

An-Najah National University



Faculty of Engineering and Information Technology
Software Graduation Project



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June 7 ,2026

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Acknowledgment

We would like to express our sincere gratitude to our supervisors, Dr. Sufyan Samara and Dr. Amjad Abu Hassan, for their valuable guidance, support, and continuous encouragement throughout this project.

We also thank the Department of Computer Engineering at An-Najah National University for providing us with the knowledge and skills that helped us complete this work.

Finally, we would like to thank our families and friends for their support, patience, and motivation throughout this journey.

Thank you all.

Abstract

Ownly is a real estate platform designed to simplify the process of buying, selling, and managing properties through a modern and user-friendly system. The platform connects property owners, buyers, real estate experts, and administrators within a single environment, making property management more efficient and accessible.

The system allows property owners to publish and manage listings, while buyers can search, filter, and explore properties according to their needs. In addition, the platform provides expert consultation services and AI-powered property evaluation to assist users in making informed decisions.

The project aims to improve the real estate experience by combining modern technologies, intelligent services, and efficient property management tools within one integrated platform.

1.1 Background

The growing real estate market has increased the need for digital platforms that simplify property management and property searching processes. Traditional methods are often time-consuming and less efficient for both property owners and buyers.

Ownly was developed as an integrated real estate platform that connects property owners, buyers, experts, and administrators in a single system. The platform provides property management tools, expert consultation services, multilingual support, and AI-powered property evaluation features, creating a modern and efficient real estate experience.

1.2 Objectives

The main objective of Ownly is to develop a comprehensive real estate platform that simplifies property management and improves communication between property owners, buyers, real estate experts, and administrators.

The specific objectives of the project are:

- Provide an easy-to-use platform for publishing and managing property listings.
- Enable buyers to search, filter, and explore available properties efficiently.
- Allow property owners to add, edit, and monitor their properties.
- Provide expert consultation services to assist users in making real estate decisions.
- Integrate Artificial Intelligence to support property evaluation and analysis.
- Support both Arabic and English languages to improve accessibility and user experience.
- Enable administrators to manage users, properties, experts, and platform content.
- Deliver a secure, responsive, and scalable system using modern technologies.
- Provide an integrated agenda system for scheduling, organizing, and managing meetings between users and real estate experts.

1.3 Significance

Ownly provides a modern solution that simplifies real estate transactions and property management through a single integrated platform. The system improves communication

between property owners, buyers, and real estate experts while providing easy access to property information and services.

The platform enhances the user experience through advanced search capabilities, AI-powered property evaluation, multilingual support, and appointment scheduling. These features help users make better decisions and manage real estate activities more efficiently.

2.1 Constraints

Several challenges were encountered during the development of Ownly. One of the main challenges was integrating Artificial Intelligence features into the platform and ensuring accurate property evaluation results. Another challenge was supporting multiple user roles, including buyers, property owners, experts, and administrators, while maintaining proper access control and functionality for each role.

Developing a responsive user interface that works efficiently across different devices and screen sizes also required additional effort. Furthermore, implementing multilingual support for both Arabic and English languages introduced challenges related to content management and interface design.

Despite these challenges, the system was successfully developed and tested to provide a reliable and user-friendly real estate platform.

2.2 Standards and Technologies

The development of Ownly relied on several modern technologies and development practices to ensure efficiency, scalability, and maintainability.

- **Flutter** was used to develop the frontend user interface and provide a responsive experience across different devices.
- **Node.js** was used for backend development and handling server-side operations.
- **MySQL** was used as the database management system for storing and managing platform data.

- **RESTful APIs** were implemented to facilitate communication between the frontend and backend components.
- **JWT (JSON Web Token)** was used to provide secure authentication and authorization mechanisms.
- **OpenStreetMap and Flutter Map** were integrated to display property locations and provide map-based property exploration.
- **Geolocation Services** were used to support location-based features and property visualization.
- **Artificial Intelligence technologies** were integrated to support property evaluation and analysis.
- The platform was designed following responsive design principles to ensure compatibility with different screen sizes and devices.
- The system supports both Arabic and English languages to improve accessibility and user experience.

Chapter 3:Literature Review

3.1 Introduction

The real estate industry has witnessed significant digital transformation in recent years. Numerous online platforms have been developed to facilitate property searching, buying, selling, and renting processes. These platforms aim to improve accessibility to property information and simplify communication between different stakeholders.

This chapter reviews several existing real estate platforms and analyzes their features, strengths, and limitations. The review helps identify gaps in current solutions and highlights the motivation behind developing Ownly as a comprehensive real estate platform.

3.2 Existing Real Estate Platforms

Several real estate platforms are currently available in Palestine and the surrounding region. These platforms provide property listing and searching services, but differ in terms of features and functionality.

OpenSooq

OpenSooq is one of the most widely used online marketplaces in Palestine and the Middle East. It allows users to buy, sell, and rent properties through an easy-to-use interface. However, the platform mainly focuses on advertisements and property listings without providing advanced real estate services such as expert consultation or AI-based property evaluation.

Waset Palestine

Waset Palestine is a local platform that enables users to publish and browse real estate listings. It provides basic search functionality and property information but lacks intelligent features that assist users in evaluating properties or managing appointments.

Comparison with Ownly

Unlike existing platforms, Ownly combines property management, expert consultation, appointment scheduling, multilingual support, and AI-powered property evaluation within a single integrated system. These features provide users with a more comprehensive and intelligent real estate experience.

3.3 Research Gap

Although existing real estate platforms provide useful property listing and search services, most of them focus primarily on displaying property information and facilitating communication between buyers and sellers. Many platforms lack intelligent decision-support tools that help users evaluate properties and make informed decisions.

In addition, expert consultation services and appointment management systems are often unavailable or provided through external communication channels. Furthermore, existing solutions rarely integrate Artificial Intelligence technologies to assist users in property evaluation and analysis.

To address these limitations, Ownly was developed as a comprehensive real estate platform that combines property management, expert consultation, appointment scheduling, multilingual support, and AI-powered property evaluation within a single system. This integration aims to improve the overall user experience and support smarter real estate decisions.

Chapter 4: Methodology

4.1 System Overview

Ownly is a comprehensive real estate platform designed to connect property owners, buyers, real estate experts, and administrators through a single integrated system. The

platform aims to simplify property management, improve communication between stakeholders, and support users in making informed real estate decisions.

The system allows property owners to publish and manage property listings, while buyers can search, filter, compare, and explore available properties. In addition, users can communicate with real estate experts, schedule appointments through the integrated agenda system, and benefit from AI-powered property evaluation services.

The platform supports both Arabic and English languages and provides a responsive user interface that adapts to different devices and screen sizes. Administrative tools are also included to manage users, properties, experts, advertisements, and platform content efficiently.

By combining modern web technologies, location-based services, and artificial intelligence, Ownly provides a complete and user-friendly real estate experience.

4.2 User Roles

Ownly is designed to serve different types of users, each with specific permissions and responsibilities. The platform includes four main user roles:

Buyer

The Buyer is responsible for searching and exploring available properties. Buyers can filter properties based on different criteria, view detailed property information, save properties to their favourites list, request expert consultations, schedule appointments, and use the AI property evaluation feature to support their decisions.

Property Owner

Property Owners can publish, edit, and manage their property listings through the platform. They can upload property information, images, and location details, monitor their listings, and interact with potential buyers. Property owners can also track property performance through the available management tools.

Real Estate Expert

Real Estate Experts provide professional guidance and consultation services to users. They can manage consultation requests, communicate with clients, and organize appointments through the integrated agenda system. Their role helps users make informed real estate decisions.

4.3 System Architecture

Ownly follows a client-server architecture that separates the frontend, backend, database, and external services. This structure makes the system easier to maintain, develop, and scale.

The frontend was developed using Flutter, which provides the user interface for different roles, including buyers, property owners, experts, and administrators. Through the frontend, users can browse properties, manage listings, communicate with experts, schedule appointments, and interact with different platform features.

The backend was developed using Node.js. It handles the main business logic of the system, including user authentication, property management, expert management, appointment scheduling, advertisements, favourites, notifications, and AI property evaluation requests. The backend communicates with the frontend through RESTful APIs.

MySQL was used as the main database management system. It stores users' information, property details, property images, expert data, appointments, favourites, advertisements, and other system records.

The system also integrates map services using OpenStreetMap and Flutter Map to display property locations and allow users to explore properties geographically. In addition, AI services are used to support property evaluation and provide users with insights that help them make better real estate decisions.

Overall, the architecture of Ownly ensures a clear separation between system components, improves maintainability, and provides a flexible structure for future enhancements.

4.4 Database Design

The Ownly platform utilizes a relational database management system (MySQL) to ensure efficient storage, retrieval, and management of system data. The database was designed following relational database principles to maintain data integrity, minimize redundancy, and support the platform's various functionalities.

The database schema consists of multiple interconnected tables that represent the core entities of the system, including users, properties, property images, experts, appointments, advertisements, favorites, notifications, and administrative data. Relationships between entities are implemented using primary and foreign keys to ensure consistency and enforce referential integrity.

The database architecture supports the platform's multi-role environment by managing different user types, including buyers, property owners, experts, and administrators. In addition, the design allows efficient querying, filtering, and retrieval of property information based on location, category, property type, price range, and other search criteria.

The database plays a central role in supporting system operations by maintaining structured data and enabling seamless interaction between the frontend and backend components through RESTful APIs.

4.5 AI Property Evaluation

The AI Property Evaluation module represents one of the key intelligent components of the Ownly platform. This module was developed to assist users in analyzing property information and obtaining data-driven insights that support real estate decision-making processes.

The evaluation process utilizes property attributes such as location, category, property type, area, number of rooms, pricing information, and additional property characteristics. These parameters are processed through an AI-powered evaluation mechanism that generates analytical feedback regarding the submitted property.

The primary objective of this module is to reduce uncertainty during property selection and provide users with additional information beyond traditional property listings. By integrating artificial intelligence into the platform, Ownly enhances user experience and introduces a smart decision-support layer that differentiates it from conventional real estate systems.

The AI evaluation feature contributes to improving property assessment efficiency and provides users with a more informed and technology-driven real estate experience.

4.6 Map and Location Services

Location-based functionality is a fundamental component of the Ownly platform. To enhance property discovery and geographical visualization, the system integrates interactive mapping services using OpenStreetMap and Flutter Map technologies.

Each property listing is associated with geographical coordinates that enable accurate positioning on the map. Through this integration, users can visually explore property locations, analyze surrounding areas, and identify nearby properties within specific regions.

The mapping module communicates with the backend system to retrieve property location data and dynamically render markers on the interactive map interface. Furthermore, location services support advanced property search capabilities by enabling users to explore listings based on geographical distribution rather than relying solely on textual search criteria.

The integration of map technologies improves spatial awareness, enhances user interaction with property data, and provides a more intuitive approach to real estate exploration and decision-making.

Chapter 5: Results and Discussion

5.1 Authentication Module

5.1.1 Login Page

This screen allows existing users to sign in using their email and password

←

Log In Sign Up

Welcome back

Log in to save favorites, manage messages, and continue where you left off.

Email address

Enter your email

Password

Enter your password

Forgot password?

Log In

Don't have an account? [Create one](#)

←

Log In Sign Up

Welcome back

Log in to save favorites, manage messages, and continue where you left off.

Email address

Enter your email

Email is required

Password

Enter your password

Password is required

Forgot password?

Log In

Don't have an account? [Create one](#)

←

Log In Sign Up

Welcome back

Log in to save favorites, manage messages, and continue where you left off.

Invalid email or password.

Email address

ownly1220+ahmad@gmail.com

Password

.....

Forgot password?

Log In

Don't have an account? [Create one](#)

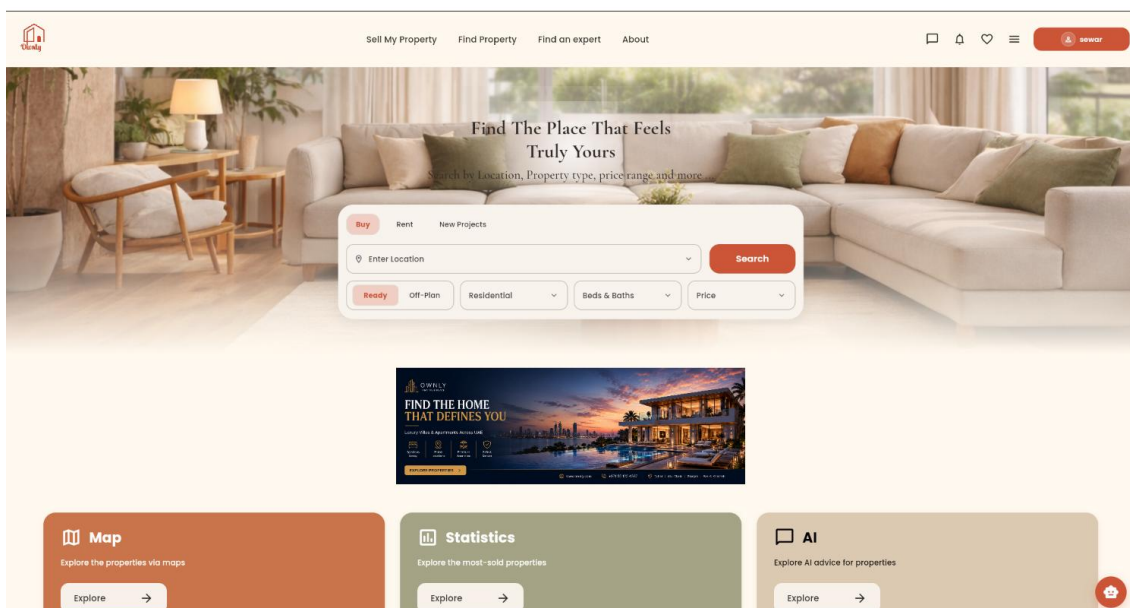
5.1.2 Registration and Email Verification

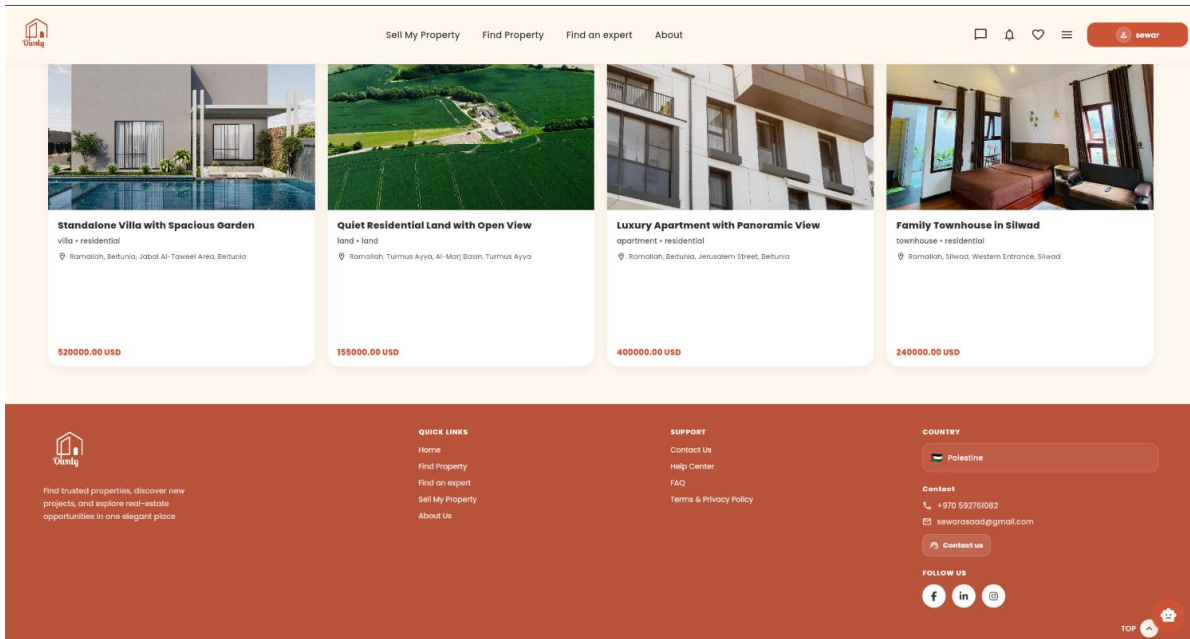
shows the user registration process in Ownly. The system validates the entered information and requires email verification to activate the account successfully.

The image displays three mobile app screens for the registration and email verification process. The first screen, titled 'Create your account', shows a form with fields for 'Full name', 'Email address', 'Phone Number', 'Password', and 'Confirm password'. Each field has a placeholder text and a red error message below it. The second screen, also titled 'Create your account', shows the same form with the fields filled out: 'Full name' is 'sewar', 'Email address' is 'ownly1220+sewar@gmail.com', 'Phone Number' is '0567892255', 'Password' is 'Ownly123456', and 'Confirm password' is '*****'. The third screen, titled 'Verify your email', shows a message: 'We sent a 6-digit code to ownly1220+sewar@gmail.com' and a 'Verify Email' button. Below the screens is a screenshot of an email inbox with a message from 'me' at 19:30, titled 'Verify your Ownly account', containing the verification code '352379' and a note that the code expires in 10 minutes.

