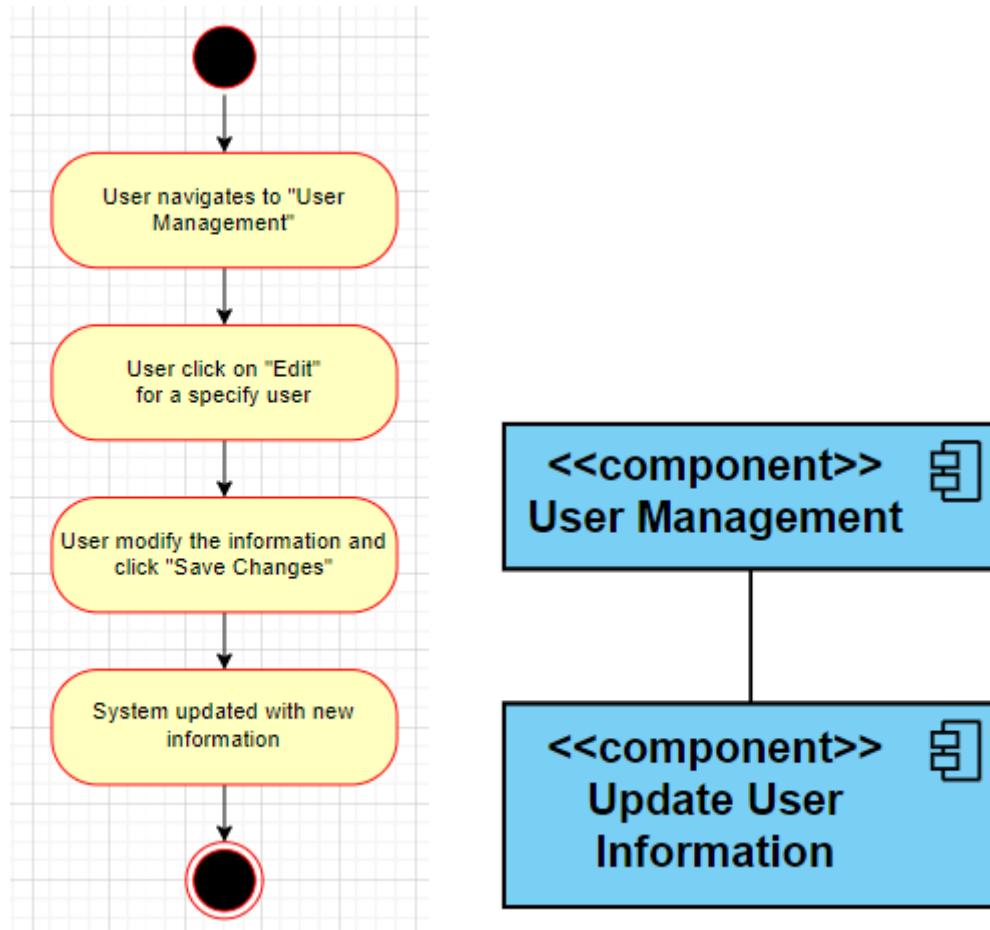
This user will use the User Management component to view the status and information of registered users.



6.1.15 Update User Information(Admin)

The user will use the Update User Information component to update the information of registered users.

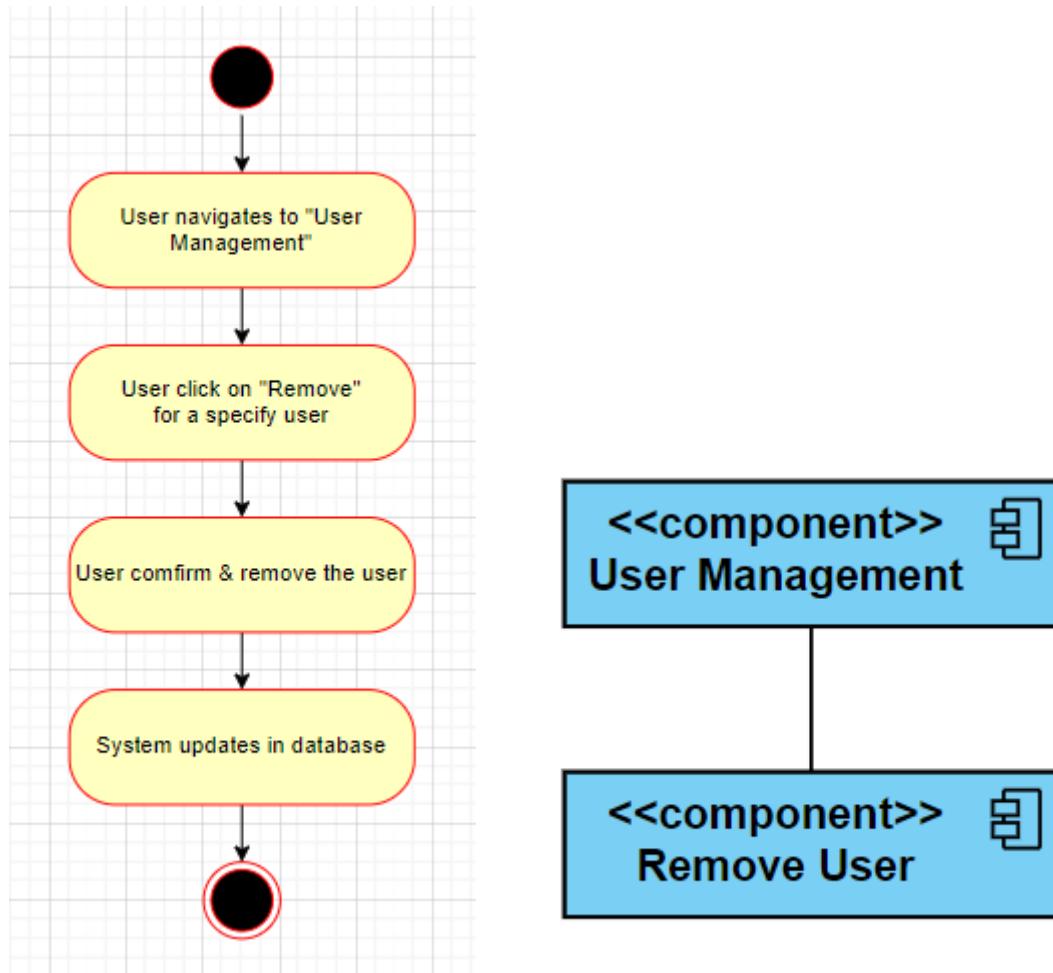
Software Requirements Specification for HomeWoW System



