



An Najah National University
Faculty of Engineering & Information
Technology
Department of Computer Engineering
Software Graduation Project
FurniFlow

Prepared by:

Yazan Saleh

Amro Jomaa

Supervised by:

Dr. Luai Malhis

JUNE 2026

Acknowledgment

We extend our sincere gratitude to everyone who supported the successful creation of the FurniFlow platform, a comprehensive furniture e-commerce and retail operations system delivered as both a web application and a mobile app.

Special thanks to our academic supervisor, Dr. Luai Malhis, for his valuable guidance and encouragement throughout the project development.

As the developers, we take pride in building this platform to support local retail and furniture commerce in Palestine, connecting customers with sellers, warehouse staff, drivers, cashiers, and support teams through a unified digital system.

We are especially grateful to our families and friends for their unwavering motivation and support throughout this challenging development journey.

Finally, we appreciate everyone who offered feedback and encouragement during our development process, helping us create a platform that truly serves our community's needs.

Table of Content

Acknowledgment	2
Abstract	9
Introduction	10
Statement of the Problem	10
Objectives of the Work	11
Primary Objectives:	11
Secondary Objectives:	11
Scope of the Work	11
Technical Scope	11
Functional Scope	12
Geographic Scope	12
Significance of the Work	12
Economic Impact	12
Social Impact	13

Technical Innovation	13
Educational Value	13
Constraints, Standards/Codes, and Earlier Coursework	13
Constraints and Limitations	13
Technical Constraints:	13
Financial Constraints:	14
Regulatory Constraints:	14
Geographic Constraints:	14
Time Constraints:	14
Standards and Codes	14
Backend – FastAPI REST Framework	
Key Standards:	14
Database – PostgreSQL	
Key Standards:	14
Frontend – React (Web) & React Native (Mobile)	
Key Standards:	15
Payment Integration – Stripe Payment Intents	
Key Standards:	15
AI Integration – Google Gemini & Hybrid Recommendation Engine	
Key Standards:	14
Methodology	16
Tools, Methods, and Programming Languages	16
Tools	16
Programming Languages & Frameworks	17
Database	19
AI and Machine Learning Integration	20
Results and Discussion	22
Web and Mobile Features	22
Common Features Among Users	22

Authentication System	22
Login Screen	22
Registration (Multi-step)	23
Email Verification	24
Forgot Password	25
Home Page & Navigation	26
Dashboard Overview	26
Profile Management	39
Profile Page	39
Edit Profile	39
Customer Features	40
Order Management	40
Browse Products	40
Product Catalog	42
Wishlist	44
Promotions	45
Shopping Cart	44
Order Address Management	47
Order Placement	47
Order Tracking	49
Delivery Tracking	49
Installment Financing	52
Installment Application	52
Installment Schedule	53
Reccommendation system	55
AI Chatbot Assistant	56
Support Tickets	58
Customer Feedback	60
Cashier Features	60
POS Terminal	60
Seller Features	63

Products Overview	63
Order Management	64
Warehouse Staff Features	66
Warehouse Staff Dashboard	66
Warehouse Staff Orders	68
Warehouse Staff Products	70
Warehouse Manager Features	70
Warehouse Manager Approvals	70
Warehouse Manager Issues	71
Warehouse Manager Inventory	73
Driver Features	74
Driver Delivery Management	74
Operations Manager Features	76
Operations and Delivery Management	76
Support Agent Features	79
Support Ticket Handling	79
Support Manager Features	81
Support Supervision and Moderation	81
Admin Features	82
Admin Dashboard	82
Products	84
Categories	84
Promotions	88
Discounts	89
Orders	89
Support Supervision and Moderation	90
User Management	92
Operations and Delivery Management	94
Installments Management	96
POS Analysis	98
Database	99

Discussion	101
Conclusion and Recommendations	102
Summary	102
Future Works	102
References	103

List Of Figures

1: login screen	23
2 : signup page	24
3: signup page (verify code)	24
4: reset password page (verify code)	25
5: dashboard page (customer , web)	27
6: dashboard page (customer , mobile)	29
7: dashboard page (driver)	30
8: dashboard page (admin)	31
9: dashboard page (seller)	32
10:dashboard page (cashier)	33
11: dashboard page (operations manager)	34
12: dashboard page (support agent)	35
13: dashboard page (support manager)	36
14: dashboard page (warehouse staff)	37
15: dashboard page (warehouse manager)	38
16: profile page (in all roles)	40
17: browse category(customer)	41
18: search products by filters/search (customer)	41
19: product search (customer)	42
20: products discounts (customer)	42
21 : product catalog (customer)	40
22 : product comments & reviews (customer)	43
23 : report other customer comment (customer)	44
24 : customer wishlist (customer)	44
25 : promotions (customer)	45
26 : cart page (customer)	46
27 : checkout page (customer)	48
28 : order tracking (customer)	50
29 : Driver tracking (customer)	51

