



American International University-Bangladesh >>>

FACULTY OF SCIENCE AND TECHNOLOGY

OBJECT ORIENTED PROGRAMMING 2

SPRING 2023-24

SECTION: P

GROUP: 03

PROJECT REPORT ON

REAL ESTATE MANAGEMENT SYSTEM

“CHEMINEE REAL ESTATE”

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SUBMISSION DATE:

15th MAY, 2024

DEAR SIR,
TOFAYET SULTAN

WE EXTEND OUR GRATITUDE FOR YOUR GUIDANCE.OUR
TEAM COMPRISES OF MD. EMRAN NAZIR EFTY, RAKIBUL
HASAN, NILADRI BISWAS AND MASHUDH AHMED.
TOGETHER, WE ARE EXCITED TO APPLY YOUR TEACHINGS
TO OUR OBJECT-ORIENTED PROGRAMMING 02 PROJECT
AND CREATE SOMETHING EXCEPTIONAL.

BEST REGARDS FROM
GROUP-03

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➤ Title:

Real Estate Management System (**CHEMINEE REAL ESTATE**)

➤ Introduction:

The Real Estate Management System (REMS) is designed to be a dynamic and robust software application tailored for the effective management of real estate properties. It serves multiple user types, including administrators, employees, property owners and clients. Each user type has access to a tailored set of functionalities that streamline operations ranging from property listings, user management and client interactions. REMS aims to simplify the complexities associated with real estate management while enhancing user engagement and satisfaction through a user-friendly digital platform. This system is not only a tool for managing properties but also a facilitator of enhanced communication and operational efficiency in real estate transactions.

➤ Case Study:

The implementation of REMS marked a pivotal shift in the operational landscape of the mid-sized real estate company. By addressing the inherent inefficiencies and limitations of their previous systems, REMS ushered in a new era of streamlined operations and enhanced customer service.

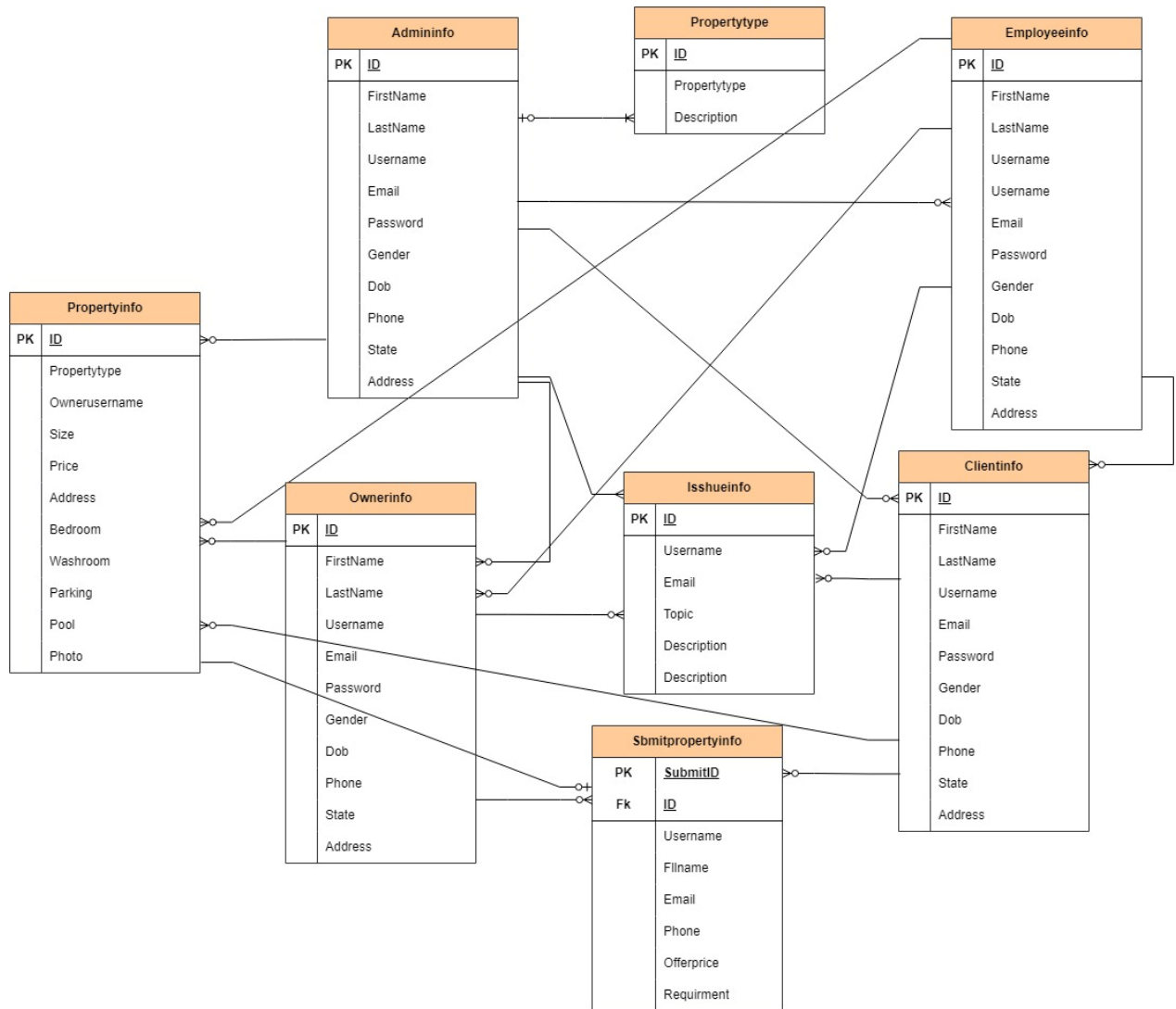
With the centralization of property information, stakeholders across the organization gained unprecedented access to real-time data, enabling informed decision-making and fostering collaboration among teams. This not only reduced the likelihood of errors in data handling but also ensured consistency and accuracy across property listings.