6.1.16 Remove User(Admin)

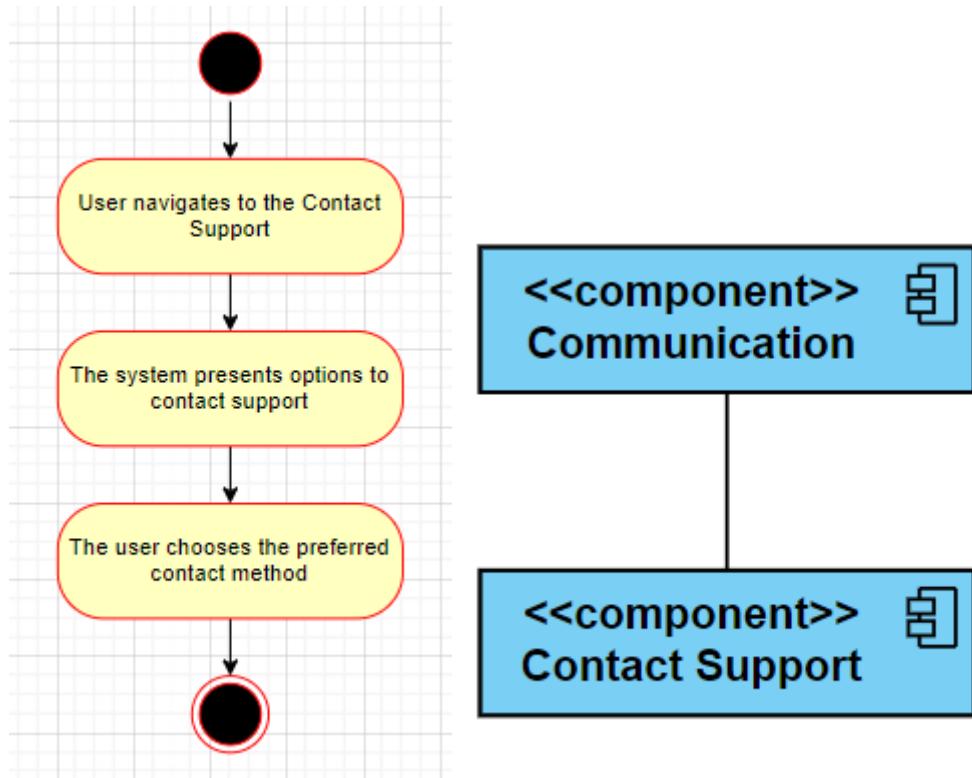
The user will use the Remove User Component to specific user that registered in the web app.