30 : new installment request (customer)	52
31 : installment schedule (customer)	53
32 : installment payments (customer)	54
33 : Recommendation (customer)	56
34 : AI Chat Assistant (customer)	57
35 : My Tickets (customer)	58
36 : Chatting System in Ticket (customer)	59
37 : Site Services Feedback (customer)	60
38 : POS Terminal (cashier)	61
39 : POS search / Total sold for day / payment method (cashier)	62
40 : Products Overview (seller)	64
41 : Start Preparing order (seller)	65
42 : preparing order (seller)	66
43 : warehouse staff dashboard (warehouse staff)	67
44 : warehouse staff start packing (warehouse staff)	68
45 : reporting (warehouse staff)	69
46 : done packed (warehouse staff)	69
47 : staff see products (warehouse staff)	70
48 : approves order packing from the warehouse staff (warehouse manager)	71
49 : warehouse manager solving issues reports from warehouse staff (warehouse manager)	72
50 : warehouse manager Inventory control stocks (warehouse manager)	73
51 : find job (driver)	74
52 : active job & uploaded proof image (driver)	75
53 : chat with customer & history page showing done delivered when delivery proof image approved (driver)	75
54 : report issue to the admin/operations manager (driver)	76
55 : orders managements (operations manager)	77
56 : tracking driver (operations manager)	77
57 : installments managements (operations manager)	78
58 : approve proofs images from delivery management (operations manager)	78
59 : reported issues management(operations manager)	79
60 : self claimed or assigned by support manager/admin ticket (support agent)	80
61 : in progress ticket (support agent)	80
62 : resolved ticket (support agent)	80
63 : view all tickets & take ticket or assign support agent to it (support manager)	81
64 : view customers feedbacks&all comments (filtered based on sentiment with AI) & manage reported comments (support manager)	82
65 : dashboard page (admin)	83
66 : Products page (admin)	85
67 : Products add/update (admin)	85

68 : configure low stock threshold (admin)	86
69 : category page (admin)	87
70 : add/update category (admin)	87
71 : create promotion (admin)	88
72 : Discounts page & creation(admin)	89
73 : orders page & filters (admin)	90
74 : view all tickets & take ticket or assign support agent to it (admin)	91
75 :view customers feedbacks&all comments (filtered based on sentiment with AI) & manage reported comments (admin)	92
76 : users list / change role / user profile (admin)	93
77 : check deliveries orders (admin)	94
78 : tracking drivers (admin)	95
79 : approves proofs images from delivery management(admin)	95
80 : reported issues management(admin)	96
81 : all installments(admin)	97
82 : installment scheduling (paid) (admin)	97
83 : installment scheduling (pending) (admin)	98
84 : POS Analysis(admin)	98

Abstract

FurniFlow is a comprehensive multi-channel furniture e-commerce and retail operations platform developed to support online shopping, in-store point-of-sale sales, warehouse fulfillment, last-mile delivery, installment financing, and customer support. The system serves multiple specialized roles—including customers, sellers, warehouse staff, warehouse managers, operations managers, drivers, cashiers, support agents, support managers, and administrators.

The first main feature is Order Management, where customers browse a multilingual product catalog, manage cart and wishlist, complete checkout with Stripe payments, track order status through a multi-stage fulfillment pipeline, and view order history. The platform also supports installment purchase requests with identity-document verification and scheduled payments.

The second main feature is Catalog and Inventory Management, where administrators and sellers manage products, categories, discounts, and promotions; warehouse staff verify and pack orders; and warehouse managers approve orders for pickup while monitoring stock levels and resolving issues.

The third main feature is Delivery and Operations Management, where operations managers assign drivers, drivers accept jobs, upload pickup and delivery proof photos, share live GPS location, and track earnings; while cashiers process in-store POS sales through a dedicated terminal interface.

FurniFlow also implements an AI-powered shopping assistant using Google Gemini for conversational product discovery, combined with a hybrid recommendation engine (behavioral events, TF-IDF content similarity, and co-purchase analysis). Support tickets with real-time

WebSocket chat, product reviews with sentiment analysis, and role-based access control with JWT authentication further strengthen security and user experience.