5.2 Buyer Module

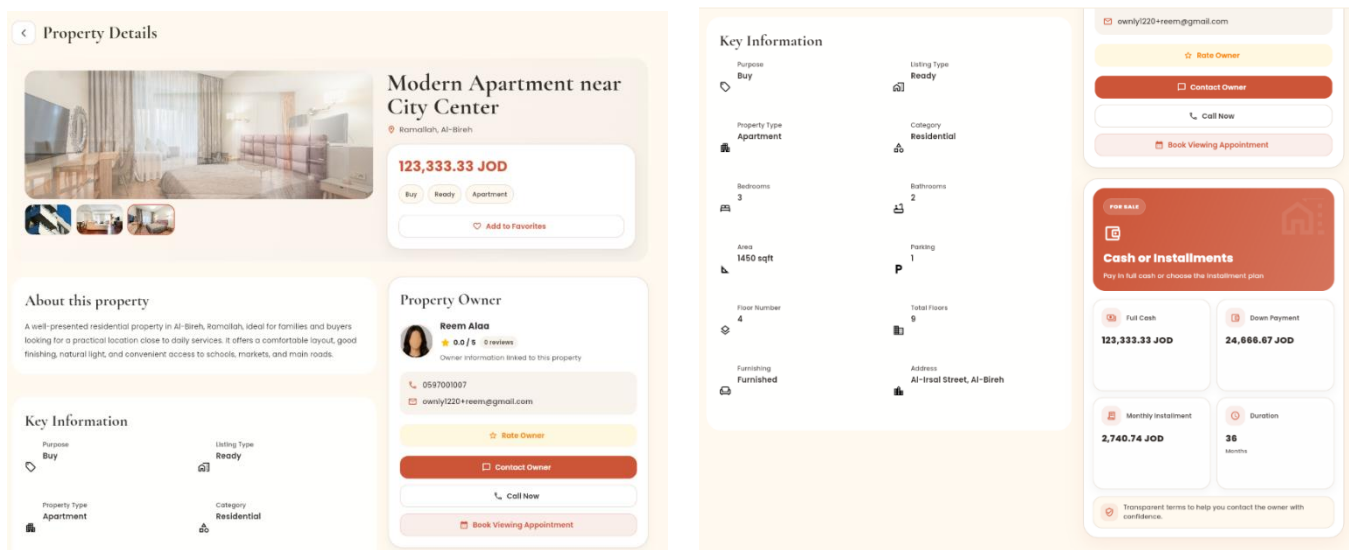
5.2.1 Home Page

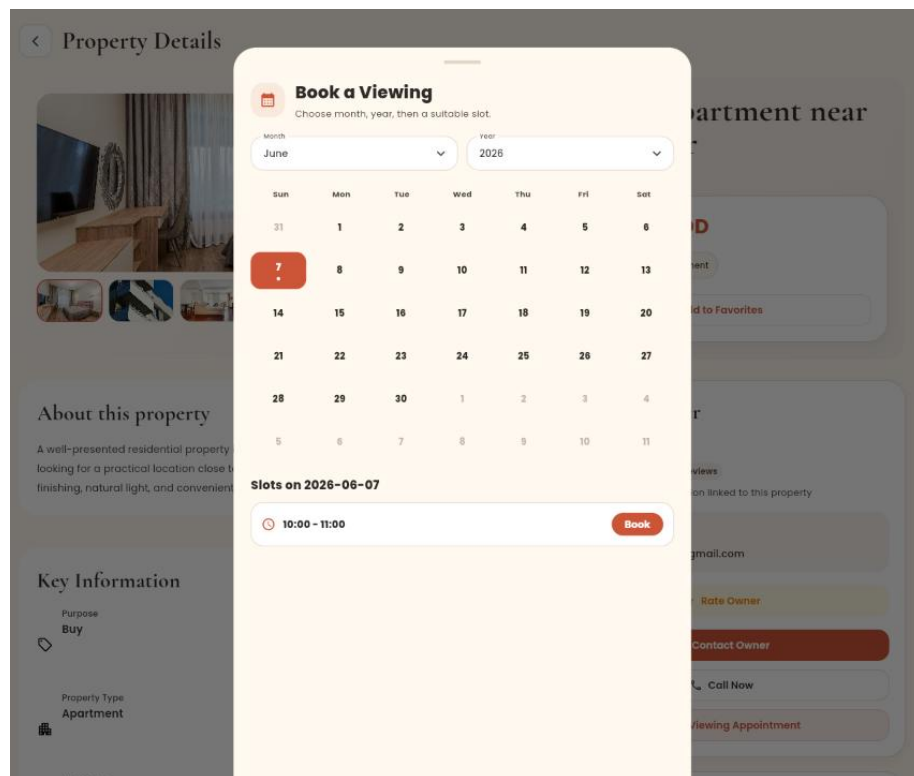
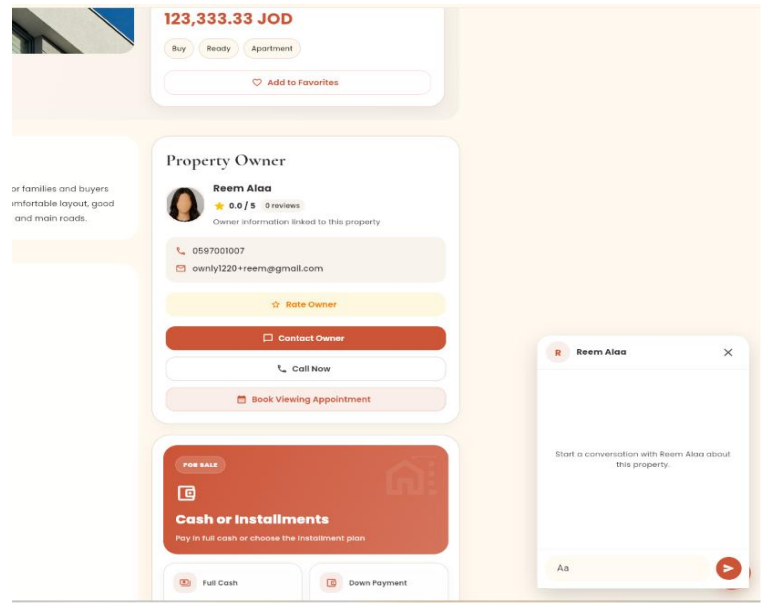
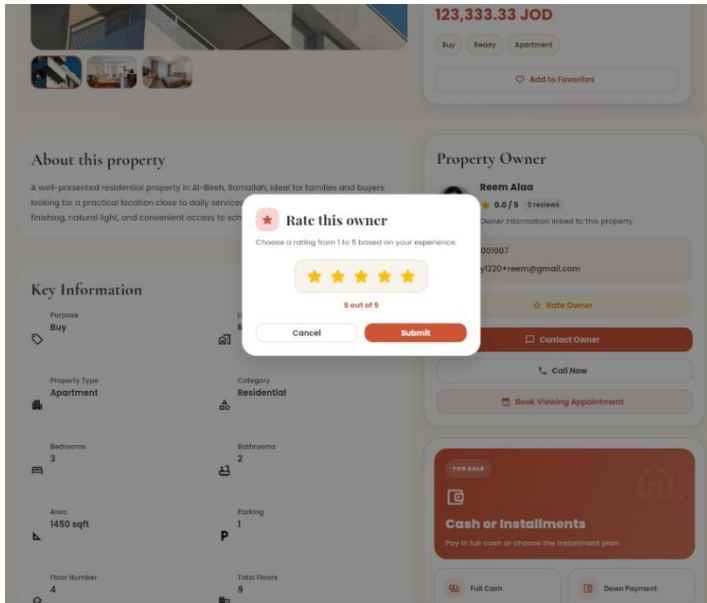




5.2.2 Property Details

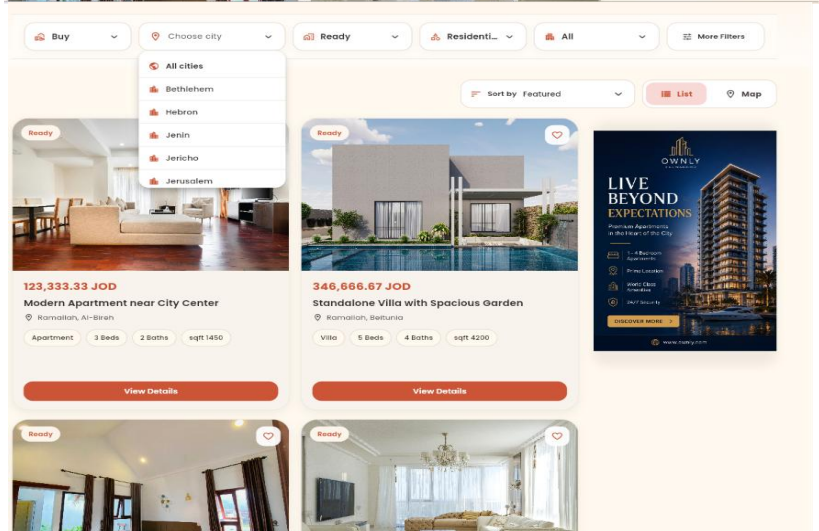
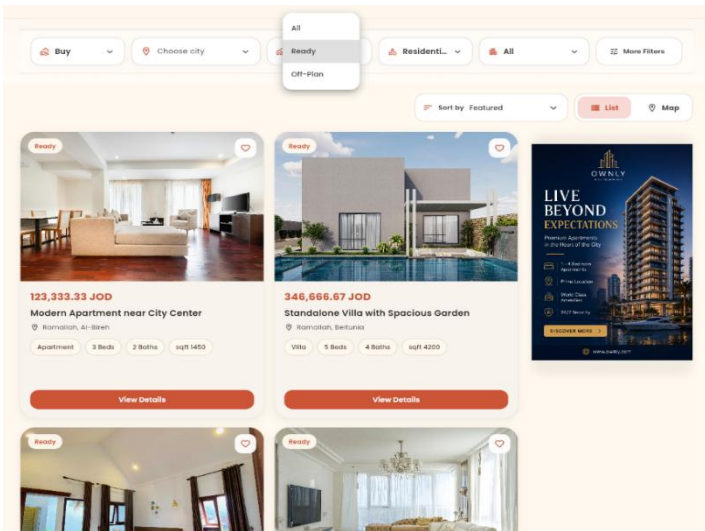
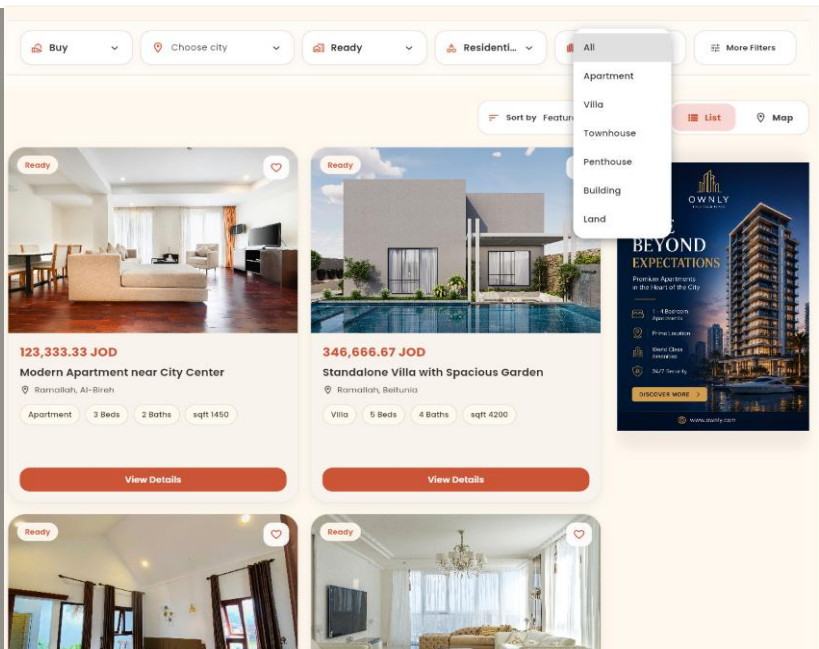
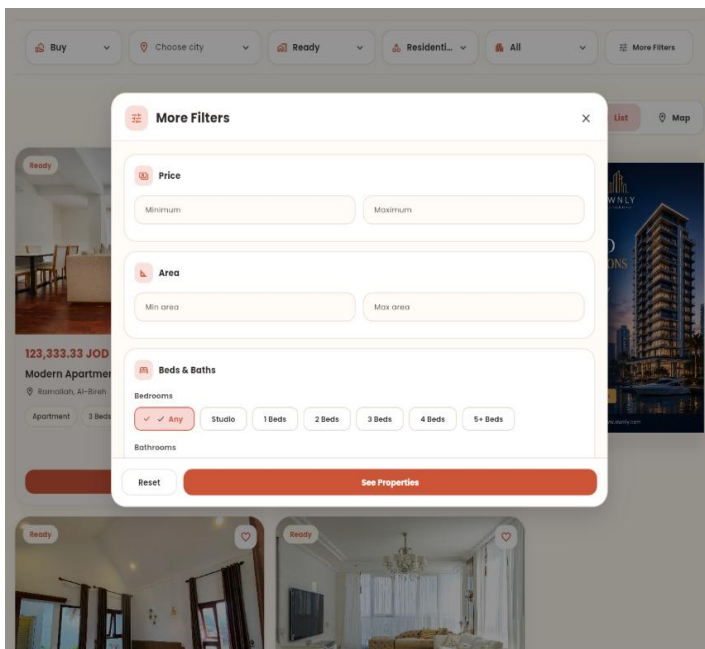
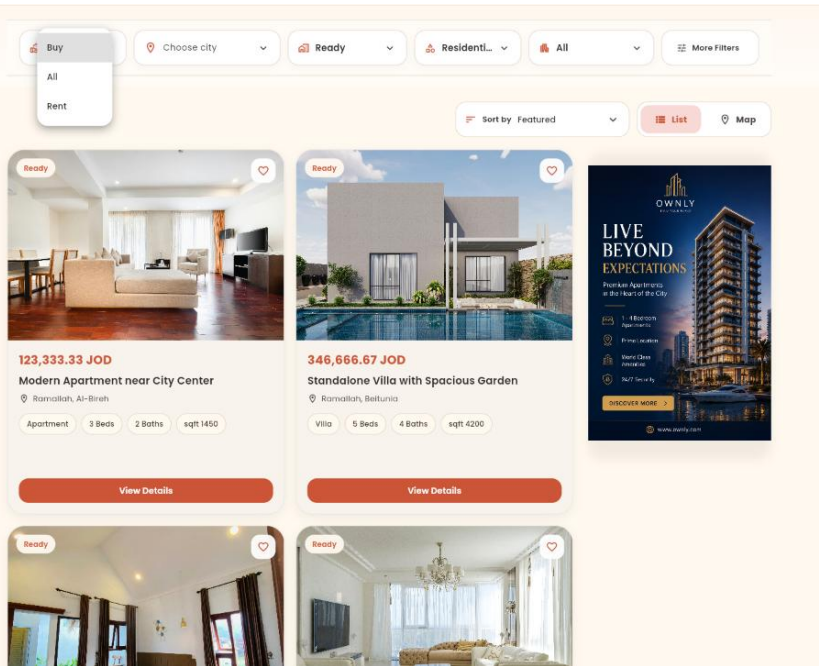
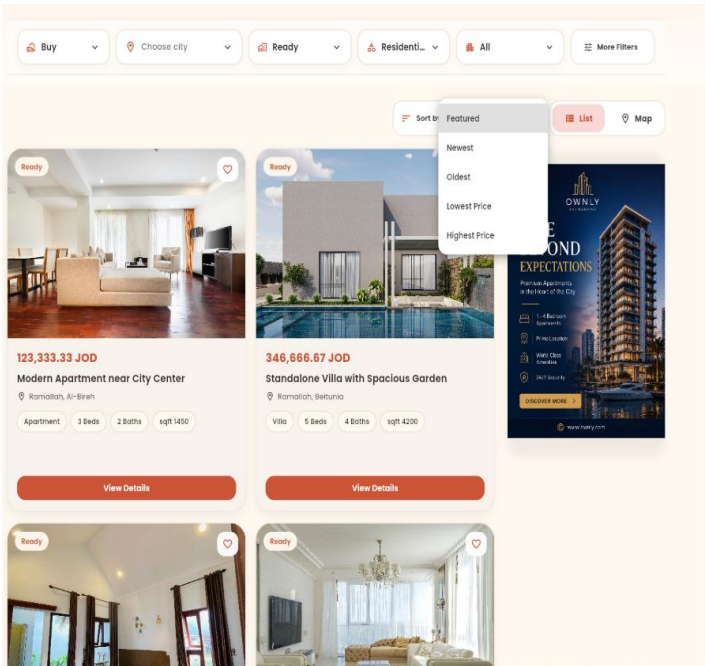
illustrates the Property Details page in Ownly. This page provides comprehensive information about the selected property, including images, specifications, pricing details, owner information, installment plans, and communication options. Users can also rate property owners, schedule property viewings, and interact directly with owners through the integrated communication and appointment management features.