Software Requirements Specification for HomeWoW System



6.1.17 Contact Support(All actor)

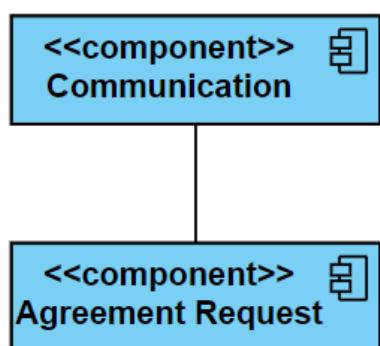
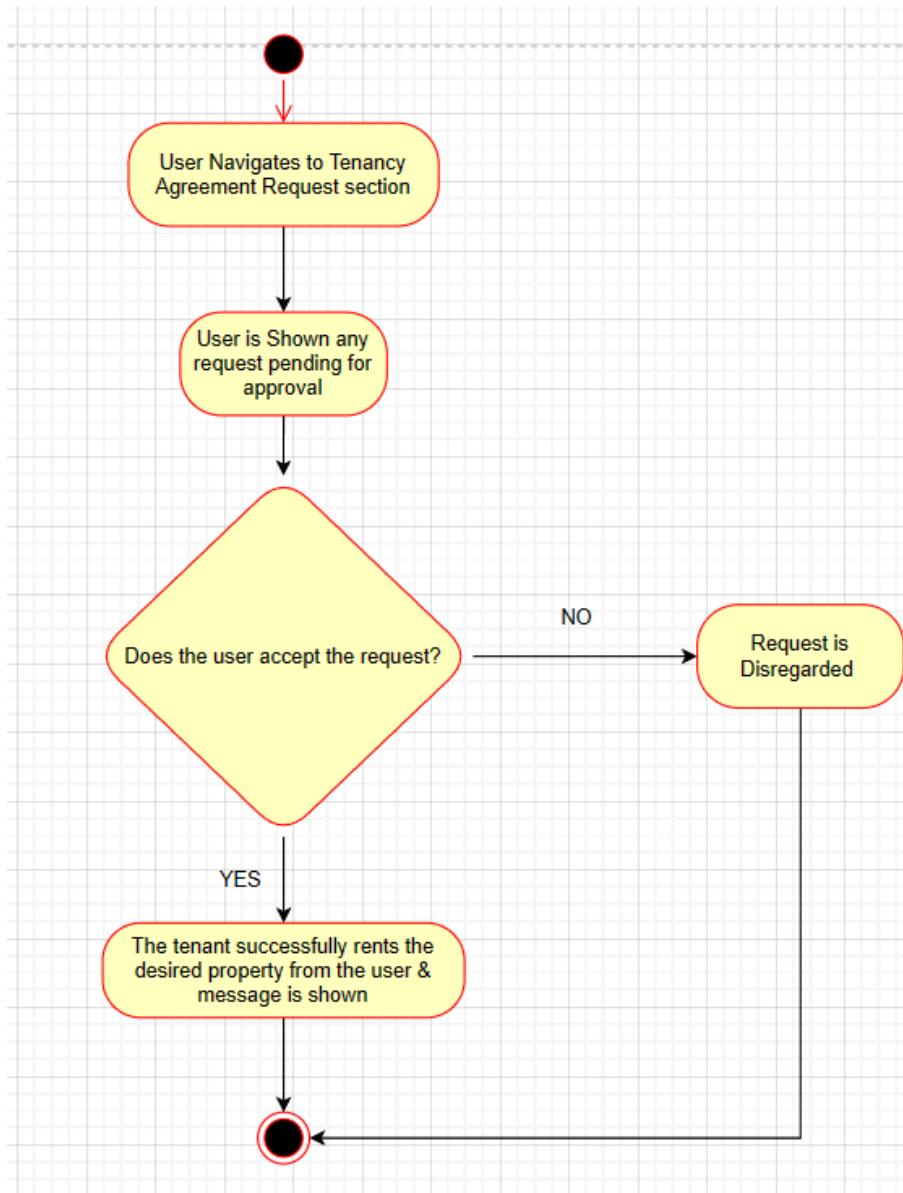
The user will use the Communication component to contact support for assistance.



6.1.18 Agreement Request (Owner/Agent)

The user will use the Communication component to receive a tenancy agreement request sent by the tenant..

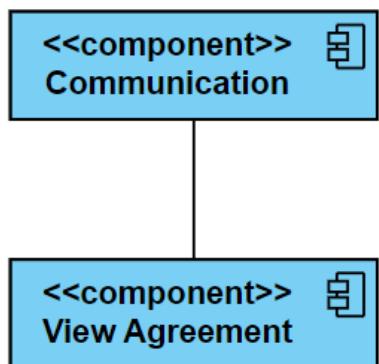
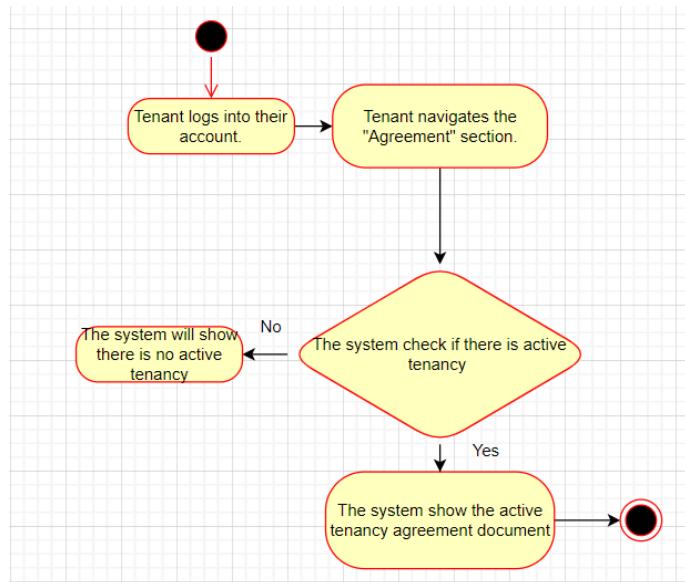
Software Requirements Specification for HomeWoW System



6.1.19 View Agreement(Tenant)

The user will use the Communication component to access and review the approved tenancy agreement for a specific property after the owner/agent accepts the agreement between them.