The platform is built using PostgreSQL with SQLAlchemy for relational data storage, FastAPI for the backend API, React for the web application, and Expo React Native for the mobile app, with trilingual support in English, Arabic, and French.

Introduction

Statement of the Problem

In Palestine, particularly in cities like Nablus and surrounding areas, furniture retailers and e-commerce businesses face significant challenges when attempting to digitize sales, fulfillment, and customer service. Traditional retail workflows are often fragmented across separate tools for catalog management, payments, warehouse packing, delivery coordination, and customer support. The current market lacks:

- **Unified Platform:** No comprehensive system connecting customers, sellers, warehouse teams, drivers, cashiers, and administrators
- **Real-time Tracking:** Limited visibility into order fulfillment, delivery status, and driver location
- **Payment Integration:** Fragmented payment methods and limited support for secure online and in-store transactions
- **AI-Powered Support:** Lack of intelligent product discovery assistance and personalized recommendations
- **Multi-role Management:** Absence of specialized interfaces for distinct operational roles in retail and logistics
- **Local Market Focus:** Limited platforms designed for Palestinian retailers with Arabic, English, and French support

These challenges result in poor user experience, inefficient warehouse and delivery operations, and missed opportunities for local furniture businesses to expand their reach through integrated digital channels.

Objectives of the Work

The primary objectives of developing the FurniFlow platform are:

Primary Objectives:

- To create a comprehensive furniture e-commerce and retail operations platform that connects customers, sellers, warehouse teams, drivers, cashiers, and administrators
- To implement end-to-end order tracking with a multi-stage fulfillment workflow and delivery job management
- To develop an AI-powered shopping assistant and hybrid recommendation system for intelligent product discovery
- To integrate secure payment processing using Stripe Payment Intents for online orders and installment payments
- To provide specialized interfaces for different user roles (customer, seller, warehouse staff, warehouse manager, operations manager, driver, cashier, support agent, support manager, and admin)

Secondary Objectives:

- To support local businesses by providing digital tools for catalog management, order processing, and POS sales
- To create operational efficiency for warehouse packing, delivery coordination, and customer support workflows
- To implement robust security measures for user data, authentication, and payment information
- To develop a scalable three-tier architecture that can accommodate future growth
- To provide analytics and operational insights for administrators, sellers, and drivers

Scope of the Work

The scope of this project encompasses:

Technical Scope:

- Development of a full-stack web and mobile application using React, Expo React Native, FastAPI, and PostgreSQL
- Implementation of RESTful API architecture for backend services

- Integration of an AI shopping assistant using Google Gemini with offline fallback and intent-based product search
- Payment integration using Stripe Payment Intents for secure online and installment transactions
- Real-time delivery chat, ticket chat, and location tracking systems
- Multi-platform deployment (web and mobile)

Functional Scope:

- Customer product browsing, cart, wishlist, checkout, orders, installments, tickets, and recommendations
- Seller and admin catalog management including products, categories, discounts, and promotions
- Warehouse verification, packing, issue reporting, and delivery job assignment
- Administrative and operations dashboards for users, orders, deliveries, installments, and analytics
- AI-powered customer assistance and hybrid product recommendations
- Payment processing for online checkout, installment schedules, and in-store POS sales
- User authentication, authorization, and role-based access control
- Analytics, sentiment analysis, and reporting for reviews, feedback, and operations

Geographic Scope:

- Primary focus on Palestine, specifically Nablus and surrounding areas
- Scalable design for potential expansion to additional Palestinian cities and retailers

Significance of the Work

This project holds significant importance for several reasons:

Economic Impact:

- **Local Business Support:** Enables furniture retailers and sellers to reach more customers and increase revenue
- **Operational Efficiency:** Streamlines warehouse packing, delivery coordination, and support workflows

- **Digital Transformation:** Modernizes furniture retail and e-commerce operations in Palestine

Social Impact:

- **Community Connectivity:** Strengthens connections between local retailers and customers
- **Accessibility:** Makes furniture shopping and order tracking more accessible through web and mobile channels
- **Convenience:** Improves quality of life through integrated online shopping, installments, and delivery

Technical Innovation:

- **AI Integration:** Demonstrates practical application of conversational AI and hybrid recommendation techniques
- **Mobile-First Design:** Addresses the mobile-centric nature of modern users
- **Scalable Architecture:** Provides a foundation for future technological advancements