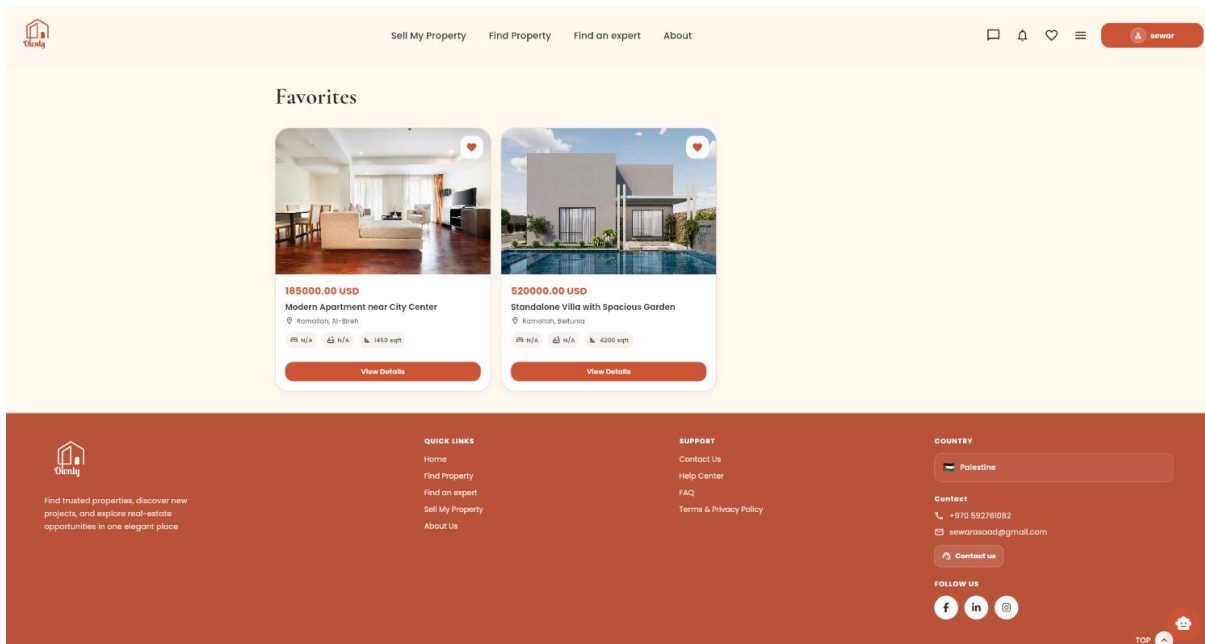
5.2.3 Search and Filtering

illustrates the property search and filtering functionality in Ownly. Users can browse available properties and refine search results using multiple criteria such as city, purpose, property type, category, status, price range, area, and room count. The platform also provides sorting options and advanced filters to help users locate properties that best match their preferences.



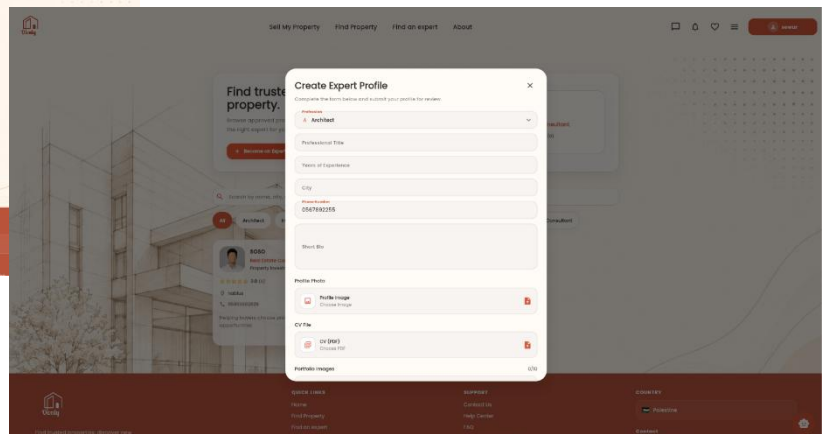
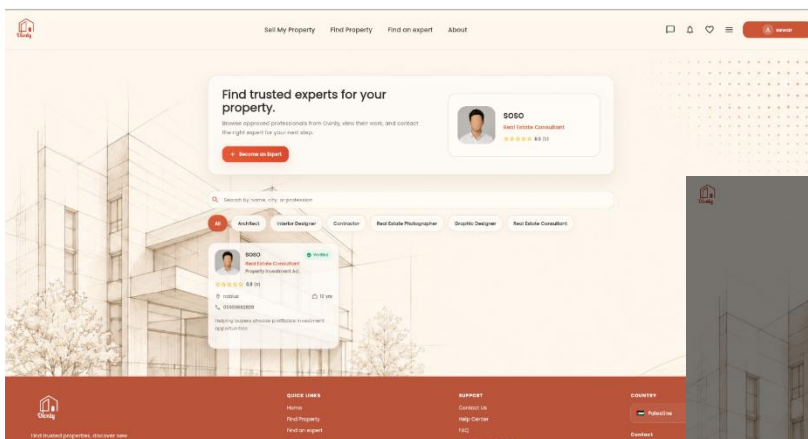
5.2.4 Favourites

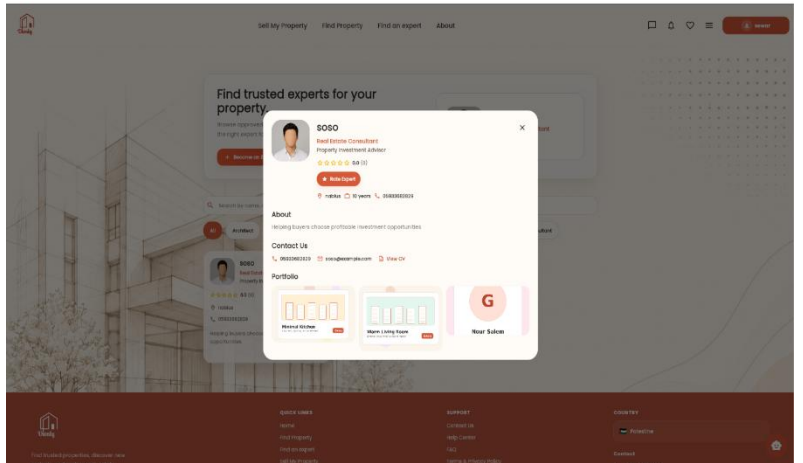
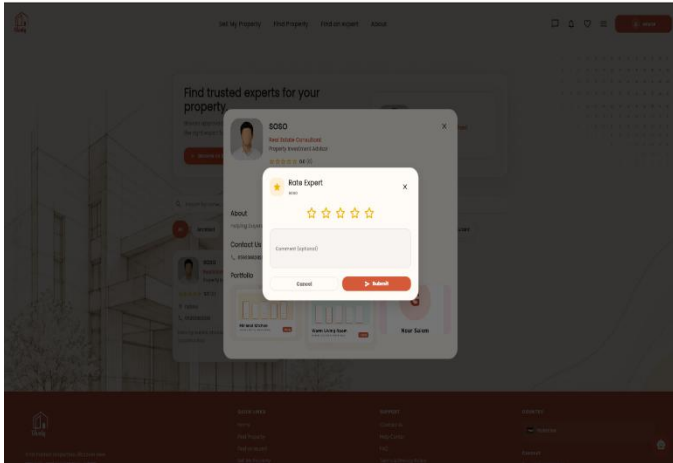
illustrates the Favourites feature in Ownly. This feature allows users to save preferred properties for future reference .



5.2.5 Expert Consultation

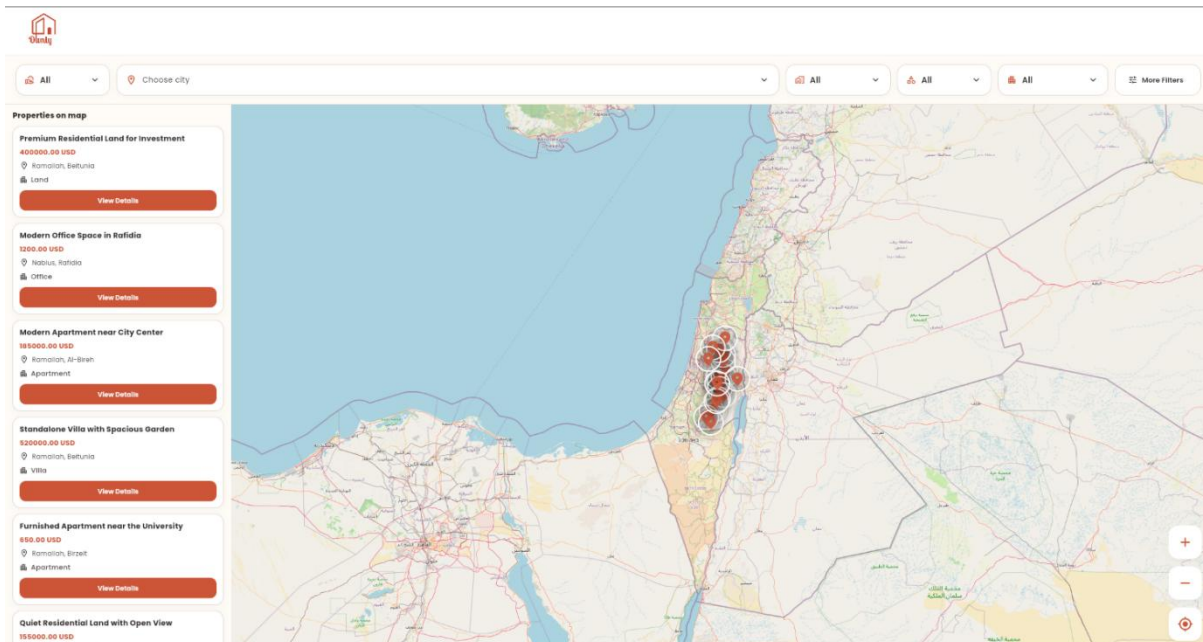
illustrates the Expert Consultation feature in Ownly. Users can browse verified experts, search by profession, view expert profiles, portfolios, and contact information, as well as submit ratings and feedback. The platform also allows qualified users to apply for expert accounts by providing their professional information and supporting documents.





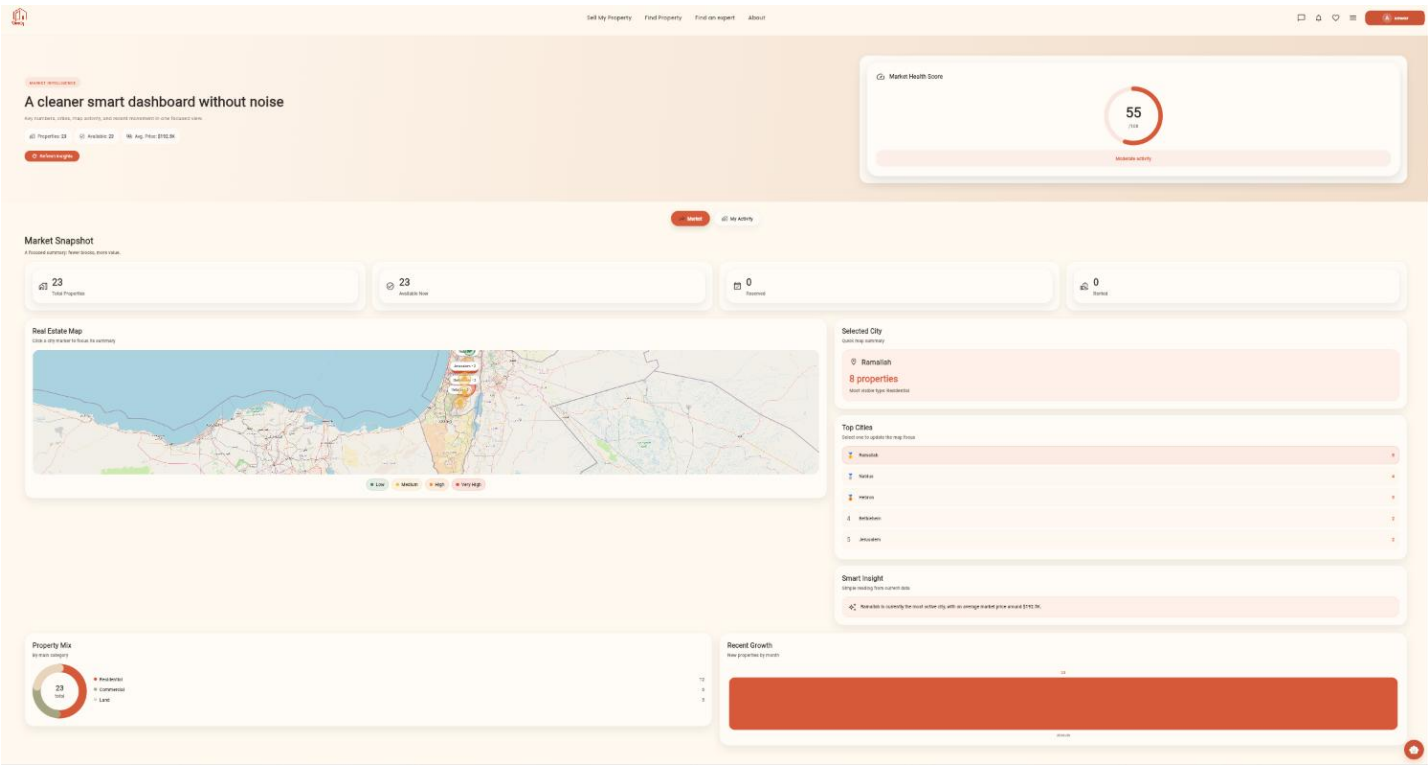
5.2.6 Map-Based Property Search

illustrates the map-based property search feature in Ownly. The platform integrates interactive maps to display property locations and enable users to explore listings geographically. Users can apply filters, browse nearby properties, and access property details directly from the map interface, providing a more intuitive property discovery experience



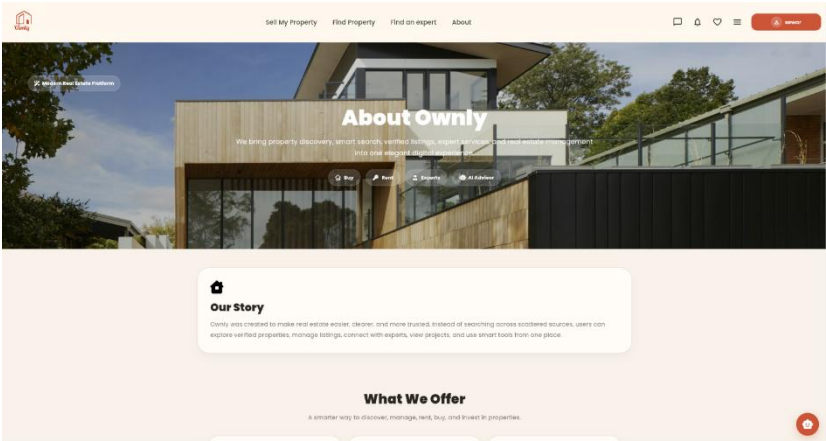
5.2.7 Market Insights Dashboard

illustrates the Market Insights Dashboard in Ownly. The dashboard provides users with an overview of real estate market activity through statistics, geographical distribution of properties, market indicators, and city-based insights. These analytics help users better understand market trends and support informed real estate decisions.