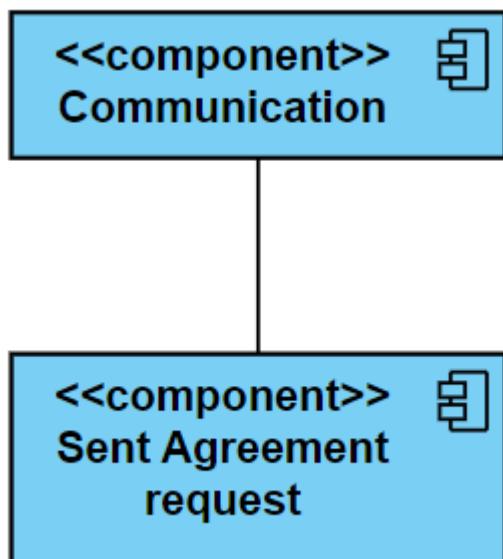
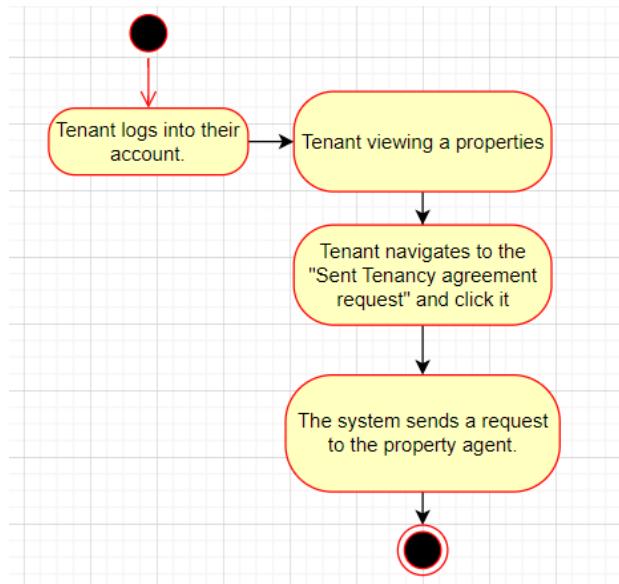
Software Requirements Specification for HomeWoW System



6.1.20 Sent Agreement Request (Tenant)

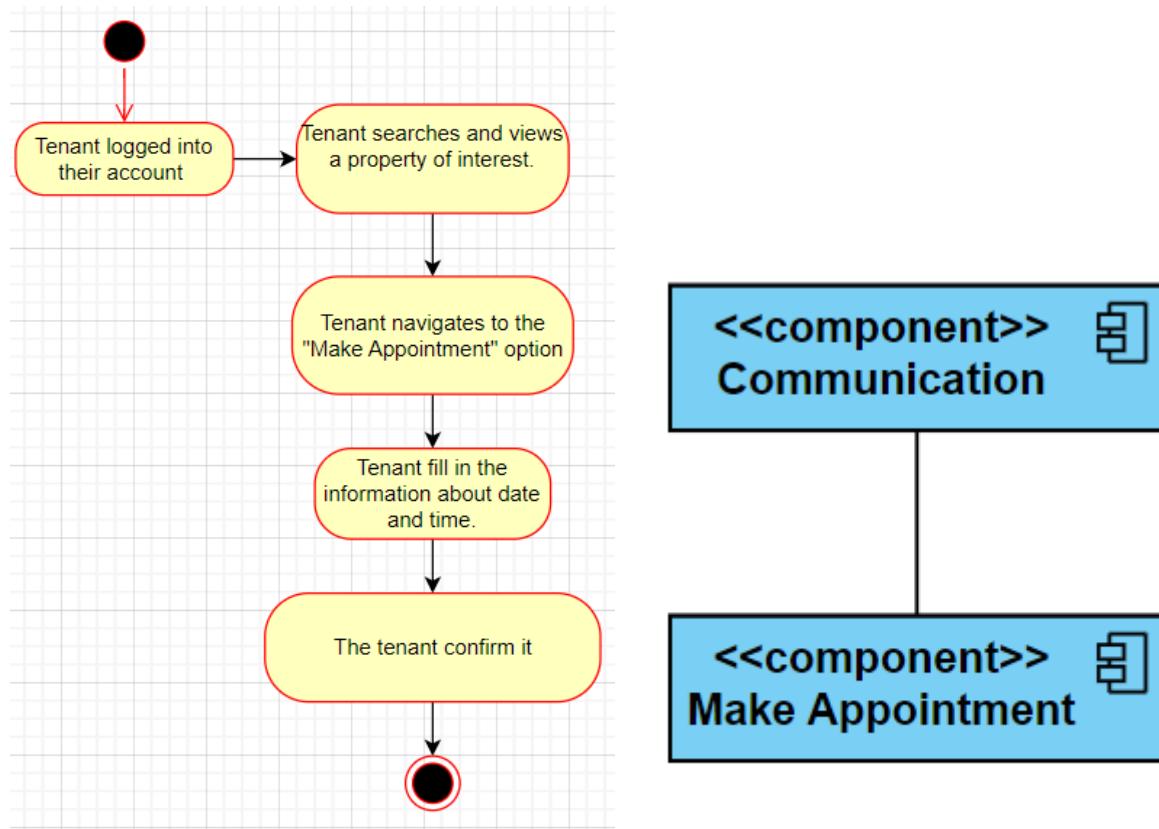
The user will use the Sent Agreement Request component to request access for tenancy agreement.