Educational Value:

- **Real-world Application:** Demonstrates practical implementation of modern web technologies
- **Problem-Solving:** Addresses genuine local market needs
- **Innovation:** Showcases creative solutions to regional retail and fulfillment challenges

Constraints, Standards/Codes, and Earlier Coursework

Constraints and Limitations

The development of the FurniFlow platform faced several constraints and limitations:

Technical Constraints:

- **Internet Connectivity:** Limited and unstable internet infrastructure in some areas of Palestine affecting real-time features

- **Device Compatibility:** Need to support older mobile devices with limited processing power and storage
- **Battery Optimization:** Mobile app must be optimized for battery life due to GPS tracking requirements
- **Network Latency:** High latency connections affecting real-time chat and tracking features

Financial Constraints:

- **API Costs:** Google Gemini API usage costs for the AI shopping assistant
- **Stripe Fees:** Transaction fees for payment processing affecting profit margins
- **Cloud Hosting:** Costs for PostgreSQL hosting, image storage, and server deployment

Regulatory Constraints:

- **Payment Regulations:** Compliance with Palestinian banking and payment regulations
- **Data Privacy:** Adherence to data protection laws and user privacy requirements
- **Business Licensing:** Requirements for operating retail, delivery, and payment services in Palestine

Geographic Constraints:

- **Limited Coverage Area:** Initial focus on Nablus and surrounding areas only
- **Language Support:** Need for Arabic, English, and French localization with RTL support
- **Cultural Considerations:** Adaptation to local customs and business practices

Time Constraints:

- **Development Timeline:** Limited time for comprehensive testing and optimization
- **Feature Scope:** Need to prioritize core features over advanced functionality
- **Learning Curve:** Time required to master new technologies and frameworks

Standards and Codes

Backend – FastAPI REST Framework

Key Standards:

- **RESTful API Design:** Following REST architectural principles with proper HTTP status codes and Pydantic validation

- **Dependency Injection:** FastAPI dependency-based authentication and role guards
- **Security Best Practices:** Following OWASP guidelines for web application security
- **Middleware Architecture:** CORS configuration, global exception handlers, and request validation
- **Environment Variables:** Secure handling of sensitive configuration data via python-dotenv

Database – PostgreSQL

Key Standards:

- **SQLAlchemy ORM:** Using SQLAlchemy for schema modeling, relationships, and data validation
- **Relational Schema Design:** Normalized table design with foreign keys and integrity constraints
- **Indexing Strategy:** Proper indexing for query optimization on orders, users, and catalog entities
- **Data Relationships:** One-to-many and many-to-one relationships across 30 database tables
- **Connection Security:** Database access control and secure PostgreSQL connections

Frontend – React (Web) & React Native (Mobile)

Key Standards:

- **Component Architecture:** Functional components with hooks
- **State Management:** React Context API for authentication, cart, wishlist, theme, and currency state
- **JavaScript:** Primary language across web and mobile applications with consistent conventions
- **Responsive Design:** Mobile-first responsive design principles
- **Code Quality:** ESLint/Prettier for consistent code formatting and linting

Payment Integration – Stripe Payment Intents

Key Standards:

- **Server-side Validation:** Payment amounts validated on the backend before Stripe confirmation

- **Security:** PCI DSS compliance through Stripe's secure infrastructure
- **Payment Confirmation:** Order and installment status updated after successful payment confirmation
- **Error Handling:** Comprehensive error handling for payment failures and declined transactions
- **Tokenization:** Using Stripe Elements and WebView checkout without storing card information

AI Integration – Gemini AI Assistant

Key Standards:

- **Gemini AI Assistant:** Google Generative AI for conversational product search with offline fallback
- **Multi-language Support:** Handling Arabic, English, and French conversations and localized catalog content

Methodology

Tools, Methods, and Programming Languages

Tools

Development Environment:

- **Visual Studio Code:** Primary code editor with Python, React, and React Native extensions
- **Git & GitHub:** Version control system for collaborative development and code management
- **Python 3:** Runtime environment for FastAPI backend development
- **Expo CLI:** Development tools for React Native mobile app development
- **Create React App (react-scripts):** Build tool and development server for the React web application

Testing and Quality Assurance:

- **Jest:** JavaScript testing framework for unit testing
- **React Testing Library:** Testing utilities for React components
- **ESLint:** Code linting and style enforcement

- **Prettier:** Code formatting and consistency
- **Pydantic:** Request/response validation and schema enforcement in FastAPI