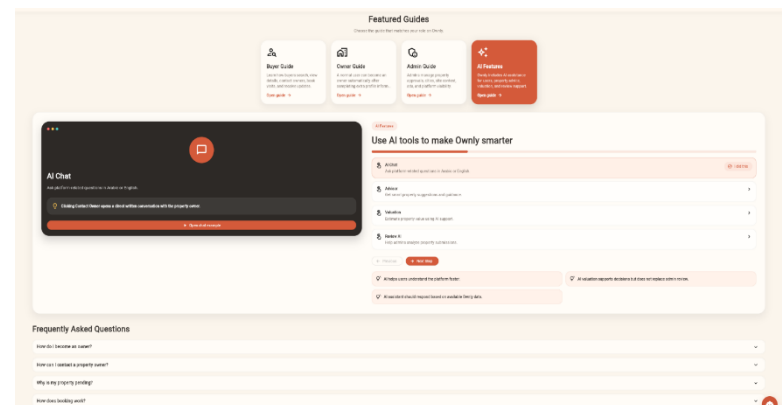
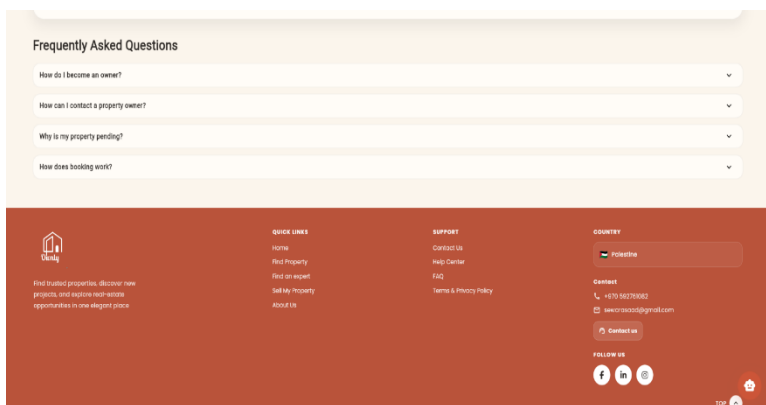
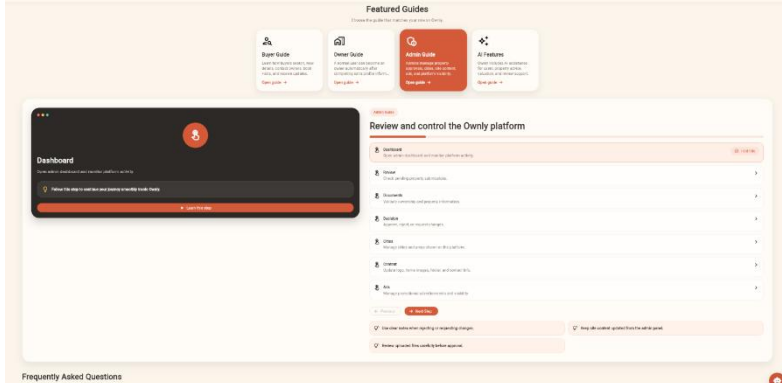
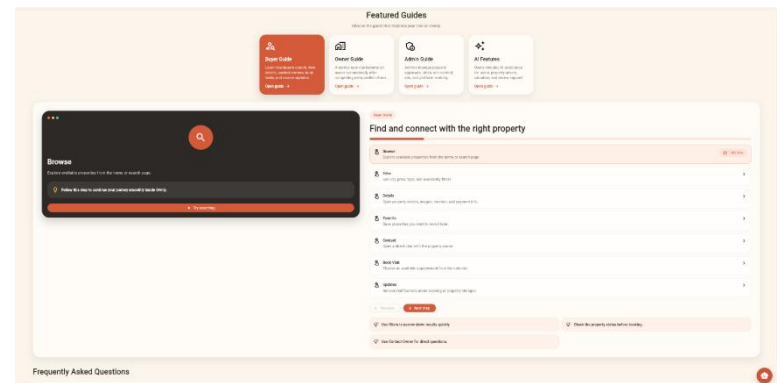
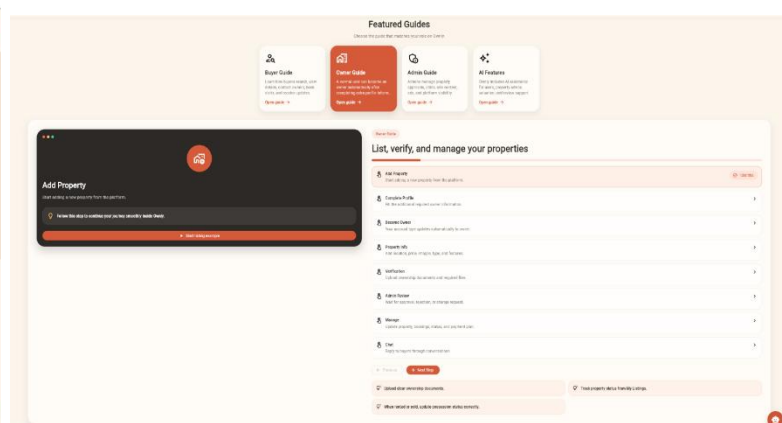
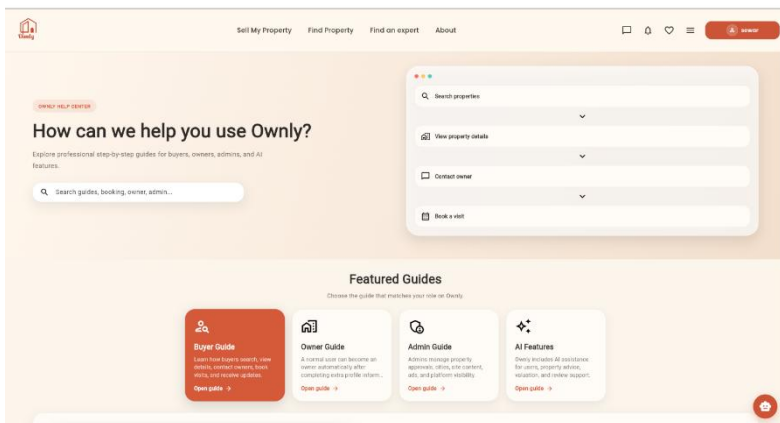
5.2.8 About Page

illustrates the About page of Ownly. The page introduces the platform and highlights its main services, features, and objectives.



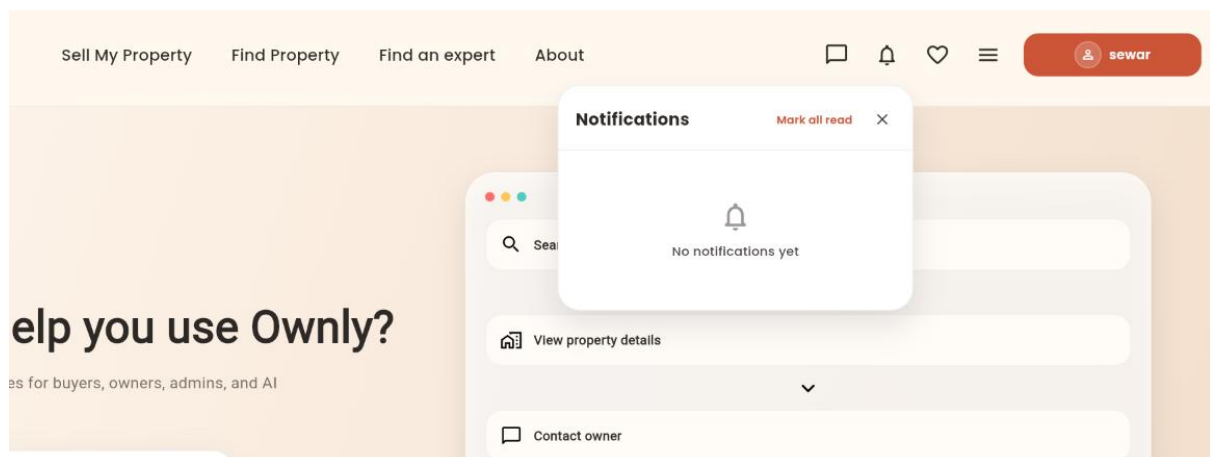
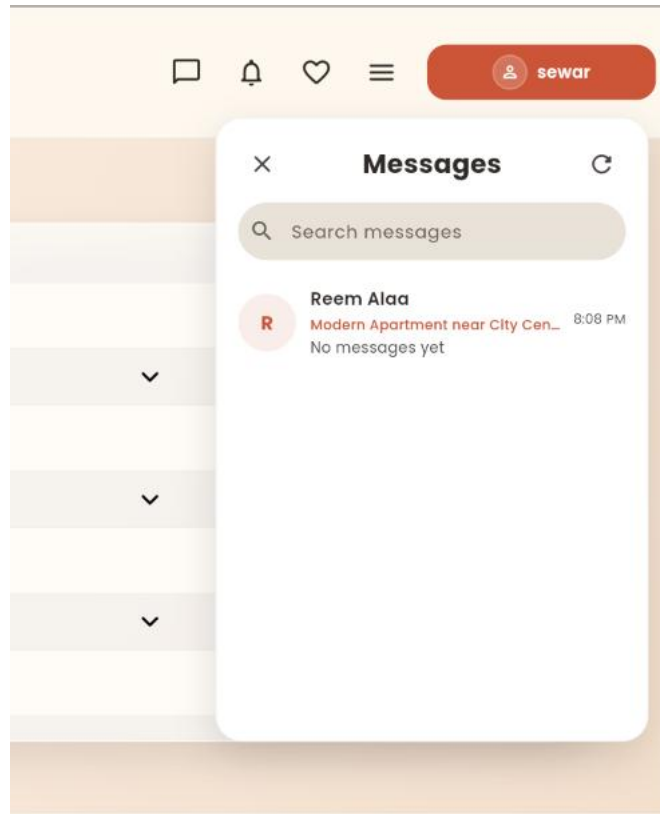
5.2.9 Guides

illustrates the Help Center in Ownly. The page provides user guides, step-by-step instructions, and frequently asked questions to help users understand and use the platform effectively.



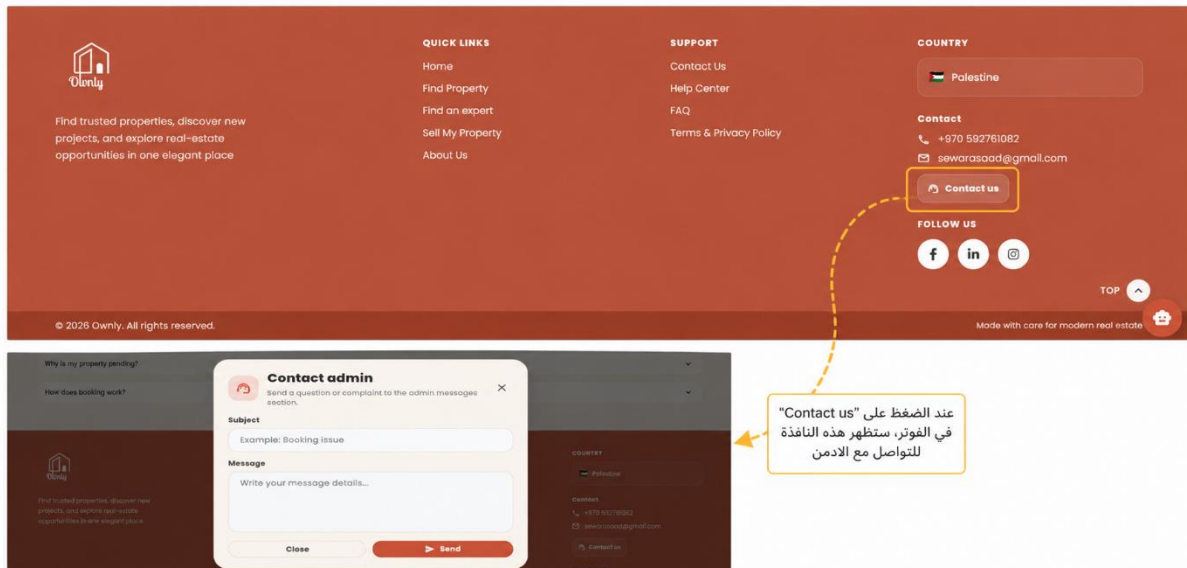
5.2.10 Notifications and Messaging

shows the notifications and messaging features in Ownly, enabling users to receive updates and manage conversations within the platform.



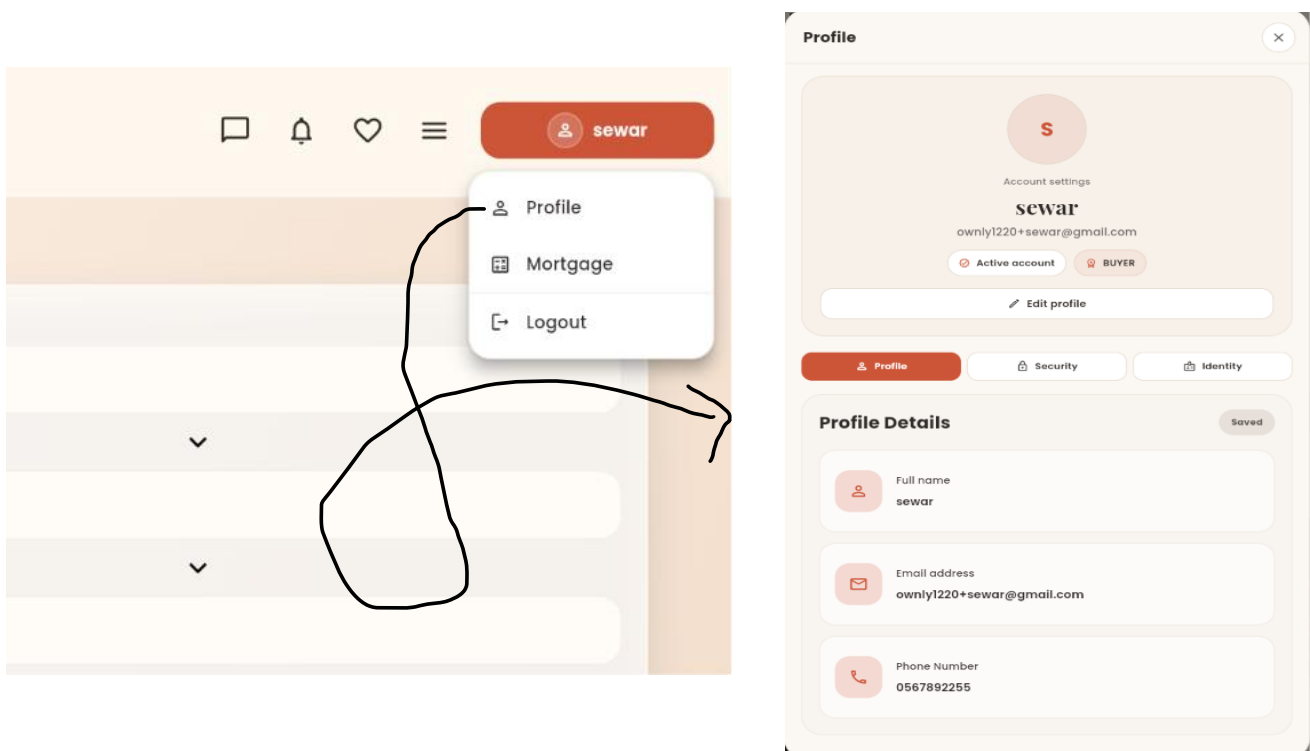
5.2.11 Contact Support

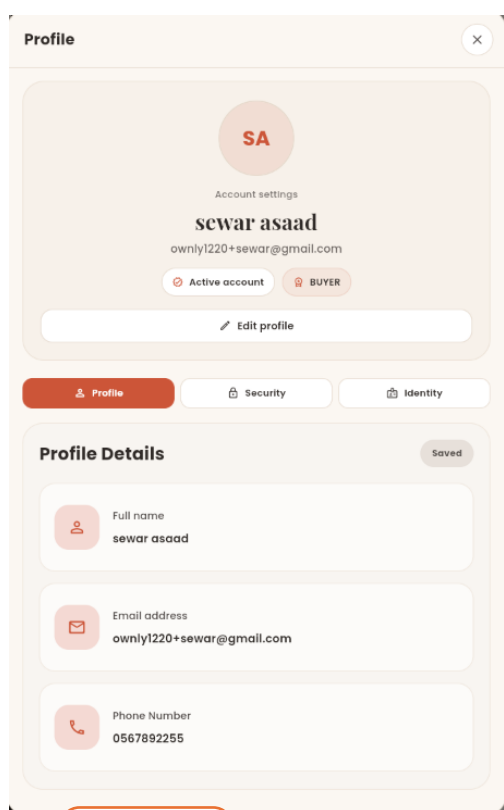
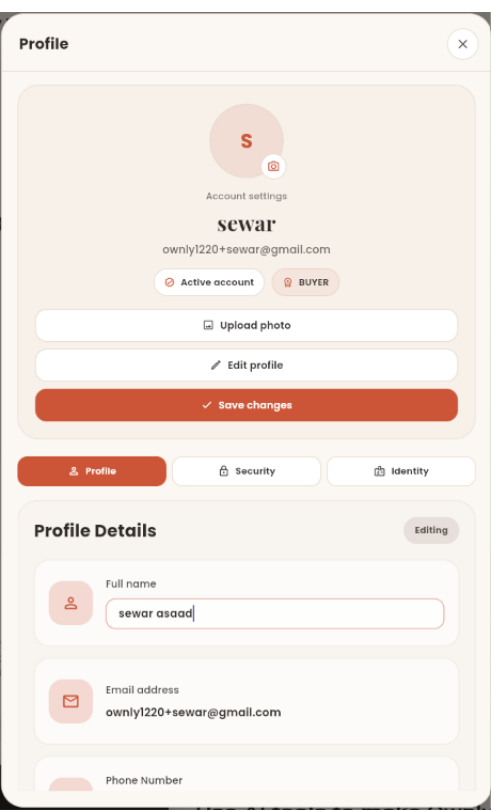
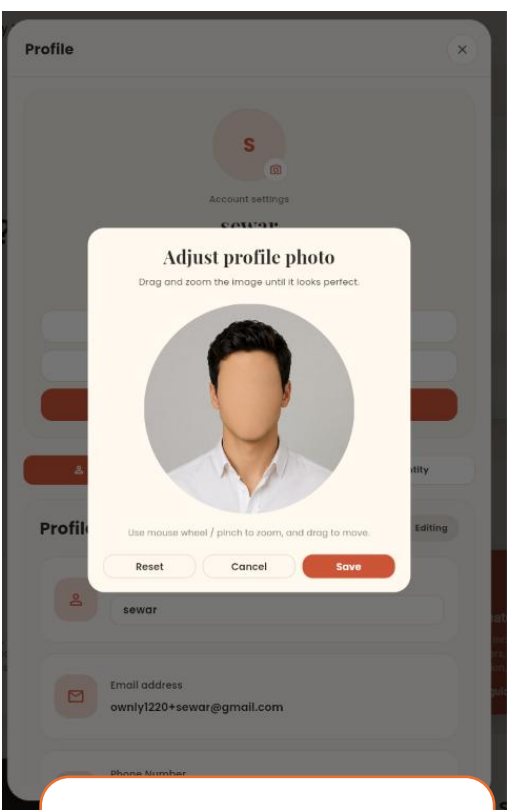
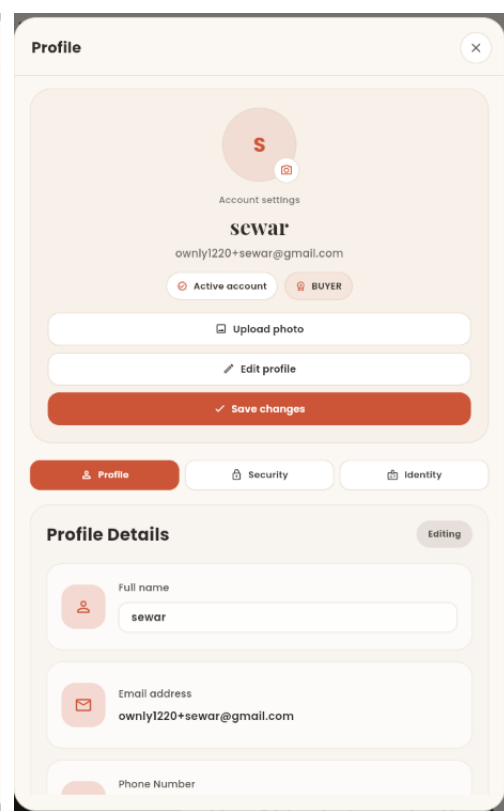
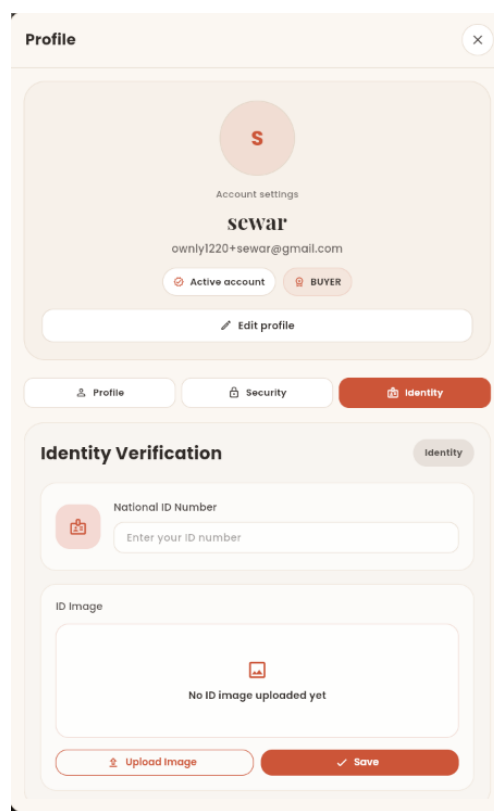
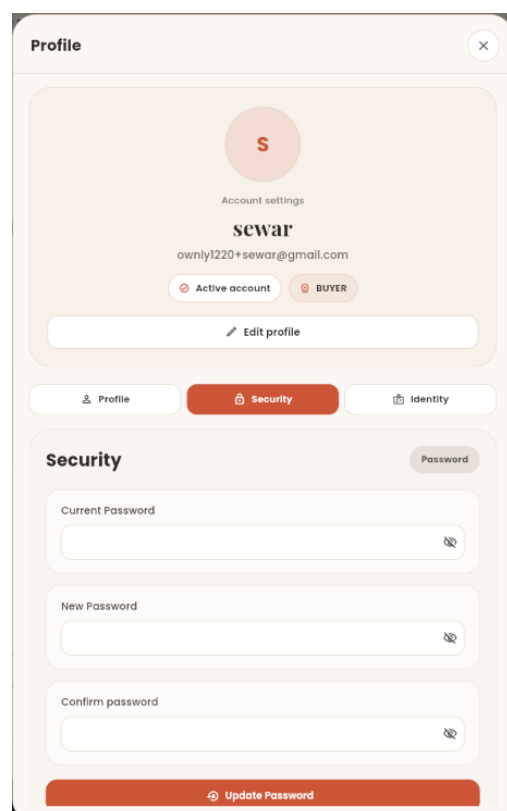
illustrates the contact support feature in Ownly. Users can contact the system administrator directly through the Contact Us button available in the footer, which opens a form for submitting inquiries, feedback, or support requests.