Software Requirements Specification for HomeWoW System



6.1.21 Make an Appointment (Tenant)

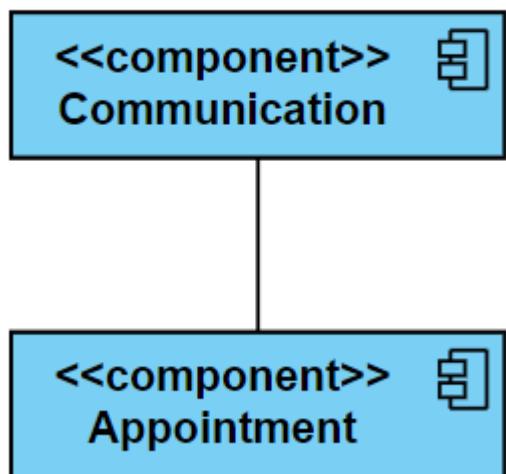
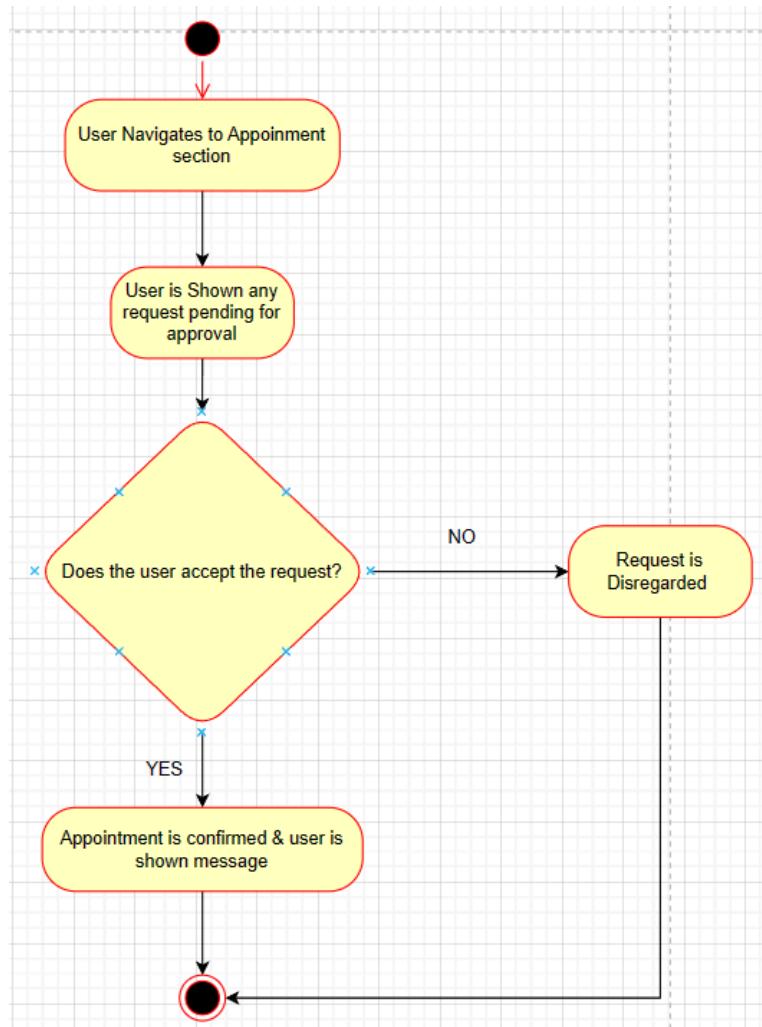
The user will use the Make an Appointment component to schedule appointments with the property owner or agent to view a specific property of interest.



6.1.22 Appointment (Owner/Agent)

The user will use the Communication component to make a decision for an appointment request sent by the tenant, to view a specific property of interest.