The automation of user account and property listing management significantly reduced the administrative burden on employees, allowing them to allocate more time and resources to value-added tasks such as client engagement and business development. This new-found efficiency translated into tangible improvements in response times to client inquiries and issues, ultimately enhancing the overall customer experience and satisfaction.

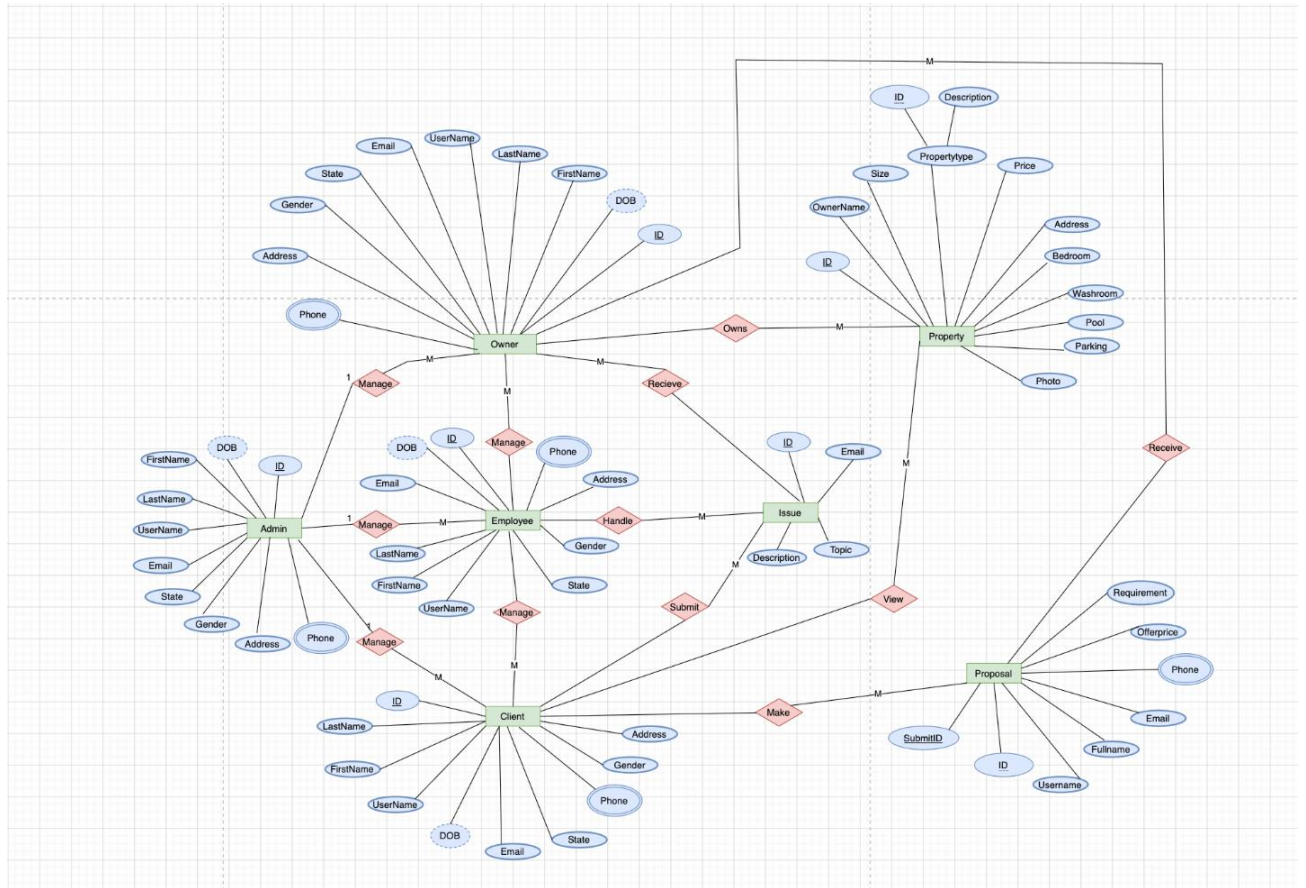
Furthermore, the introduction of real-time communication and negotiation capabilities empowered property owners and clients alike, facilitating smoother and more transparent transactions. By providing a platform for direct interaction, REMS fostered trust and transparency in client relationships, laying the foundation for long-term partnerships and repeat business.

In summary, the adoption of REMS not only addressed the immediate challenges faced by the company but also positioned it for sustainable growth and success in a competitive market. The trans-formative impact of REMS underscored the importance of leveraging technology to drive operational excellence and enhance customer satisfaction in the real estate industry.