5.2.12 Profile Management

shows the profile management feature in Ownly, allowing users to manage account information, security settings, profile photos, and identity verification

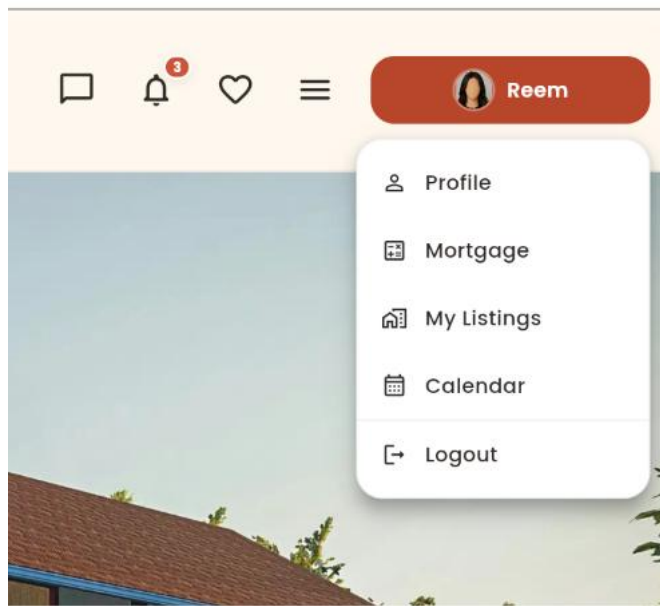




Selecting the image and
adjusting its position

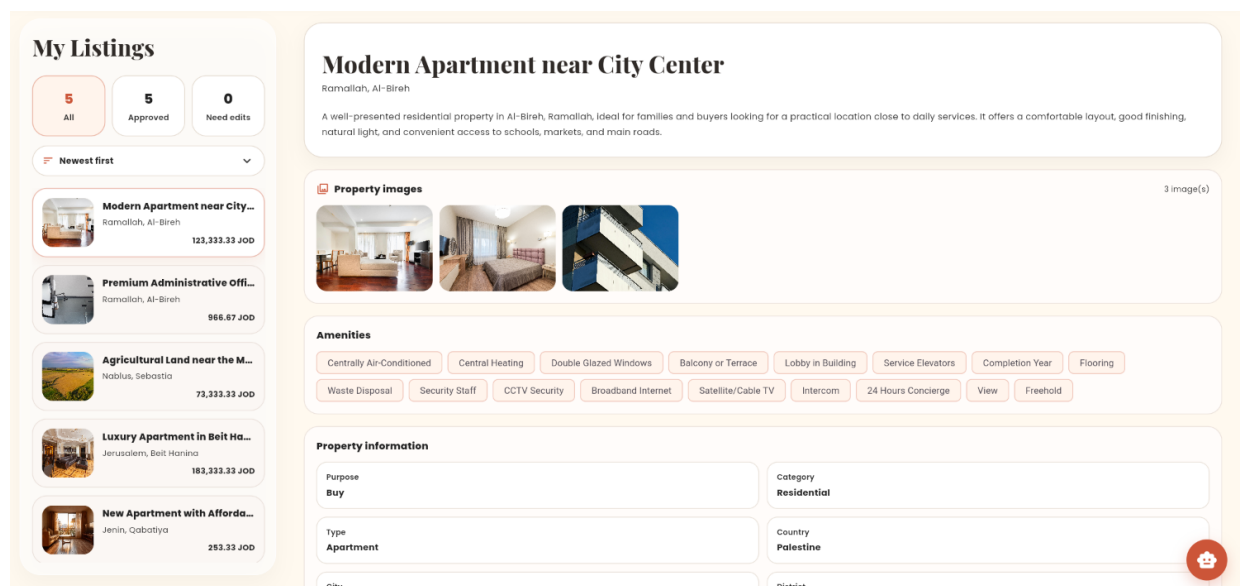
After
the edit

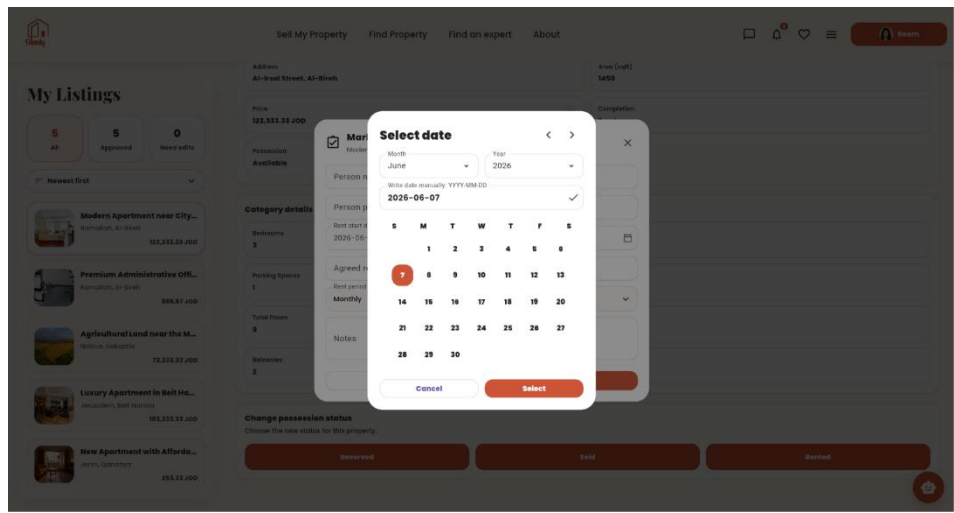
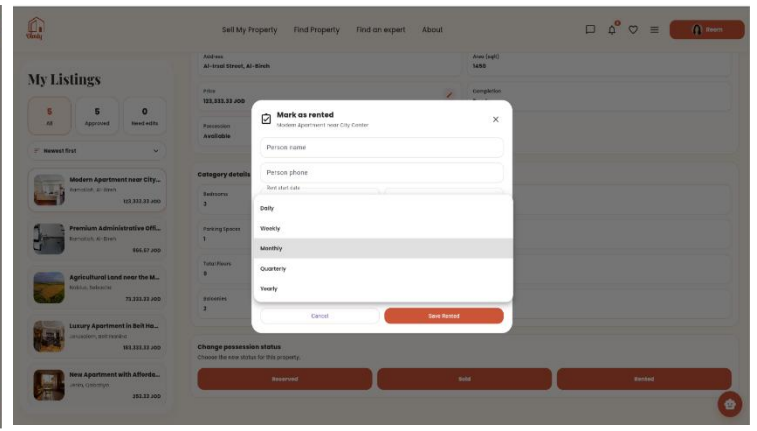
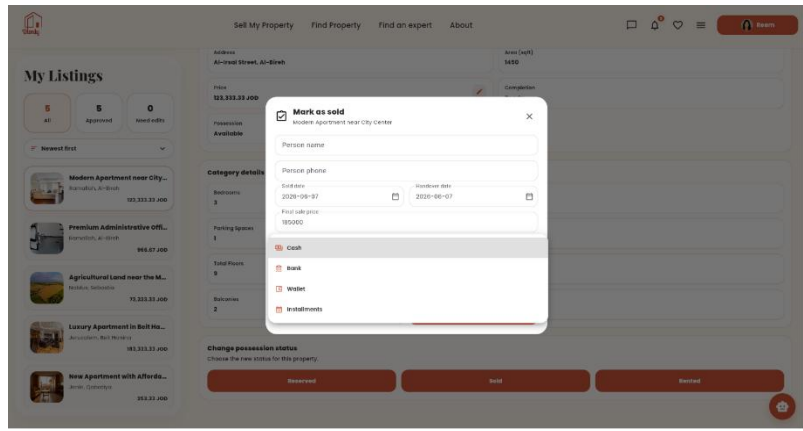
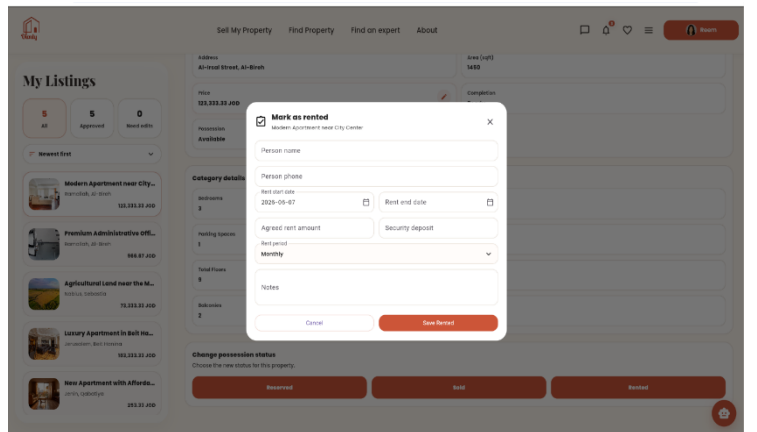
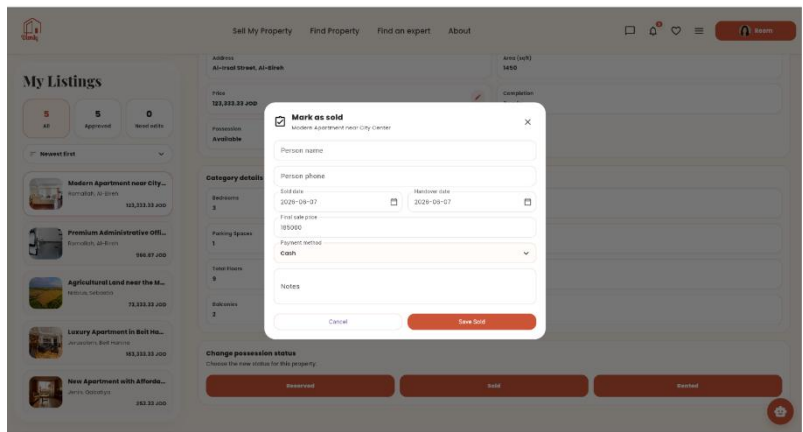
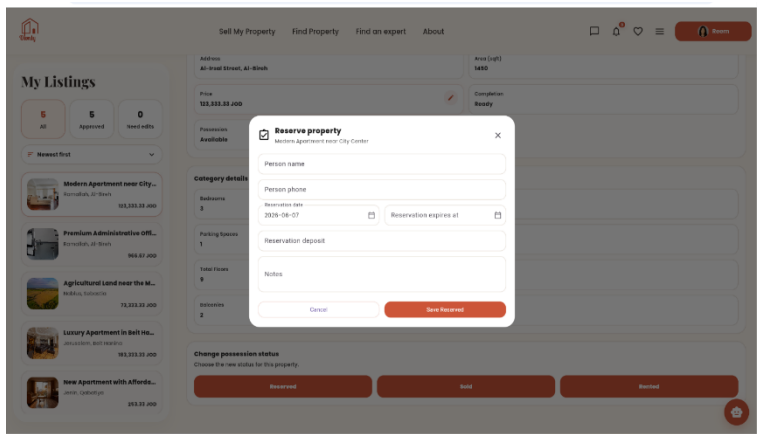
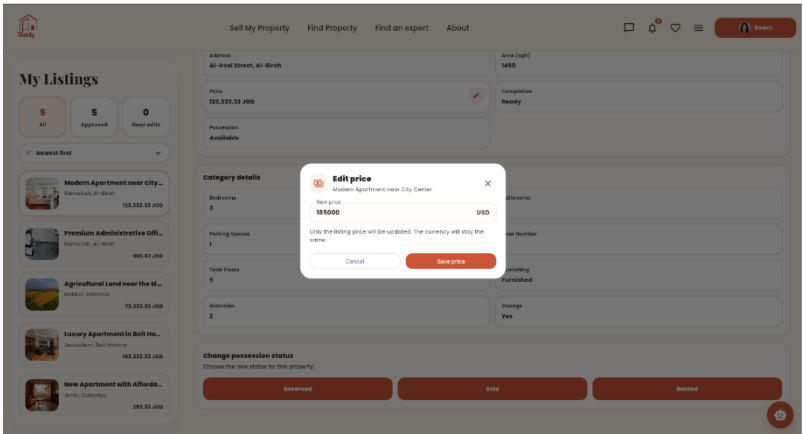
5.3 Property Owner Module