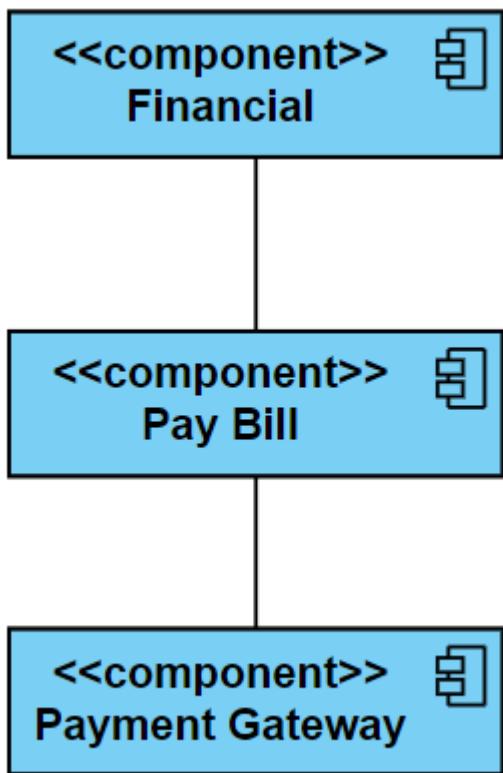
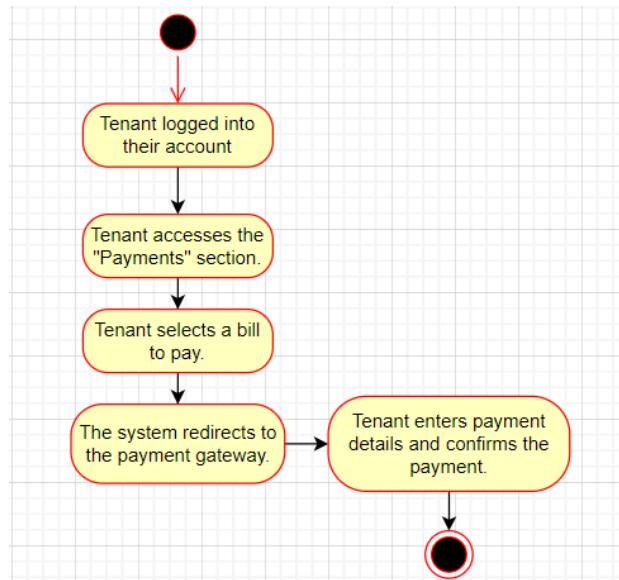
Software Requirements Specification for HomeWoW System



6.1.23 Pay Bill

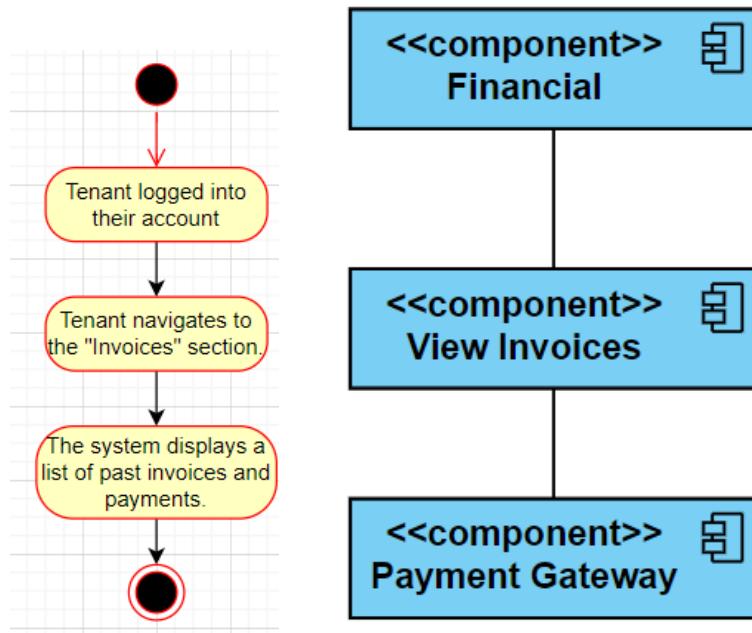
The user will use the Financial Component to securely make payments for bills using the integrated payment gateway.

Software Requirements Specification for HomeWoW System



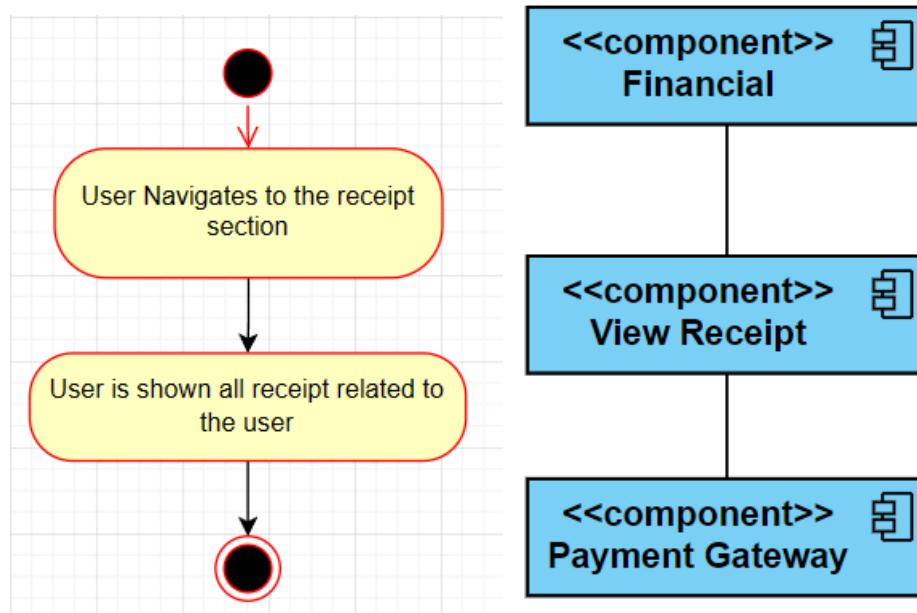
6.1.24 View Invoices

The user will use the Financial component to access and review past invoices associated with their tenancy.