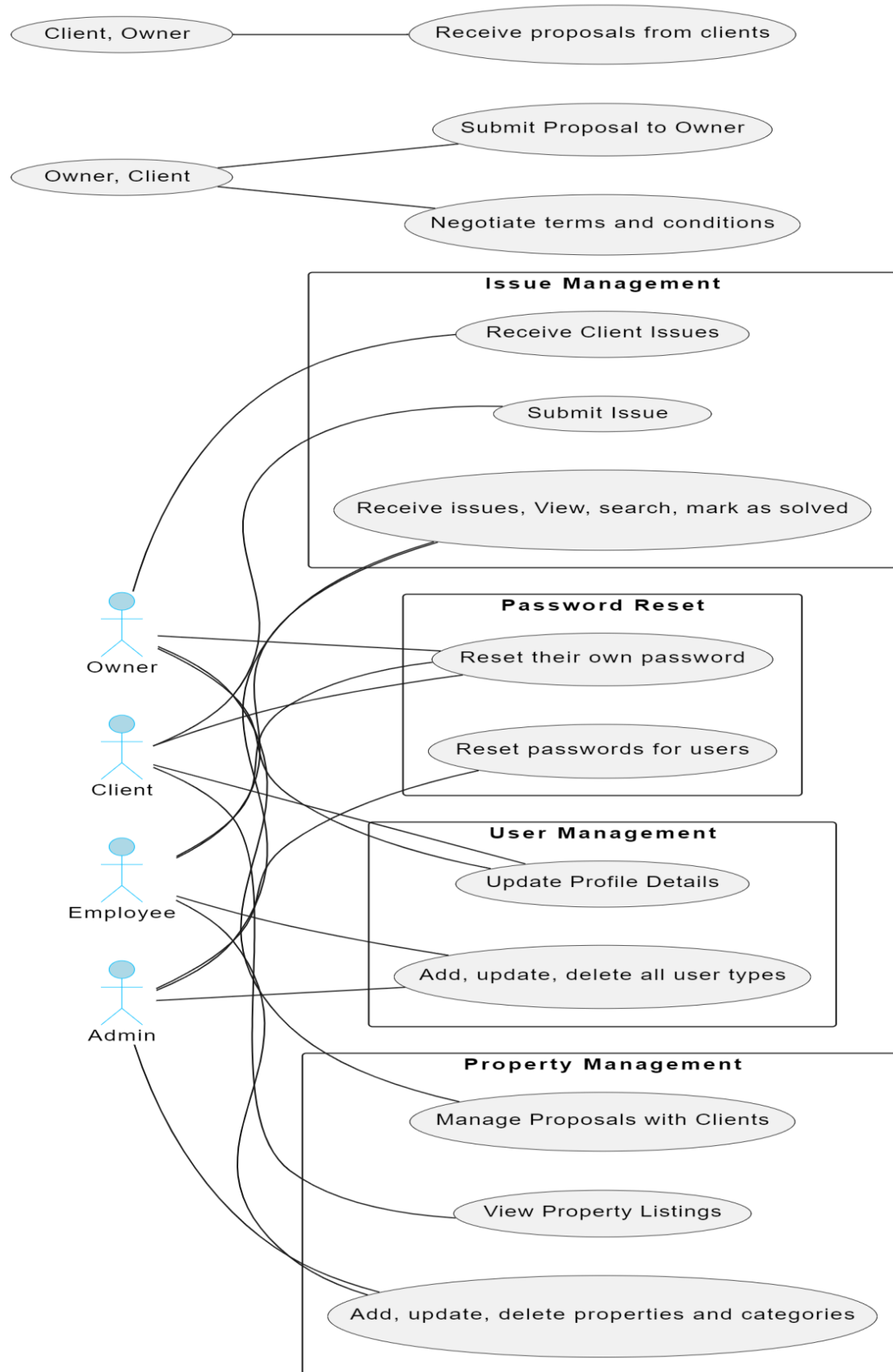
DATABASE SCHEMA



ER DIAGRAM



ACTIVITY DIAGRAM



TRANSITION DIAGRAM

➤ Login & Sign-Up:



Figure 1: Login & Sign-Up Procedure

➤ Admin Features:

● Administrator:

The image shows two screenshots of the CHEMINEE Real Estate Admin Dashboard. The top screenshot is the 'Overview' page, and the bottom screenshot is the 'Register Admin' page. A line connects the 'Administrator' button in the top screenshot to the 'Register Admin' page in the bottom screenshot.

Overview Page:

- Header: CHEMINEE Real Estate, [Admin] Signed as, Log Out
- Left Sidebar: Administrator (selected), Employee, Client, Client, Property, Property-Type, View House
- Right Content: CHEMINEE Real Estate logo

Register Admin Page:

Form fields for registration:

- First Name:
- Last Name:
- User Name:
- Email:
- Password:
- Gender: ☐ Male ☐ Female
- Date Of Birth: Saturday, May 11, 2024
- Phone:
- State: Dhaka
- Address:
- Buttons: Add, Update


User Table:

ID	FirstName	LastName	Username	Email
22-47802-2	Md. Emren Nazir	Elty	mdemrennazir...	mdemrenna...
111	admin	admin	admin	admin@gh...
CBFC3660-C77C...	asd	asd	asd	asd
F8A49C85-362...	asd	asd	asd	asd
1C18C14E-C617...	qqq	qqq	qqq	qqq
95478878-79CB...	aaa	aaa	aaa	aaa
*				

Figure 2: Administrator Details

● Employee:

Overview



Administrator

Employee

Owner

Client

Property

Property-Type

View Issue

Registeremployee

[Register Employee]

First Name:

Last Name:

User Name:

Email:

Password:

Gender: ☐ Male ☐ Female

Date Of Birth: Saturday , May 11, 2024

Phone:

State: Dhaka

Address:

Add

User Name: Search


ID	FirstName	LastName	Username	Email
123	employee	employee	employee	employee@
111	employee	employee	employee	employee
B908BDAF-591...	asd	asd	asd	asd
D0EFD8C0-CF1...	test	test	test	test

Update

Figure 3: Register Employee

● Owner:

Overview



Administrator

Employee

Owner

Client

Property

Property-Type

View Issue

Registerowner

[Register Owner]

First Name:

Last Name:

User Name:

Email:

Password:

Gender: ☐ Male ☐ Female

Date Of Birth: Saturday , May 11, 2024

Phone:

State: Dhaka

Address:

Add

User Name: Search


ID	FirstName	LastName	Username	Email
06C8ED98-48E...	owner	owner	owner	owner
873F48B9-F7F4...	efty	efty	efty	efty
2D1902AD-27A...	owner	owner	Owner	owner
7BD706EF-FF3C...	owner	owner	Owner	owner
B29CB4C7-0A1...	asd	asd	asd	asd

Update

Figure 4: Register Owner

● Client:

Overview



Administrator

Employee

Owner

Client

Property

Property-Type

View Issue

Registerclient

[Register Client]

First Name:

Last Name:

User Name:

Email:

Password:

Gender: ☐ Male ☐ Female

Date Of Birth: Saturday , May 11, 2024

Phone:

State: Dhaka

Address:

Add

User Name:

Search


ID	FirstName	LastName	Username	Email
5D92075E-597C...	client	client	client	client@gmail.com
157A1491-C889...	asd	asd	asd	asd
4F31A635-7A18...	siam	ahmed	siam	siam@gmail.com

Update

Figure 5: Register Client

● Property:

Overview



Administrator

Employee

Owner

Client

Property

Property-Type

View Issue

Property

[Property]

Property Type: Town

Owner Username:

Size:

Price:

Address:

Bedroom: 0

Washroom: 0

Parking: ☐

Pool: ☐

Add Photo: Browse

Add

Value:

Search

View All Property

Delete

Figure 6: Property Listing

- Property type:

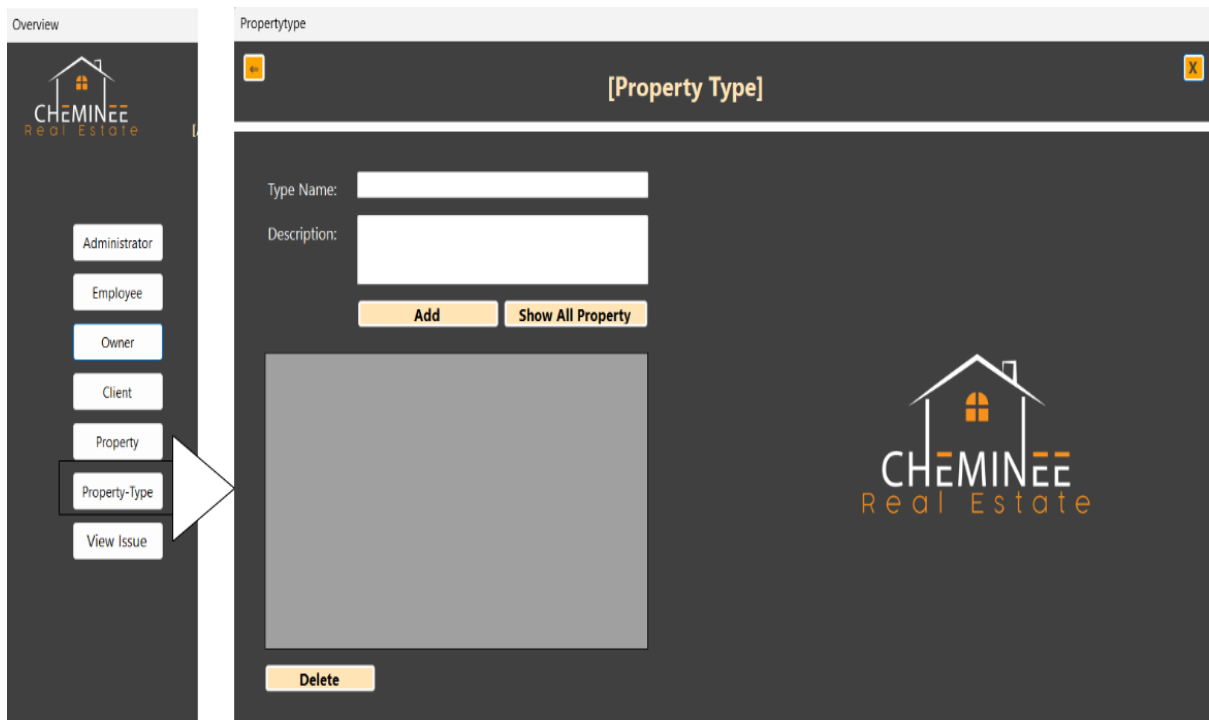


Figure 7: Property type listing

- View Issue :

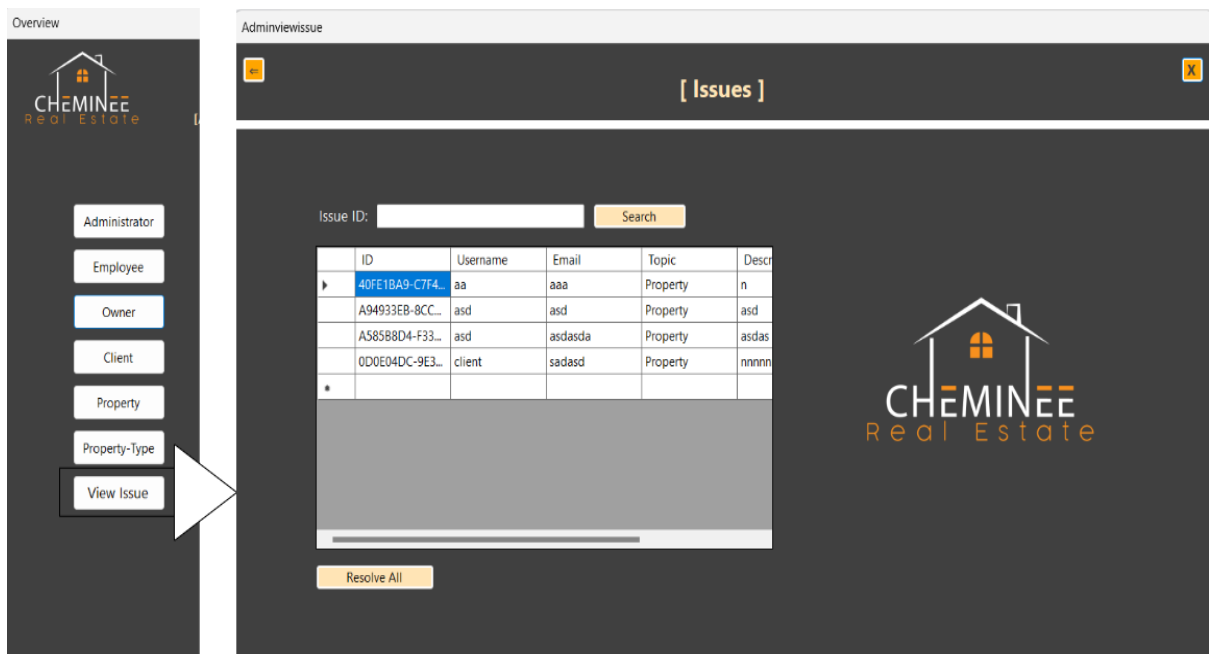


Figure 8: View Submitted Issue

➤ Employee features:

- Employee Details

Employeeoverview



[Employee] Signed as,

Log Out

Employee Details

Owner Details

Client Details

Property

Property Image

View Issue

Reset Password



Employeeemployeedetails



[Employee]



First Name:

Last Name:

User Name:

Email:

Password:

Gender: ☐ Male ☐ Female

Date Of Birth: Saturday , May 11, 2024

Phone:

State: Dhaka

Address:

Add

User Name:

Search

	ID	FirstName	LastName	Username	Email
▶	123	employee	employee	employee	employee@
	111	employee	employee	employee	employee
	B90BBD AF-591...	asd	asd	asd	asd
	D0EFDBC0-CF1...	test	test	test	test
•					

Update

Figure 9: View, Add, Update & Search Employee Details

- Owner details:

Employeeoverview

Employee Details
Owner Details
Client Details
Property
Property Image
View Issue
Reset Password

Employeeownerdetails

[Owner Details]

First Name:
Last Name:
User Name:
Email:
Password:
Gender:
Male
Female
Date Of Birth:
Saturday , May 11, 2024
Phone:
State:
Dhaka
Address:

Add

User Name:
Search

ID	FirstName	LastName	Username	Email
06CBED9B-48E...	owner	owner	owner	owner
B73F48B9-F7F4...	efty	efty	efty	efty
2D1902AD-27A...	owner	owner	Owner	owner
78D706EF-FF3C...	owner	owner	Owner	owner
B29CB4C7-0A1...	asd	asd	asd	asd

Update

Figure 10: View, Add, Update & Search Owner Details

- Client Details

Employeeoverview

Employee Details
Owner Details
Client Details
Property
Property Image
View Issue
Reset Password

Employeeclientdetails

[Client Details]

First Name:
Last Name:
User Name:
Email:
Password:
Gender:
Male
Female
Date Of Birth:
Saturday , May 11, 2024
Phone:
State:
Dhaka
Address:

Add

User Name:
Search

ID	FirstName	LastName	Username	Email
5D92075E-597C...	client	client	client	client@gma
157A1491-C889...	asd	asd	asd	asd
4F31A635-7A18...	siam	ahmed	siam	siam@gmai

Update

Figure 11: View, Add, Update & Search Client Details .

- Property

Employeeoverview

Employee Details
Owner Details
Client Details
Property
Property Image
View Issue
Reset Password

EmployeeProperty

[Property]

Value:

View All Property

Property Type:
Owner Username:
Size:
Price:
Address:
Bedroom:
Washroom:
Parking: ☐
Pool: ☐
Add Photo:

Figure 12: Property Listing

- Property Image

Employeeoverview

Employee Details
Owner Details
Client Details
Property
Property Image
View Issue
Reset Password

EmployeePropertyImage

[Property Image]

Select Property Type

	Propertytype
▶	Indristial
	Village
	Town
	Residential
*	

Property View

Select Property Details:

- View Issue

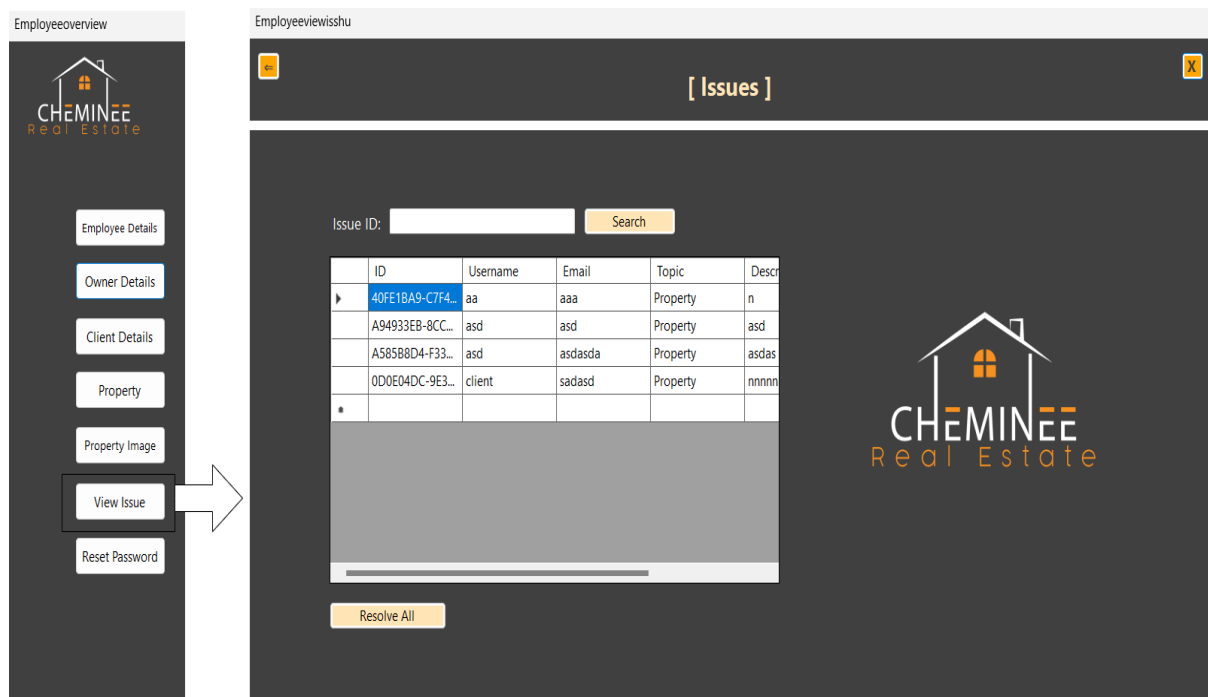


Figure 14: View, Search and Solve Issues

- Reset Password

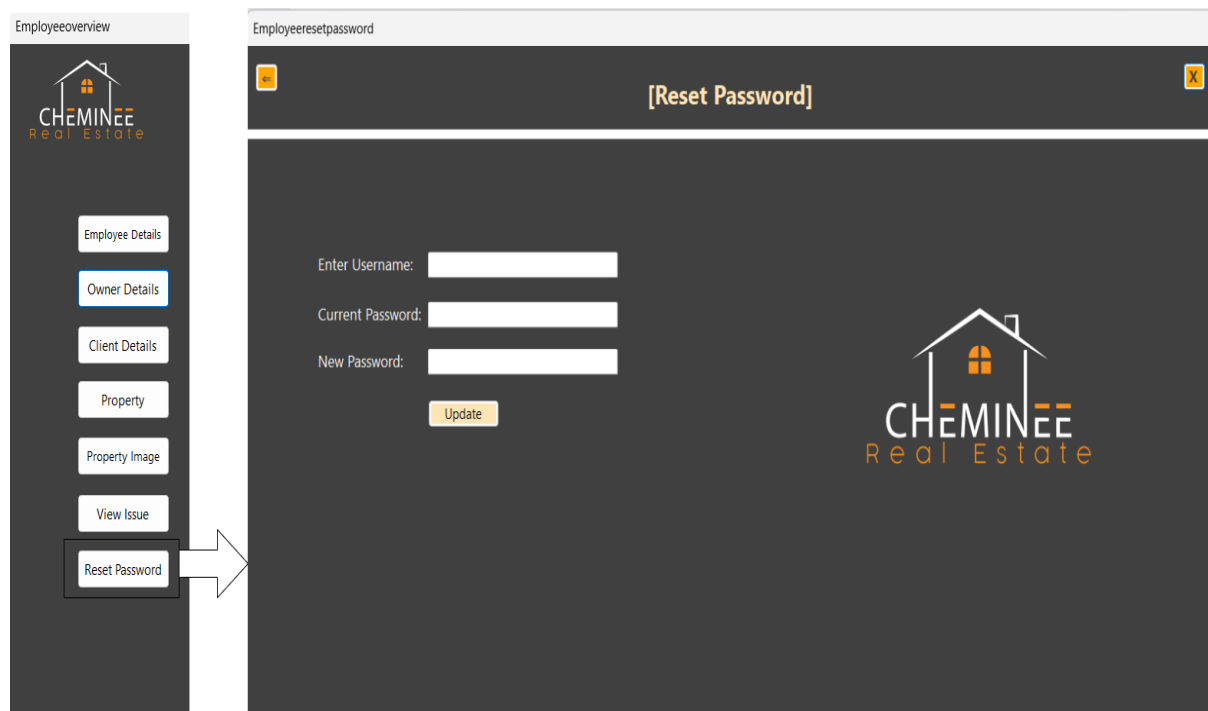


Figure 15: Reset Password

➤ Owner Feature:

● Owner Details:

Owneroverview

CHEMINEE
Real Estate

[Owner] Signed as,

Log Out

Owner Details

Add Property

Property Image

Submit Issue

View Proposal

Reset Password

CHEMINEE
Real Estate

Ownerownerdetails

[My Details]

update

First Name:

Last Name:

User Name:

Email:

Password:

Gender: ☐ Male ☐ Female

Date Of Birth:

Phone:

State:

Address:

Figure 16: Owner Details

- Add property:

Owneroverview

CHEMINEE Real Estate

Owner Details

Add Property

Property Image

Submit Issue

View Proposal

Reset Password

Owneraddproperty

[Add Property]

Property Type: Town

Owner Username:

Size:

Price:

Address:

Bedroom: 0

Washroom: 0

Parking: ☐

Pool: ☐

Add Photo: Browse

Add

CHEMINEE Real Estate

Figure 17: Add Property

- Submit Issue:

Owneroverview

CHEMINEE Real Estate

Owner Details

Add Property

Property Image

Submit Issue

View Proposal

Reset Password

Ownersubmitissue

[New Issue]

Username:

Email:

Topic: Account

Description:

Submit

CHEMINEE Real Estate

Figure 18: Submit Issue

- View Proposal:

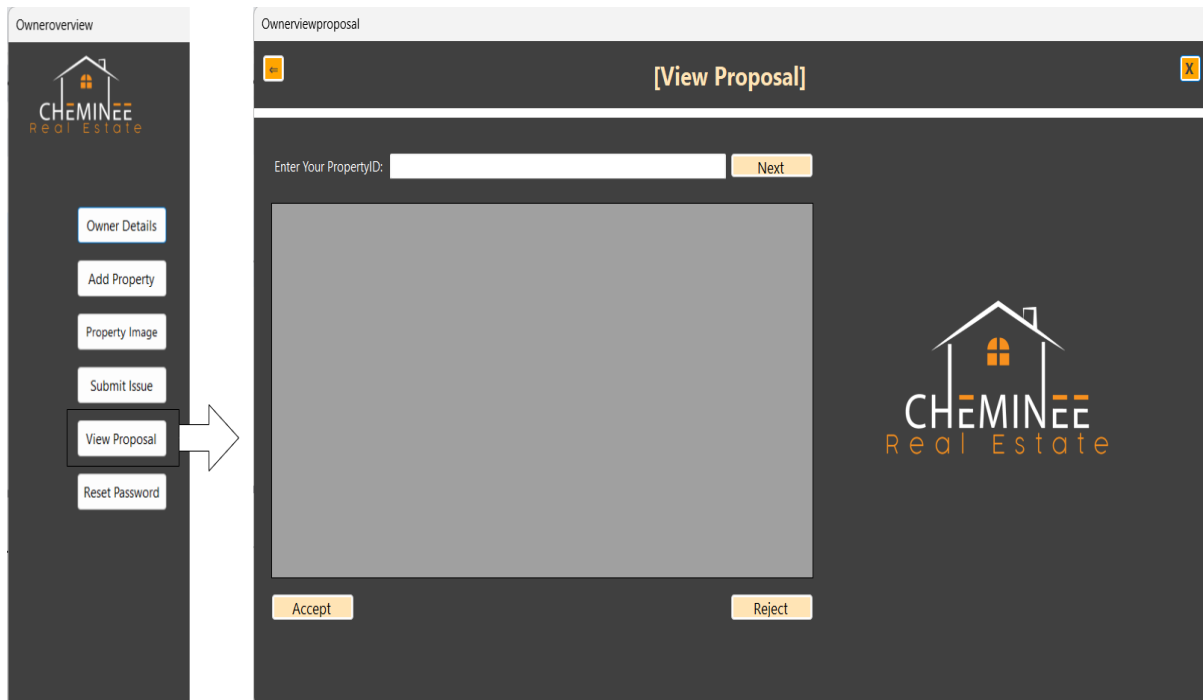


Figure 19: View Submitted Proposal

- Reset Password:

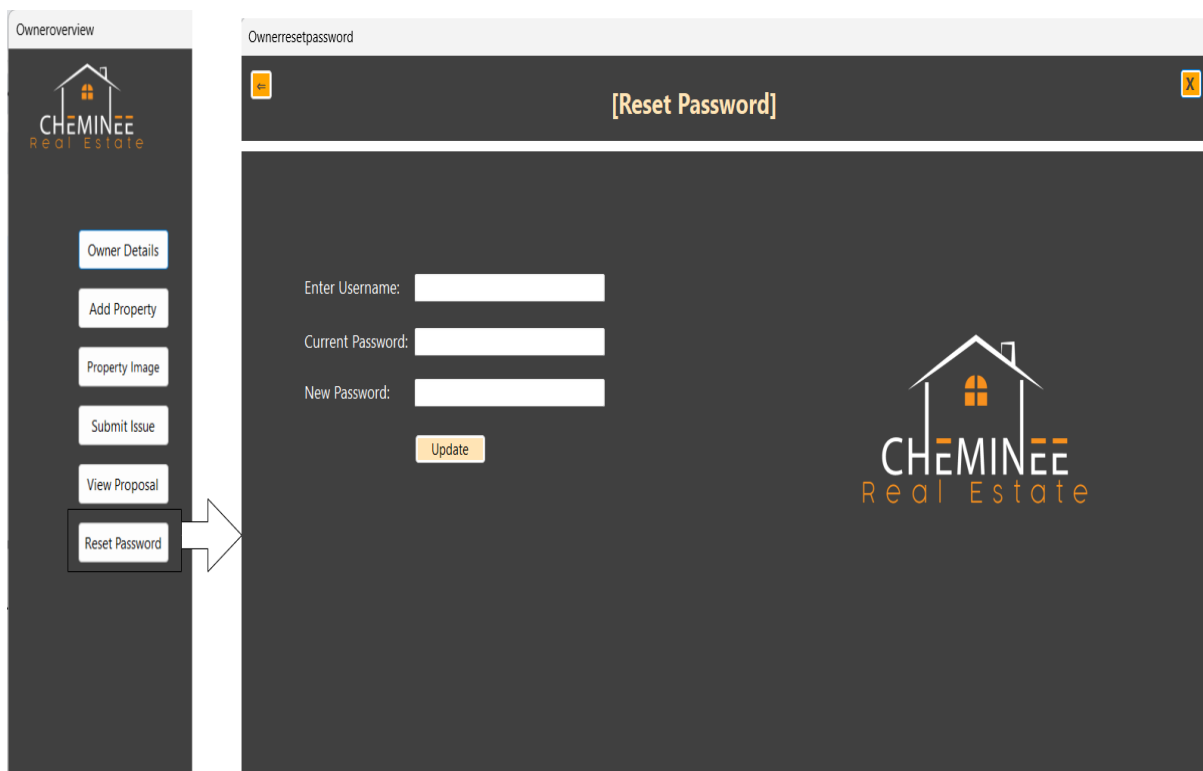


Figure 20: Reset Password

➤ Client features:

● Client Details

The figure consists of two screenshots of a web application interface, connected by a large white arrow pointing from the first to the second.

Top Screenshot (Client Overview):

- Page title: Clientoverview
- Header: CHEMINÉE Real Estate logo, [Client] Signed as, Log Out button.
- Left sidebar menu:
 - Client Details (highlighted with a blue border and a black box)
 - Property Image
 - Submit Issue
 - Reset Password
- Main content area: CHEMINÉE Real Estate logo.

Bottom Screenshot (Client Details Update):

- Page title: Clientclientdetails
- Header: [My Details]
- Left sidebar menu:
 - First Name: [text input]
 - Last Name: [text input]
 - User Name: [text input]
 - Email: [text input]
 - Password: [text input]
 - Gender: ☐ Male ☐ Female
 - Date Of Birth: Saturday , May 11, 2024 (dropdown)
 - Phone: [text input]
 - State: [dropdown]
 - Address: [text input]
- Right sidebar: update button, [large gray placeholder area]

Figure 21: View Client Details & Update

● Property Image:

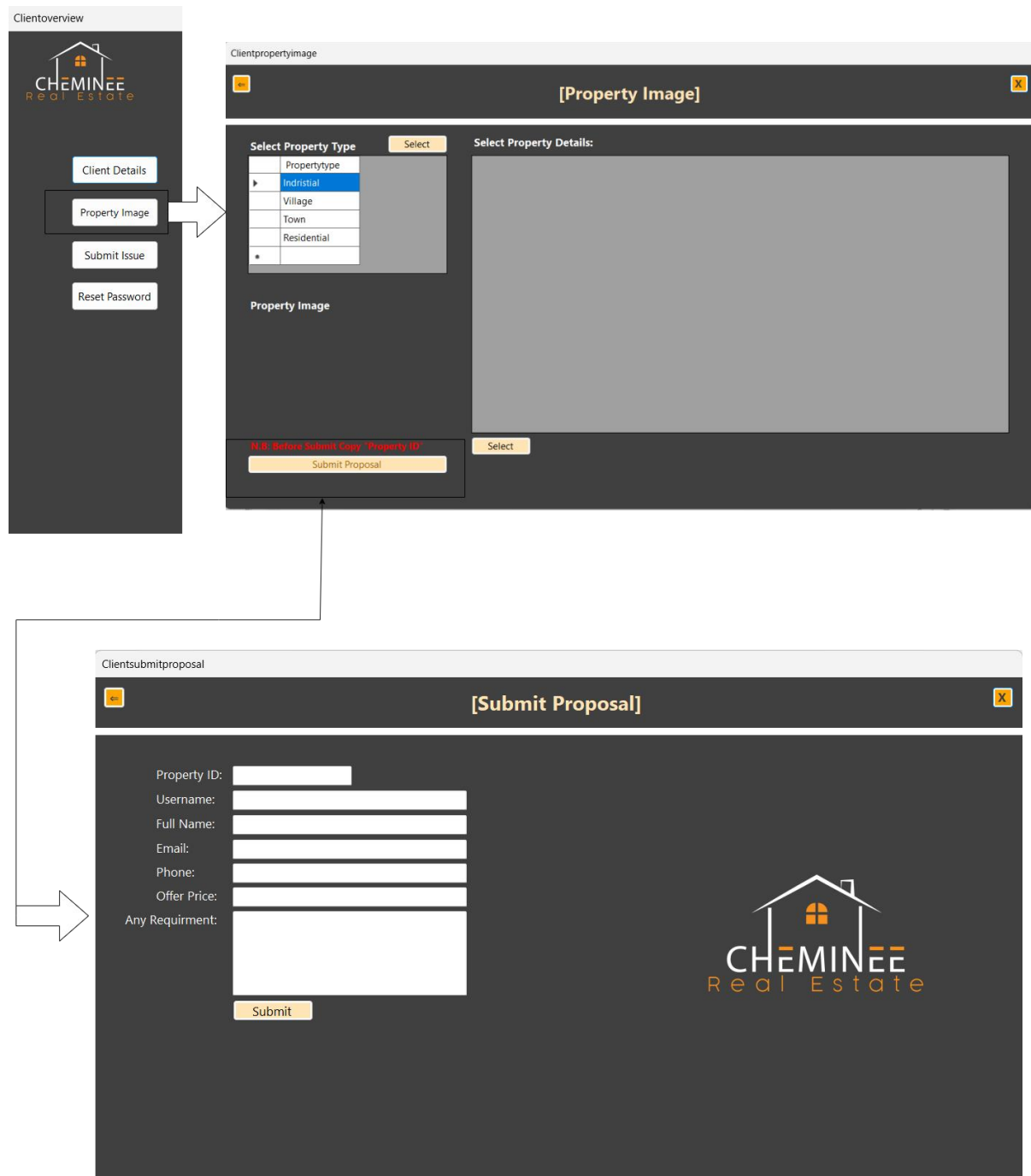


Figure 22: Add Property Image and Submit Proposal

● Submit Issue

The image shows a two-part interface. On the left, a sidebar titled 'Clientoverview' contains the Cheminee Real Estate logo and four buttons: 'Client Details', 'Property Image', 'Submit Issue' (highlighted with a red box and an arrow pointing right), and 'Reset Password'. On the right, the main content area is titled 'Clientsubmitissue' and '[New Isshu]'. It contains a form with the following fields: 'Username:' (text input), 'Email:' (text input), 'Topic:' (dropdown menu with 'Account' selected), and 'Description:' (large text area). A yellow 'Submit' button is at the bottom of the form. The Cheminee Real Estate logo is also displayed on the right side of the form area.

Figure 23: Submit Issue

● Reset Password

The image shows a two-part interface. On the left, a sidebar titled 'Clientoverview' contains the Cheminee Real Estate logo and four buttons: 'Client Details', 'Property Image', 'Submit Issue', and 'Reset Password' (highlighted with a red box and an arrow pointing right). On the right, the main content area is titled 'Clientresetpassword' and '[Reset Password]'. It contains a form with the following fields: 'Enter Username:' (text input), 'Current Password:' (text input), and 'New Password:' (text input). A yellow 'Update' button is located below the 'New Password' field. The Cheminee Real Estate logo is also displayed on the right side of the form area.

Figure 23: Reset Password

➤ Features of the Project

1. User Management:

- Admins can add, update and delete profiles for employees, owners and clients, ensuring proper access and security.
- Employees can manage owner and client profiles, supporting administrative tasks and client service.

2. Property Management:

- Users with required permissions can add, update and delete property listings and categories, which streamlines the property handling process.

3. Issue Management:

- A unified platform for receiving, viewing, searching and resolving issues raised by users enhances communication and operational responsiveness.

4. Proposal and Negotiation Management:

- Owners and clients can initiate and negotiate proposals directly through the system, making the transaction process smoother and faster.

5. Access and Security:

- All user types have the capability to reset their passwords, safeguarding user access and enhancing system security.

6. Client and Property Interaction:

- Clients can view property listings, submit issues and propose negotiations, empowering them in the real estate transaction process.

➤ Conclusion

The Real Estate Management System is a comprehensive solution designed to meet the diverse needs of the real estate market. By integrating multiple functionalities into a single platform, REMS provides a seamless, efficient, and user-friendly experience for all stakeholders involved in real estate management. The system not only improves operational deficiencies but also fosters better client relations and business growth through enhanced communication and management capabilities. As the real estate industry continues to evolve, REMS is well-positioned to adapt to changing demands, demonstrating its long-term viability and value to the real estate sector.