5.3.1 Property Management

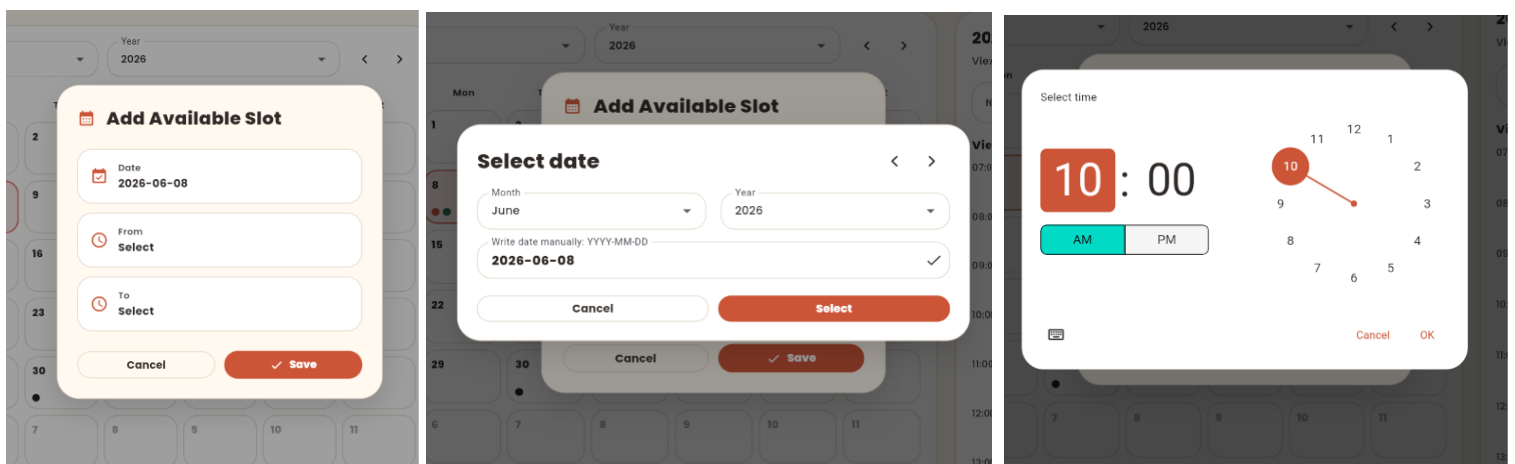
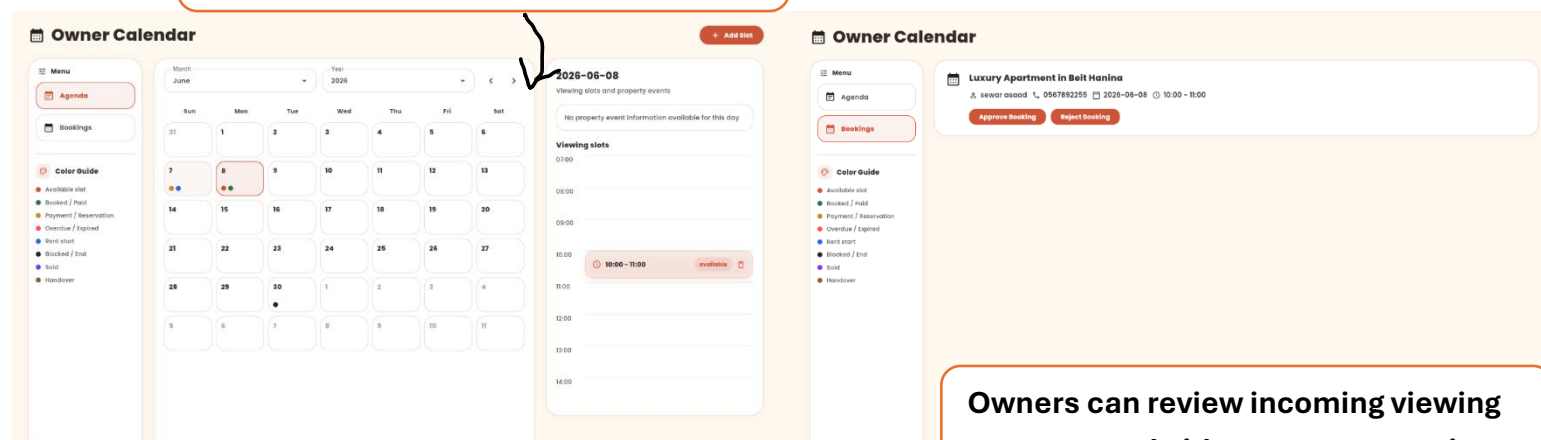
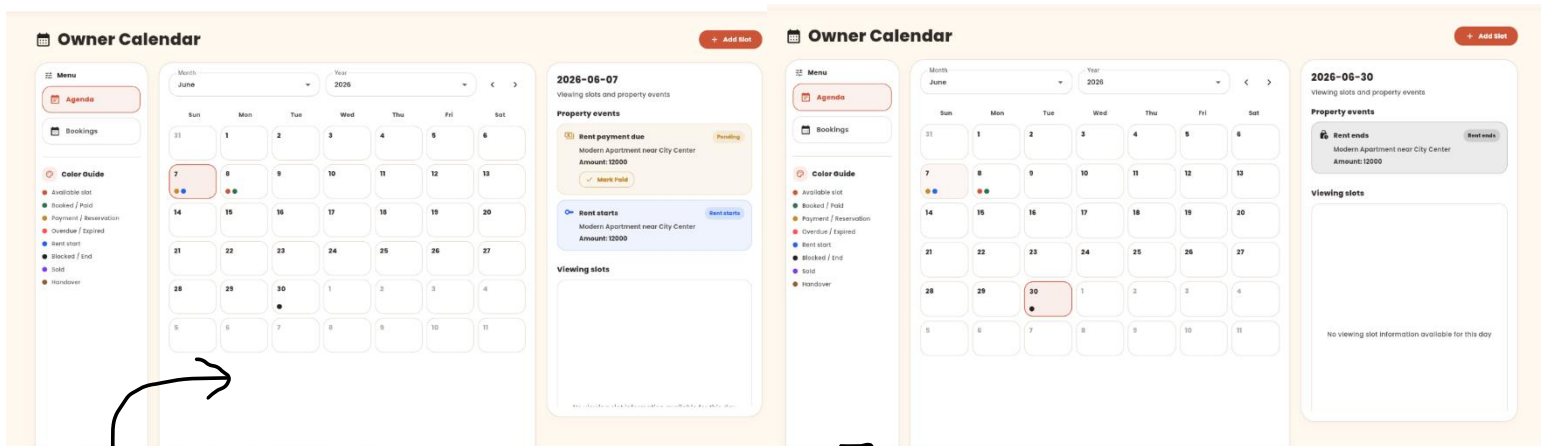
This interface allows property owners to manage their listings, update property prices, and change the property status. Owners can mark a property as reserved, sold, or rented by entering the required transaction details, dates, and payment information. The system also provides tools for editing listing information and tracking property availability.





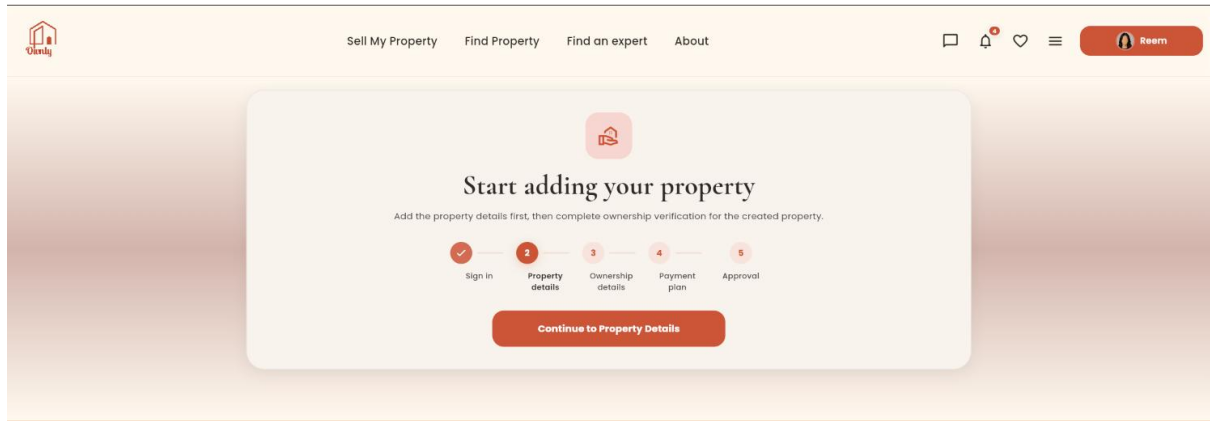
5.3.2 Owner Calendar and Booking Management

This module allows property owners to manage viewing appointments, monitor property events, and organize booking schedules through an interactive calendar. Owners can add available time slots, review booking requests, approve or reject visits, and track important property events such as rent starts, rent ends, payments, reservations, sales, and handovers.



5.3.3 Property Listing Creation & Ownership Verification

This module allows property owners to create and publish new property listings through a guided multi-step process. The owner enters property details, uploads ownership documents, receives AI-assisted pricing suggestions, selects a payment plan, and submits the property for administrative review and approval.



This screenshot shows the 'Adding New Property' form at Step 2: Property details. The progress bar at the top indicates the current step. The form includes sections for Purpose (Sell/Rent), Category (Residential/Commercial/Land), Property Type (Office/Shop/Warehouse/Commercial Villa/Building/Showroom), and Location (City/District/Address).

This screenshot shows the 'Adding New Property' form at Step 2: Property details. The progress bar at the top indicates the current step. The form includes sections for Purpose (Sell/Rent), Category (Residential/Commercial/Land), Property Type (Apartment/Villa/Townhouse/Penthouse/Building/Floor), and Location (City/District/Address).

This screenshot shows the 'Adding New Property' form at Step 2: Property details. The progress bar at the top indicates the current step. The form includes sections for Purpose (Sell/Rent), Category (Residential/Commercial/Land), Land details (Residential/Road width), Available services (Water/Electricity/Road access/Sewage), and Location (City/District/Address).

This screenshot shows the 'Adding New Property' form at Step 2: Property details. The progress bar at the top indicates the current step. The form includes sections for Purpose (Sell/Rent), Category (Residential/Commercial/Land), Property Type (Apartment/Villa/Townhouse/Penthouse/Building/Floor), and Location (City/District/Address).

City

District

Address

Property location

Latitude

Longitude

Go to coordinates

Click to choose location

Basic Information

Title

Description

Specifications

Bedrooms

Bathrooms

Area (m²)

Extra Details

Parking Spaces

Floor Number

Total Floors

Balconies

Storage room

The property includes a storage room.

Furnished Status

Furnished

Unfurnished

Amenities

Features

Centrally Air-Conditioned

Central Heating

Double Glazed Windows

Building

Balcony or Terrace

Lobby in Building

Service Elevators

Completion year

Prayer Room

Flooring

Health & Fitness

Gym or Health Club

Facilities for Disabled

Swimming Pool

Recreation & Family

Kids Play Area

Lawn or Garden

Barbeque Area

Cleaning & Maintenance

Waste Disposal

Maintenance Staff

Cleaning Services

Business & Security

Security Staff

CCTV Security

Technology

Broadband internet

Satellite/Cable TV

Intercom

Miscellaneous

24 Hours Concierge

Pets Allowed

View

Freehold

Property Images

upload property images

Add clear and high-quality images for the listing. You can select multiple images at once.

Upload images

Next

AI Price Suggestion

This range is estimated from similar listings and adjusted using the extra pricing details you provided.

Refresh

56313 - 76188 JOD

Recommended Price: 66250 JOD

Confidence: low

The suggested range is based on a fallback estimate because there are not enough similar listings in the database.

Very close to city center

Public transportation is available

Road is paved

School is nearby

Hospital is nearby

Mosque is nearby

Market/services are nearby

New building

You can choose a final price inside this range, or slightly above it if the property has premium features.

1 Sign in

2 Property details

3 Ownership details

4 Payment plan

5 Approval

Property pricing factors

These extra details help the AI suggest a more realistic price range later in the payment plan.

Nearby services

Nearest hospital distance (km)

Example: 2.5

Nearest school distance (km)

Example: 1

Nearest mosque distance (km)

Example: 0.5

Nearest market / services distance (km)

Example: 1.2

Location and access

Distance to city center (km)

Example: 4

Street width (meters)

Example: 8

Public transport

Available

Road condition

Paved

Building condition

Building age (years)

Example: 5

Building condition

Good

Construction quality

Standard

Noise level

Medium

Has elevator

Near main road

Back

Continue

29

✓

✓

3

4

5

Sign in

Property details

Ownership details

Payment plan

Approval

Ownership details

Complete ownership verification for this property.

Basic ownership information

Ownership Type

Select ownership document type

Ownership Document

Upload ownership document

JPG, PNG, or PDF

Choose File

Basin Number

Enter basin number

Parcel Number

Enter parcel number

Building documents

Building license number

Enter building license number

Building license

Upload building license

Upload building license. JPG, PNG, or PDF.

Choose File

Building plan

Upload building plan

Upload building plan. JPG, PNG, or PDF.

Choose File

Basin Number

Enter basin number

Parcel Number

Enter parcel number

Building documents

Building license number

Enter building license number

Building license

Upload building license

Upload building license. JPG, PNG, or PDF.

Choose File

Building plan

Upload building plan

Upload building plan. JPG, PNG, or PDF.

Choose File

Identity Verification

This is required only once before your first property listing.

National ID Number

409268

ID image

Selected ID image

Αδειες οδήγησης και κυκλοφορίας - Νέες υπηρεσίες διαθέσιμες μέσω KEPI.jpg

Change File

Remove

Continue to payment plan

Basin Number

Enter basin number

Parcel Number

Enter parcel number

Building documents

Building license number

Enter building license number

Building license

Upload building license

Αδειες οδήγησης και κυκλοφορίας - Νέες υπηρεσίες διαθέσιμες μέσω KEPI.jpg

Building plan

Upload building plan

Identity

This is required only once before your first property listing.

National ID Number

409268

ID image

Selected ID image

Remove

Continue to payment plan

DRIVER LICENSE

ID: 123456789-005

NAME SURNAME

DOB: 23.05.1997

SEX: M

ISS: 12.03.2012

EXP: 12.08.2020

CLASS: B

DONOR: ○

John Doe

✓

✓

✓

4

5

Sign in

Property details

Ownership details

Payment plan

Approval

Payment Plan

AI Price Suggestion

This range is estimated from similar listings and adjusted using the extra pricing details you provided.

Refresh

56313 - 76188 JOD

Recommended Price: 66260 JOD

Confidence: low

The suggested range is based on a fallback estimate because there are not enough similar listings in the database.

Very close to city center

Public transportation is available

Road is paved

School is nearby

Hospital is nearby

Mosque is nearby

Market/services are nearby

New building

You can choose a final price inside this range, or slightly above it if the property has premium features.

Pricing

Rent Amount

Enter rent amount

Currency

JOD JOD

Rental Payment Details

Daily Rent

Weekly Rent

Monthly Rent

Quarterly Rent

Yearly Rent

Security Deposit (Optional)

Enter security deposit

Contract Duration (Months)

Example: 12

Submit

✓

✓

✓

4

5

Sign in

Property details

Ownership details

Payment plan

Approval

Payment Plan

AI Price Suggestion

Refresh

This range is estimated from similar listings and adjusted using the extra pricing details you provided.

50313 - 70188 JOD

Recommended Price: 66260 JOD

Confidence: low

The suggested range is based on a fallback estimate because there are not enough similar listings in the database.

Very close to city center

Public transportation is available

Road is paved

School is nearby

Hospital is nearby

Mosque is nearby

Market/services are nearby

New building

You can choose a final price inside this range, or slightly above it if the property has premium features.

Pricing

Rent Amount

60000

Currency

JD

JOD

Rental Payment Details

Daily Rent

Weekly Rent

Monthly Rent

Quarterly Rent

Yearly Rent

Security Deposit (Optional)

Contract Duration (Months)

Enter security deposit

12

Submit

✓

✓

✓

4

5

Sign in

Property details

Ownership details

Payment plan

Approval

Payment Plan

AI Price Suggestion

Refresh

This range is estimated from similar listings and adjusted using the extra pricing details you provided.

50906 - 68874 JOD

Recommended Price: 59890 JOD

Confidence: low

The suggested range is based on a fallback estimate because there are not enough similar listings in the database.

Reasonably close to city center

Limited public transportation

Road is partially paved

School is nearby

Hospital is nearby

Mosque is nearby

Market/services are nearby

Relatively modern building

You can choose a final price inside this range, or slightly above it if the property has premium features.

Pricing

Total Price

Enter total price

Currency

JD

JOD

Sale Payment Method

Full Cash Payment

Down Payment + installments

Only full cash payment is available for this property.

Submit

✓

✓

✓

4

5

Sign in

Property details

Ownership details

Payment plan

Approval

Payment Plan

AI Price Suggestion

Refresh

This range is estimated from similar listings and adjusted using the extra pricing details you provided.

50906 - 68874 JOD

Recommended Price: 59890 JOD

Confidence: low

The suggested range is based on a fallback estimate because there are not enough similar listings in the database.

Reasonably close to city center

Limited public transportation

Road is partially paved

School is nearby

Hospital is nearby

Mosque is nearby

Market/services are nearby

Relatively modern building

You can choose a final price inside this range, or slightly above it if the property has premium features.

Pricing

Total Price

Enter total price

Currency

JD

JOD

Sale Payment Method

Full Cash Payment

Down Payment + installments

Both options are available for this property.

Down Payment

Installment Amount

Installment Period (Months)

Enter down payment

Enter installment amount

Example: 36

Submit

✓

✓

✓

4

5

Sign in

Property details

Ownership details

Payment plan

Approval

Payment Plan

AI Price Suggestion

Refresh

This range is estimated from similar listings and adjusted using the extra pricing details you provided.

50906 - 68874 JOD

Recommended Price: 59890 JOD

Mortgage Calculator

Estimate the monthly mortgage payment based on property price, down payment, interest rate, and loan term.

Property Price

100000

JOD

Down Payment

10000

JOD

Annual Interest Rate

% 0

%

Loan Term

3

Years

Calculate Mortgage

Estimated Result

Monthly Payment

JOD 527.96

Loan Amount

JOD 80000.00

Total Payment

JOD 126711.50

Total Interest

JOD 46711.50

This is an estimate only. Actual bank offers may vary depending on eligibility, fees, and loan conditions.

Pricing

Total Price

Enter total price

Currency

JD

JOD

Sale Payment Method

Full Cash Payment

Down Payment + installments

Both options are available for this property.