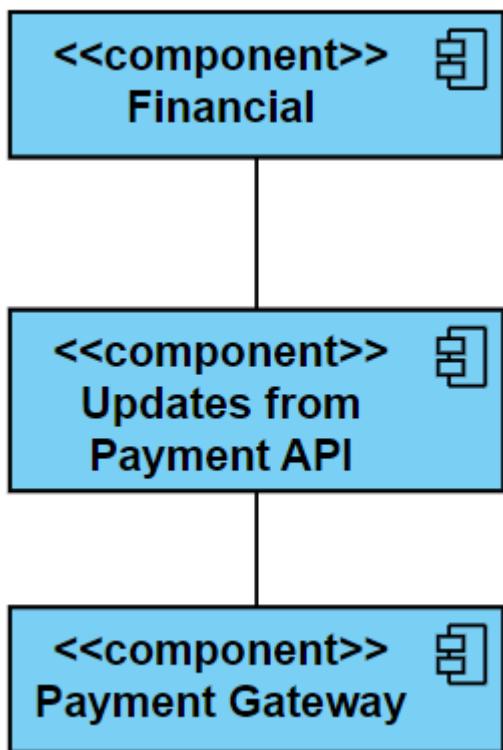
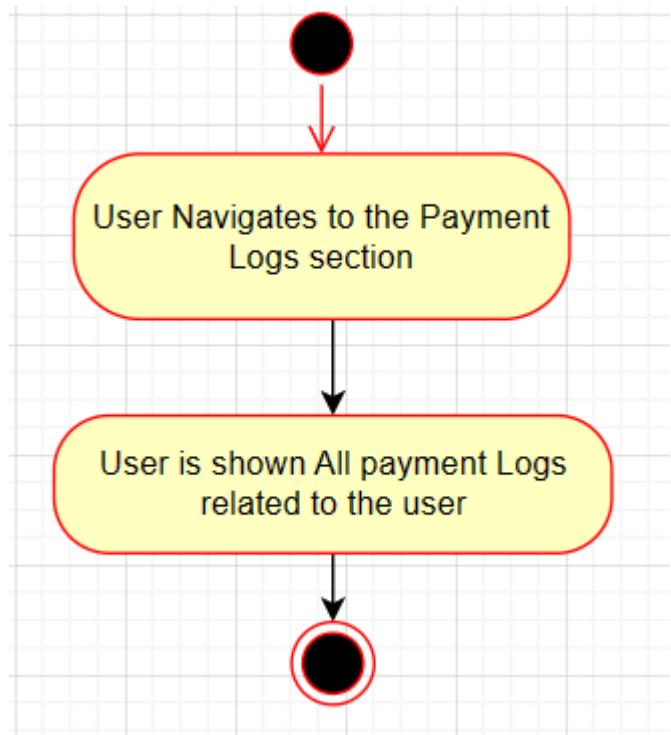
6.1.25 View Receipt

The user will use the Financial component to view review receipts of their past payments.



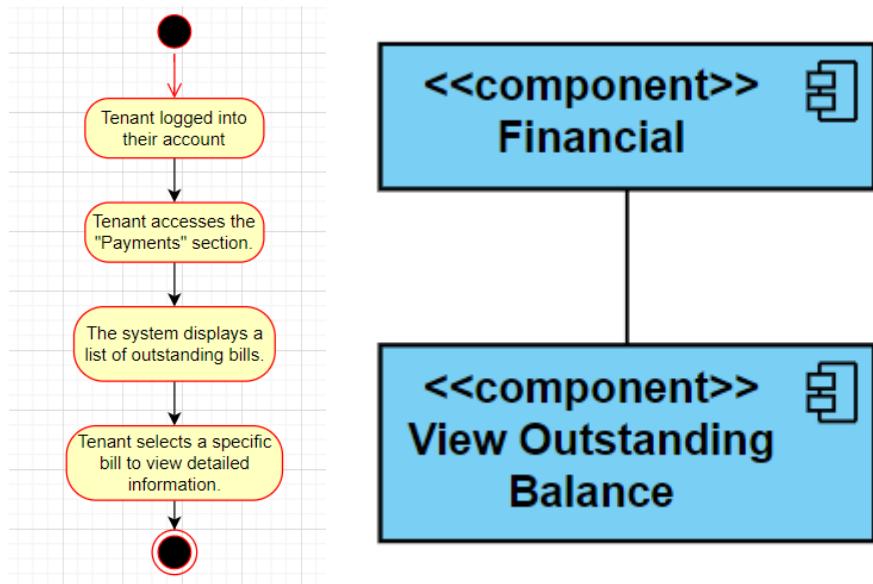
6.1.26 Updates from Payment API

The user will get Updates from the Payment API component to view payment logs from the Payment Gateway system.