Down Payment

Installment Amount

Installment Period (Months)

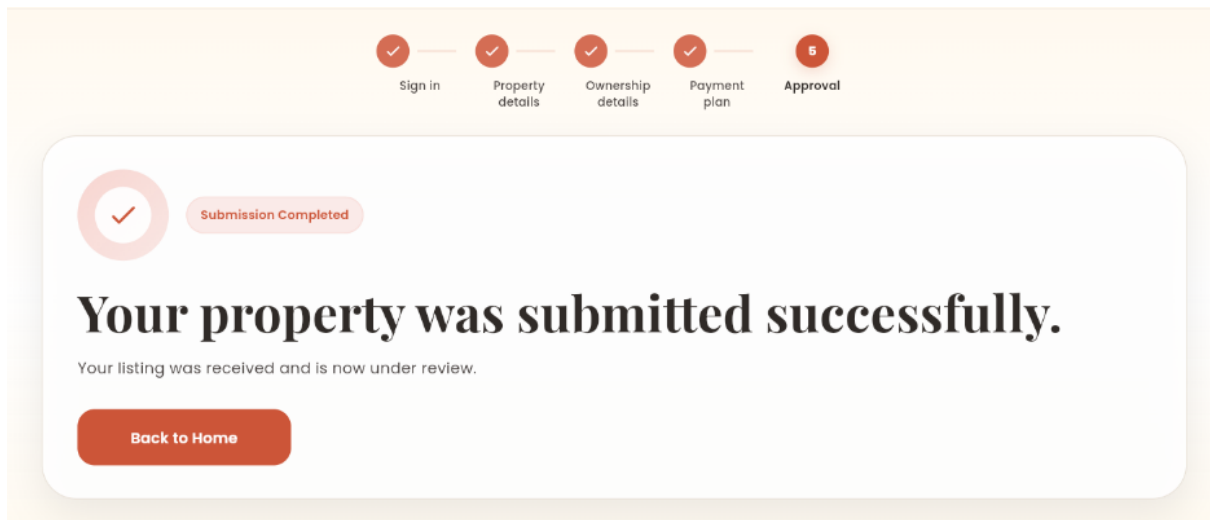
Enter down payment

Enter installment amount

Example: 36

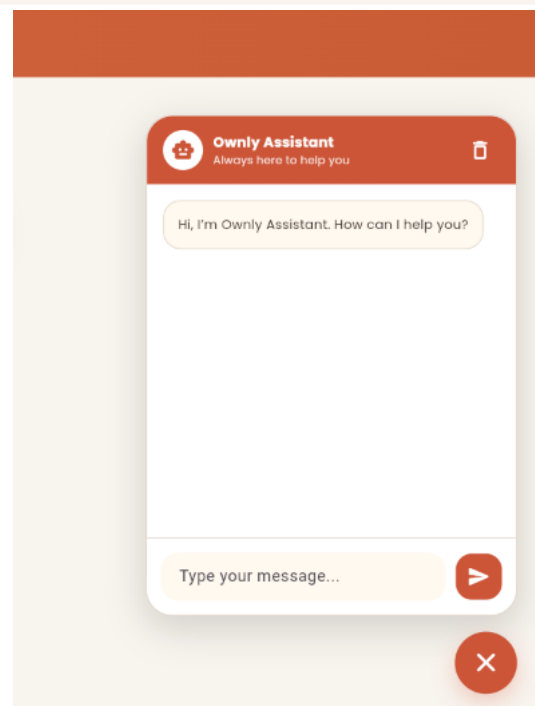
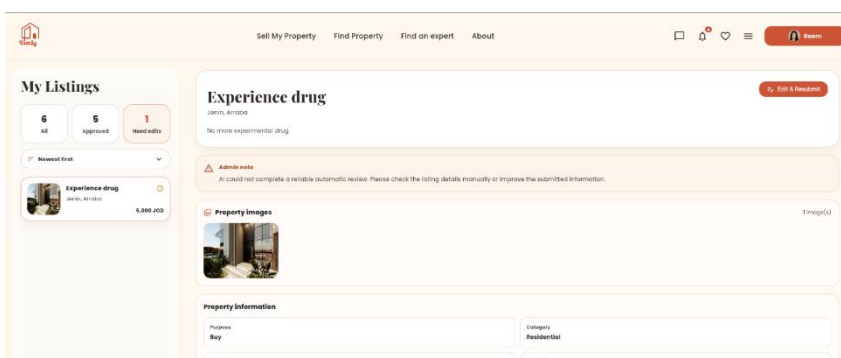
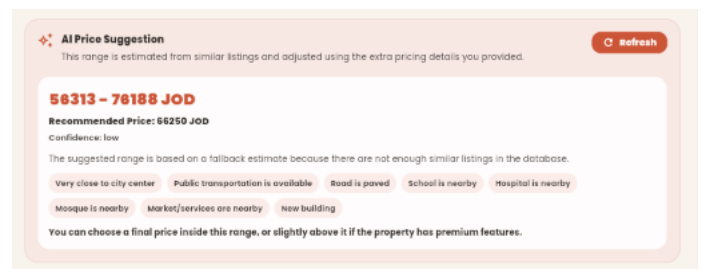
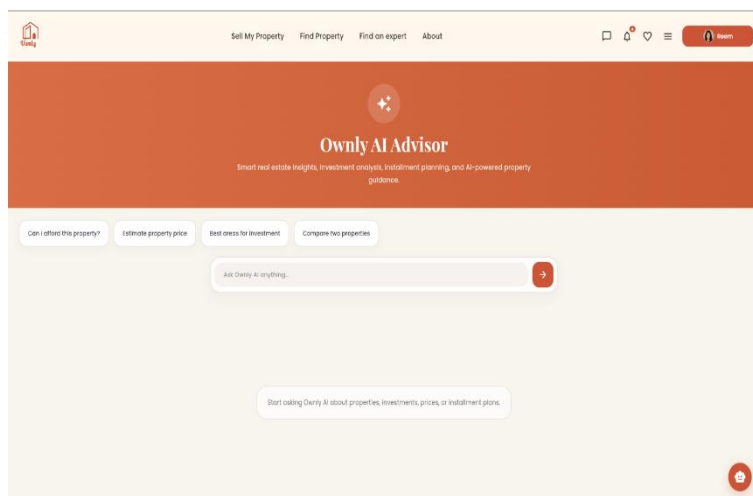
Submit

31



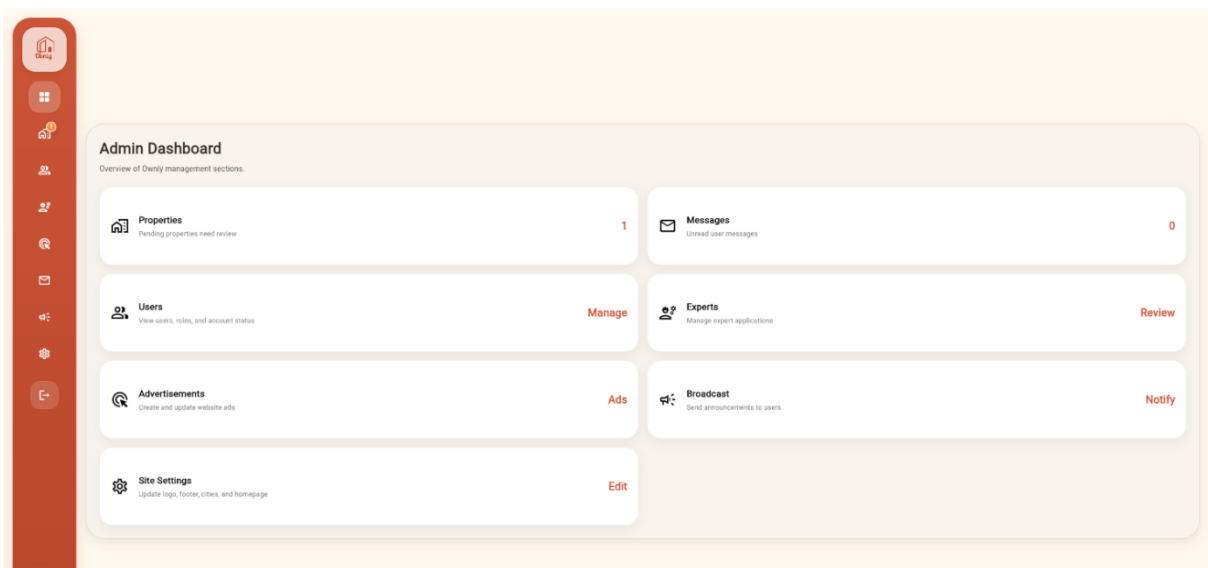
5.4 AI-Powered Services

The AI Advisor allows users to ask real-estate related questions and receive intelligent recommendations. It provides assistance for property valuation, affordability analysis, investment opportunities, property comparisons, and installment planning.



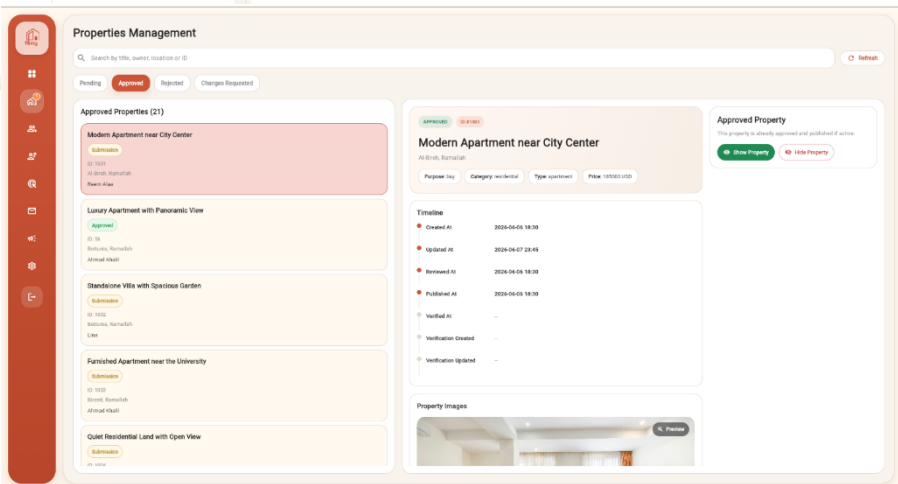
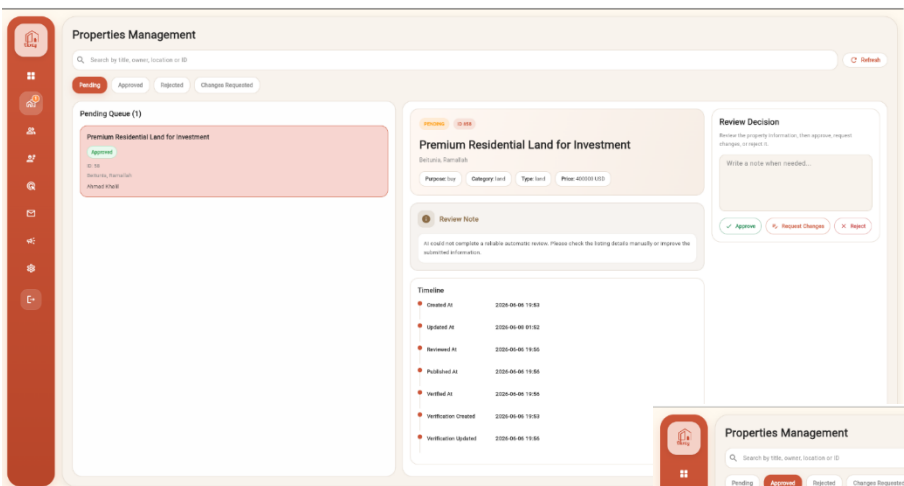
5.5 Admin Dashboard

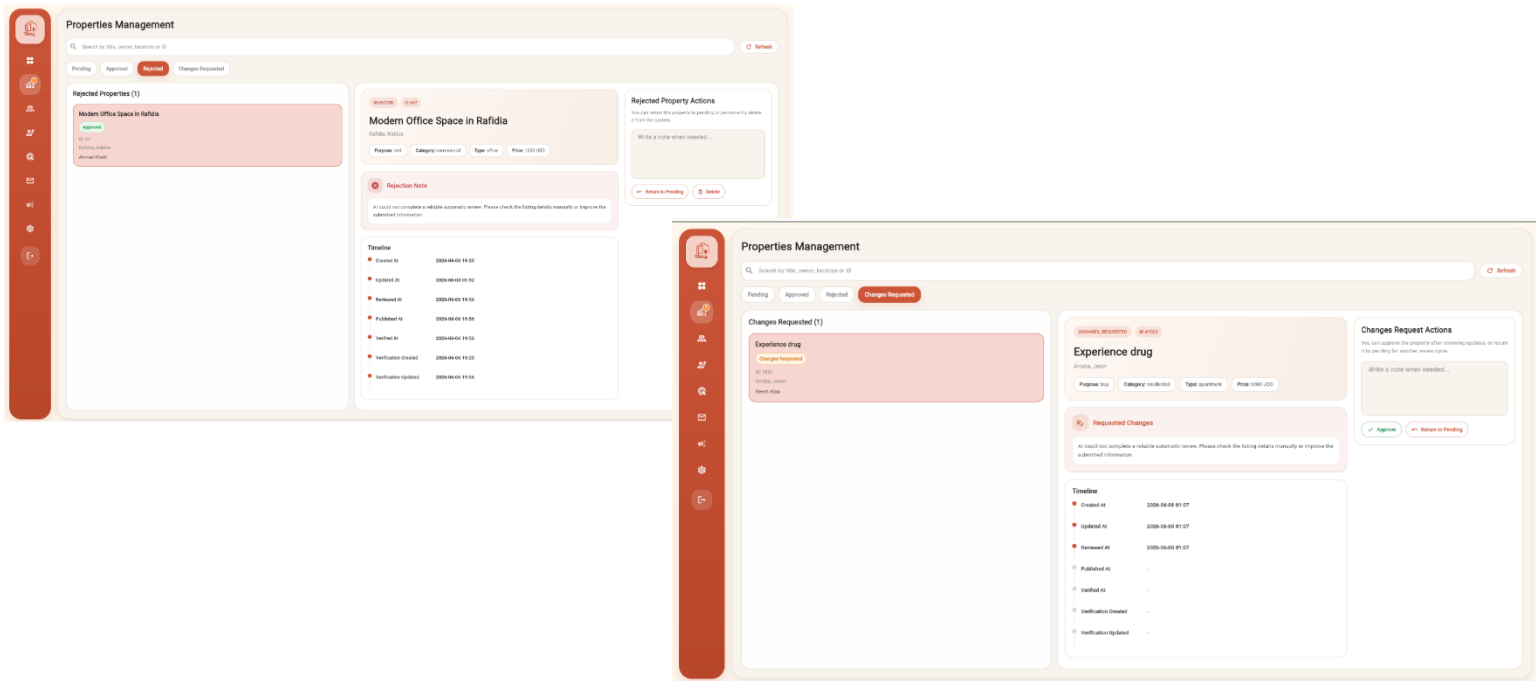
The Admin Dashboard provides a centralized overview of the platform and allows administrators to access and manage all system sections from one place.



5.5.1 Property Management

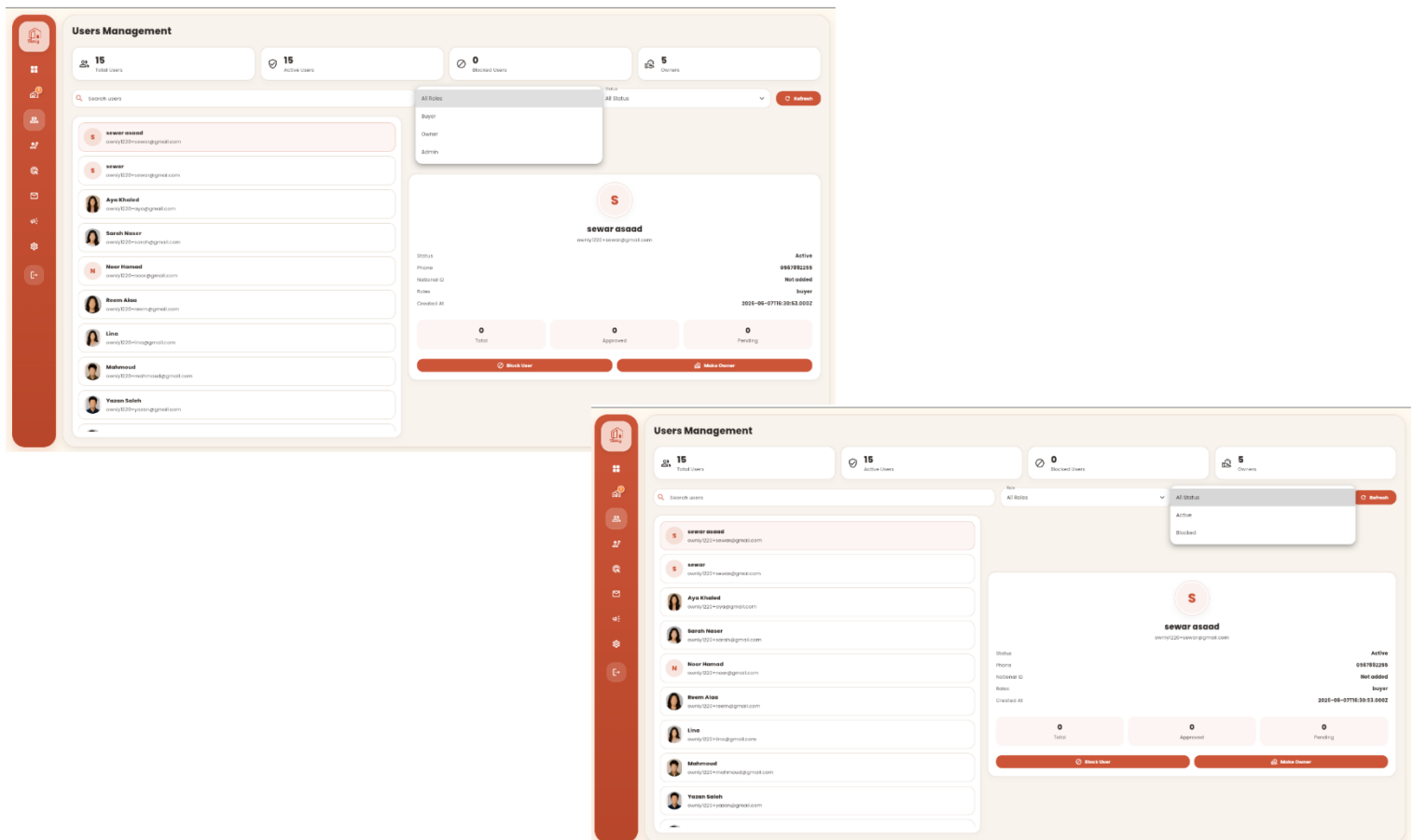
This section allows administrators to review submitted properties, approve listings, reject invalid submissions, and manage property visibility on the platform.

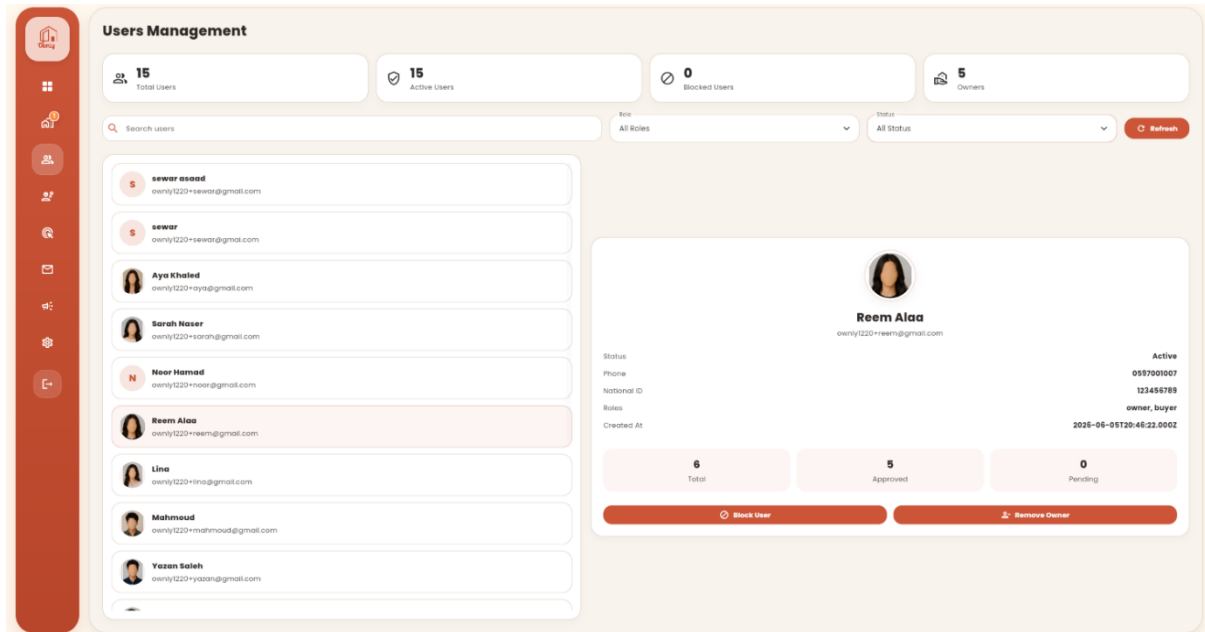




5.5.2 User Management

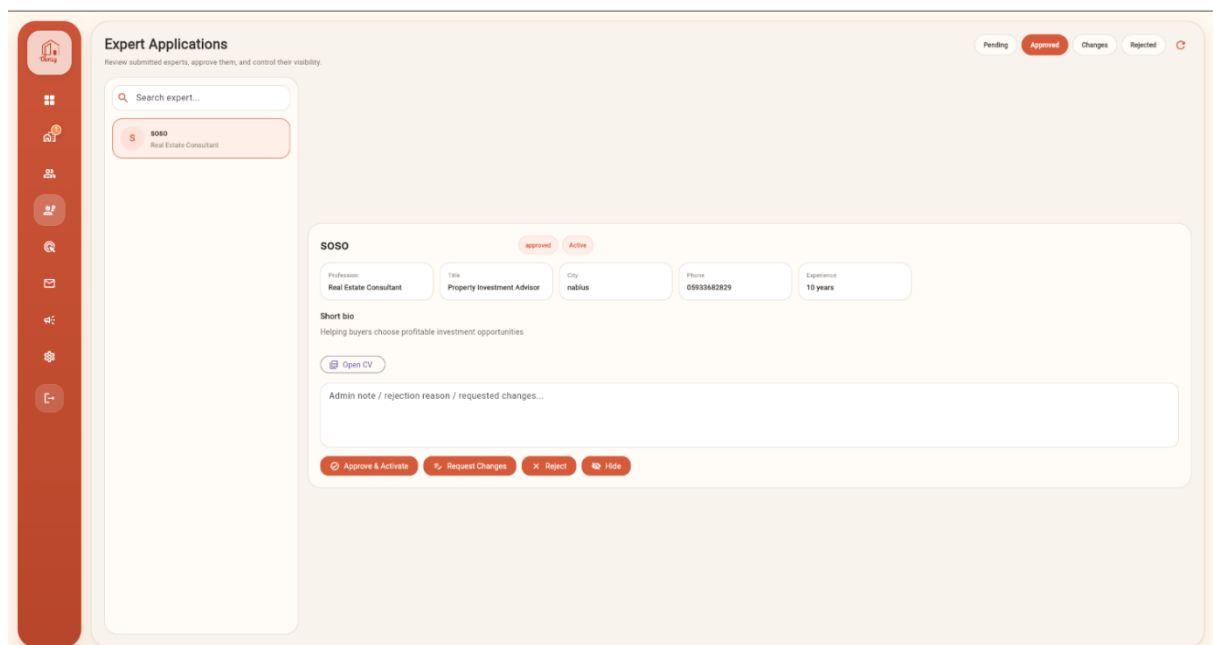
This section is used to manage user accounts, monitor account status, assign roles, and control owner privileges.





5.5.3 Expert Applications

This section enables administrators to review expert applications, verify qualifications, and approve or reject expert profiles.



5.5.4 Advertisement Management

This section allows administrators to create, edit, and manage advertisements displayed throughout the platform.

Home

Users

Properties

Advertisements

Analytics

Settings

Help

Advertisements

Upload visual ads for the home and search pages.

Create advertisement

Title

Example: Special property offer

Target URL

Example: /property/15 or https://example.com

Placement

Search vertical ad

Priority

5

Shuffle seconds

5

Status

Active

Start date

YYYY-MM-DD optional

End date

YYYY-MM-DD optional

Upload advertisement image

Save ad

Current advertisements

the new one

Home | priority: 5 | active

Period: From 2020-09-09

Views: 201 | Clicks: 9

test

Search | priority: 1 | active

Period: From 2020-02-09

Views: 109 | Clicks: 0

Home

Users

Properties

Advertisements

Analytics

Settings

Help

Advertisements

Upload visual ads for the home and search pages.

Edit advertisement

Title

the new one

Target URL

Example: /property/15 or https://example.com

Placement

Home horizontal banner

Priority

5

Shuffle seconds

8

Status

Active

Start date

2020-09-25

End date

YYYY-MM-DD optional

Upload new image or keep current one

Image preview

FIND THE HOME THAT DEFINES YOU
Luxury Villas & Apartments Across UAE

Cancel edit

Update ad

Current advertisements

the new one

Home | priority: 5 | active

Period: From 2020-09-09

Views: 201 | Clicks: 9

test

Search | priority: 1 | active

Period: From 2020-02-09

Views: 109 | Clicks: 0

Home

Users

Properties

Advertisements

Analytics

Settings

Help

Advertisements

Upload visual ads for the home and search pages.

Create advertisement

Title

Example: Special property offer

Target URL

Example: /property/15 or https://example.com

Placement

Search vertical ad

Priority

5

Status

Active

Start date

YYYY-MM-DD optional

End date

YYYY-MM-DD optional

Upload advertisement image

Save ad

Current advertisements

the new one

Home | priority: 5 | active

Period: From 2020-09-24

Views: 201 | Clicks: 9

test

Search | priority: 1 | active

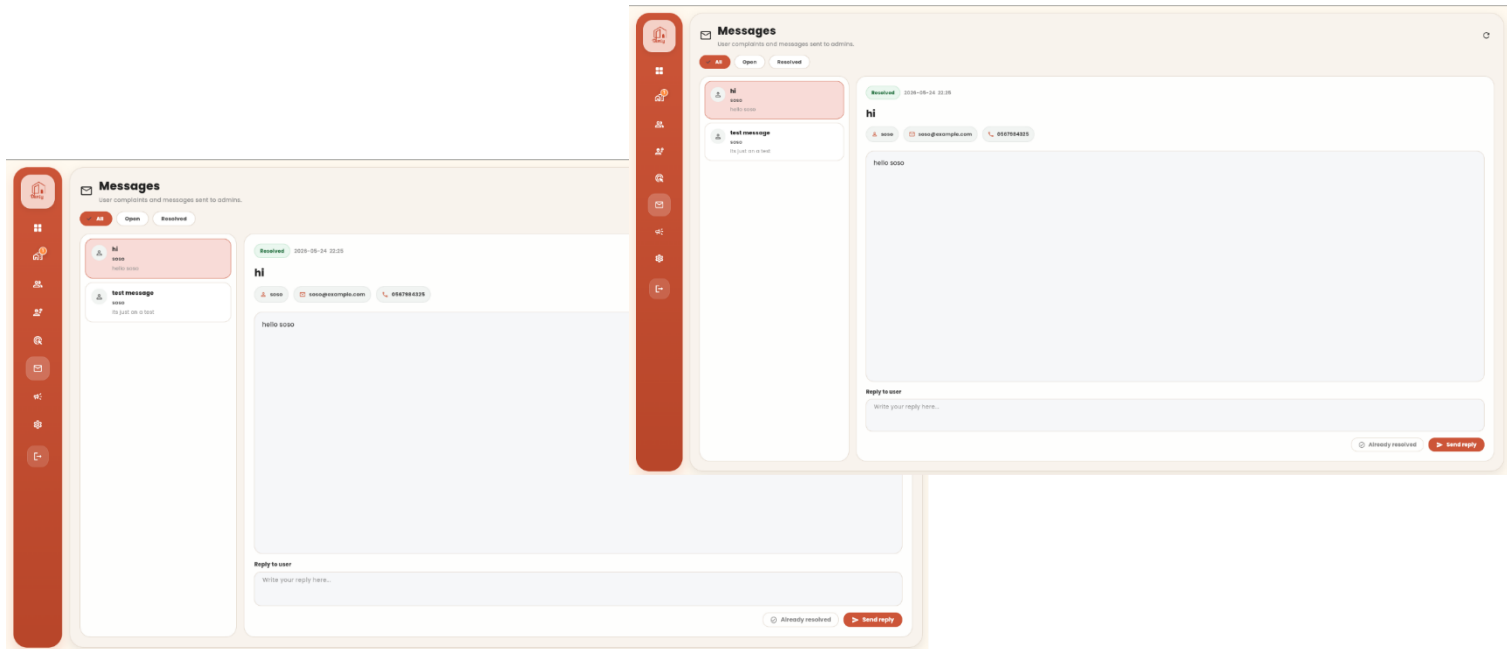
Period: From 2020-02-09

Views: 109 | Clicks: 0

36

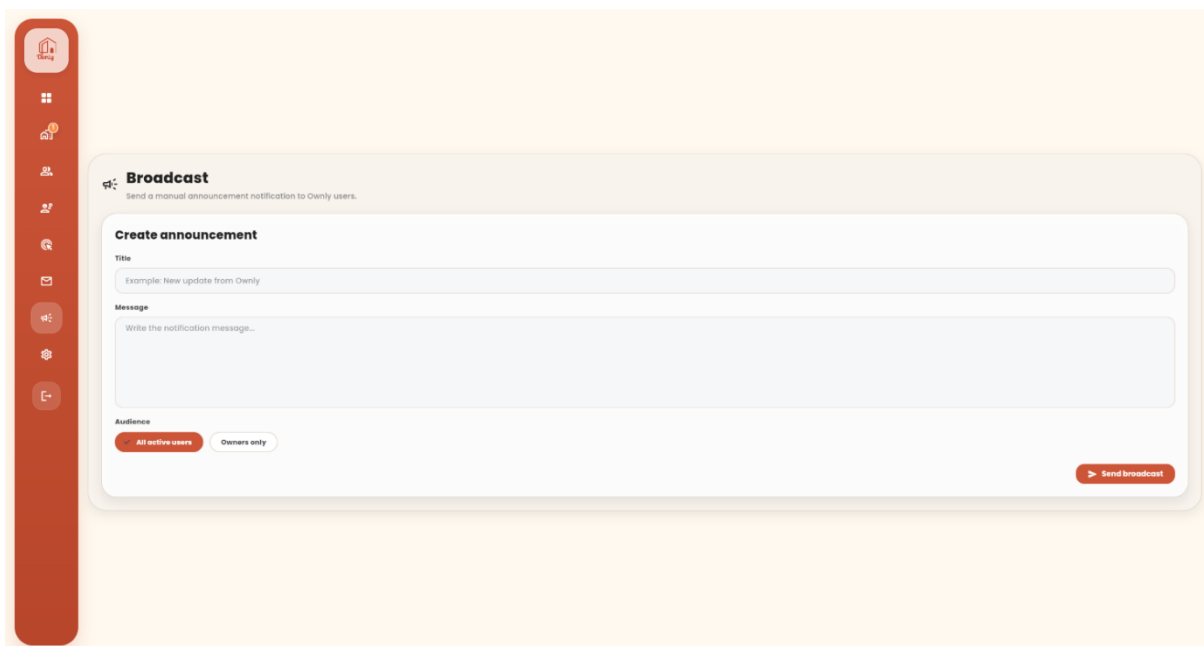
5.5.5 Messages Management

This section provides a communication channel between users and administrators, allowing messages, inquiries, and support requests to be handled.



5.5.6 Broadcast Management

This section allows administrators to send announcements and notifications to users across the platform.



5.5.7 Site Content Management

This section enables administrators to manage website content, including logos, homepage images, contact information, social media links, and location data.

Home

Dashboard

Users

Properties

Locations

Site Content

Settings

Help

Site Content

Logos

Navbar Logo
Main logo shown in the navigation bar.

Choose Logo

Footer Logo
White logo shown inside the footer.

Choose Footer Logo

Current / New Navbar Logo
Current:  New Preview: No new image

Current / New Footer Logo
Current:  New Preview: No new image

Home Images

Home Slider Images
Upload multiple images. Existing images stay unless you delete them.

Choose Home Images

Current Home Images
 

Remove All

Footer Text

Footer Text English
Find trusted properties, discover new projects, and explore real-estate opportunities in one elegant place

Footer Text Arabic
اكتشف العقارات الموثوقة، واتبع المشاريع الجديدة، واستكشف فرص العقارات في مكان واحد أنيق

Contact Information

Home

Dashboard

Users

Properties

Locations

Site Content

Settings

Help

Footer Text

Footer Text English
Find trusted properties, discover new projects, and explore real-estate opportunities in one elegant place

Footer Text Arabic
اكتشف العقارات الموثوقة، واتبع المشاريع الجديدة، واستكشف فرص العقارات في مكان واحد أنيق

Contact Information

Country: Palestine

Code: +970

Phone Number: 592701082

Email address: sewarasad@gmail.com

Social Links

Facebook URL: https://www.facebook.com/sewarasad.559286

Instagram URL: https://www.google.com

LinkedIn URL:

Locations Management

Add Area to Existing City
Choose a city and add one new area to it.

Existing City: Bethlehem / بيت لحم

Hide Selected City

Area Name English:

Area Name Arabic:

+ Add Area

Add New City With Areas
Create one city and add multiple areas in a clean structure.

City Name English:

City Name Arabic:

Areas:

+ Add Area Row

Area English 1:

Area Arabic 1:

Add City With Areas

Save Changes

38

Chapter 6: Conclusion and Future Work

6.1 Conclusion

This project presented the design and development of Ownly, an integrated real estate platform that connects property owners, buyers, real estate experts, and administrators within a single system. The platform was developed to simplify property management processes and improve the overall real estate experience through modern technologies and intelligent services.

Ownly provides a wide range of features, including property listing and management, advanced property search and filtering, expert consultation services, appointment scheduling, multilingual support, interactive maps, and AI-powered property evaluation. These features work together to provide users with a more efficient, accessible, and informed real estate environment.

The platform was successfully implemented using Flutter, Node.js, and MySQL, resulting in a responsive and scalable system capable of supporting different user roles and functionalities. The integration of artificial intelligence and location-based services further enhances the platform and distinguishes it from many traditional real estate systems.

Overall, Ownly demonstrates how modern software technologies can be utilized to improve real estate management and support smarter decision-making processes for all stakeholders.

6.2 Future Work

Although Ownly successfully achieves its main objectives, several enhancements can be implemented in future versions of the platform.

Potential future improvements include the integration of 3D property visualization technologies that allow users to explore properties in a more interactive manner. Additional AI capabilities can also be introduced to provide more advanced property recommendations and predictive market analysis.

Future versions may include virtual property tours, mortgage and financing calculators, real-time communication tools, and enhanced analytics for property owners and administrators. Furthermore, expanding the platform to support additional regions and real estate markets can increase its usability and impact.

These improvements would further strengthen the platform and provide users with a more comprehensive and intelligent real estate experience.