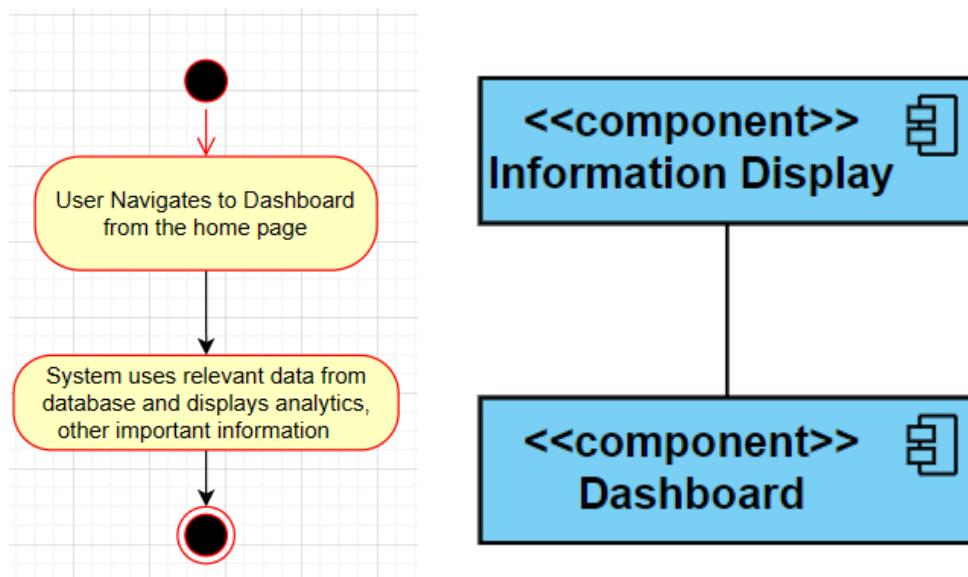
6.1.27 View Outstanding Balance

The user will use the Financial component to access and review details regarding any outstanding balance with their tenancy.

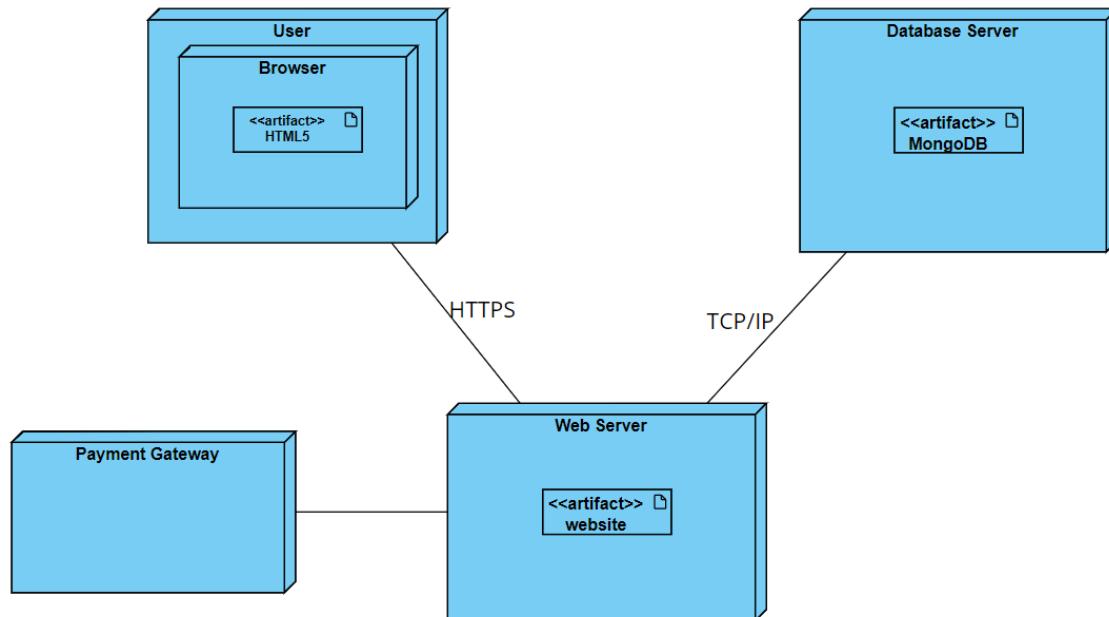


6.1.28 Dashboard

The user will use the Information Display component to view relevant information associated with their account.



7 Deployment Diagram



There is a web server, a database server, and the machine where the user views the website.

The payment gateway is a separate service that is used to process online payments. When a user makes a payment on the website, their payment information is sent to the payment gateway, which then processes the payment and sends the results back to the website.

User Node:

Components: This node represents the end-user perspective, equipped with a web browser (like Chrome, Firefox, Safari, etc.).

Artifact: It holds an HTML5-based artifact, which could be a web application, a set of web pages, or any content developed using HTML5 technology. HTML5 provides a versatile framework for creating interactive and multimedia-rich content that can be accessed through web browsers.

Web Server Node:

Components: This node hosts and serves the web content to users accessing the application or website.

Artifact: The web server node holds the website or web application, composed of HTML, CSS, NodeJS(Javascript).

Database Server Node:

Components: This node primarily manages and stores the data required by the web application.

Artifact: The database server node hosts MongoDB, a NoSQL database solution. MongoDB is designed for flexible and scalable data storage. It stores structured data in a

Software Requirements Specification for HomeWoW System

document-oriented format and is commonly used for various types of applications requiring scalable and efficient data handling.