Database and Backend Tools:

- **pgAdmin / DBeaver:** PostgreSQL database management and visualization tools
- **SQLAlchemy:** Python ORM for PostgreSQL data modeling
- **Postman:** API testing and documentation tool
- **Uvicorn:** ASGI server for running the FastAPI application

Deployment and DevOps:

- **PostgreSQL:** Relational database hosting (local or cloud deployment)
- **Vercel/Netlify:** Web application deployment platforms
- **Expo Application Services (EAS):** Mobile app building and deployment
- **Environment Variables:** Secure configuration management

Design and UI Tools:

- **Figma:** UI/UX design and prototyping
- **Custom CSS Design System:** Token-based styling with Space Grotesk and Fraunces typography
- **React Icons (Feather):** Consistent iconography across web and mobile panel interfaces
- **Framer Motion:** Animation library for React components

Programming Languages & Frameworks

Backend Technologies:

- **Python 3:** Primary language for server-side development
- **FastAPI:** Modern Python web framework for building REST APIs
- **Uvicorn:** ASGI server for production and development deployment
- **Pydantic:** Data validation and settings management
- **SQLAlchemy:** ORM layer for PostgreSQL database access

Frontend Technologies:

- **React:** JavaScript library for building user interfaces
- **React Native:** Framework for cross-platform mobile development
- **JavaScript:** Primary language for web and mobile client development
- **Expo:** Development platform and toolchain for React Native mobile app
- **React Router:** Declarative routing for React web applications

State Management:

- **React Context API:** Global state for auth, cart, wishlist, theme, currency, and confirmations
- **React Context API:** Built-in state management for component communication
- **Expo SecureStore:** Secure token storage for React Native mobile authentication

Styling and UI:

- **Custom CSS:** Token-based styling with CSS variables and page-scoped class prefixes
- **React Native StyleSheet:** Themed mobile styling with light/dark mode support
- **CSS-in-JS:** Styled components approach for component styling
- **Framer Motion:** Production-ready motion library for React

Authentication and Security:

- **JWT (JSON Web Tokens):** Secure token-based authentication
- **passlib[bcrypt]:** Password hashing and verification
- **python-jose:** JWT token creation and validation
- **CORS:** Cross-Origin Resource Sharing configuration

Payment Integration:

- **Stripe:** Payment processing platform
- **Stripe Payment Intents:** Secure online and installment payment processing
- **Stripe React SDK / WebView:** Web and mobile payment integration

Maps and Location Services:

- **OrderMapTracker:** Interactive delivery tracking maps on the web frontend
- **Nominatim Geocoding:** Address-to-coordinate conversion for delivery jobs

- **Expo Location:** Live GPS location sharing for driver mobile workflows
- **OpenStreetMap links:** Map integration for delivery addresses and tracking

Database

Database System:

- **PostgreSQL:** Relational SQL database
- **SQLAlchemy:** Python ORM for schema definition and queries
- **psycopg2:** PostgreSQL database adapter for Python

Database Design:

- **Relational Architecture:** Normalized schema with foreign keys across catalog, orders, delivery, and support entities
- **Tables:** 30 relational tables including users, products, orders, deliveries, installments, tickets, and recommendations
- **Indexing:** Optimized query performance with strategic indexing on status, role, and foreign key fields
- **Data Relationships:** SQLAlchemy relationships modeling one-to-many and many-to-one associations

Data Models:

- **User Model:** Customer, seller, driver, cashier, warehouse staff, support roles, and admin user types
- **Order Model:** Order management with multi-stage status tracking and sale channel (online/pos)
- **Product Model:** Multilingual product catalog, images, discounts, and inventory quantities
- **Promotion Model:** Cart-level promotions with filter rules and discount configuration
- **Delivery Model:** Delivery jobs, proof photos, driver location, and chat
- **Recommendation Model:** User interaction events and batch recommendation cache

Database Operations:

- **CRUD Operations:** Create, Read, Update, Delete operations
- **Aggregation Pipeline:** Complex data processing and analytics

- **Data Validation:** Pydantic schemas and SQLAlchemy model constraints ensuring data integrity
- **Connection Pooling:** Efficient database connection management

Security and Backup:

- **Data Encryption:** Encryption at rest and in transit
- **Access Control:** Role-based database access
- **Backup Strategy:** Regular automated backups
- **Environment Configuration:** Secure database connection strings

AI and Machine Learning Integration

AI Chat System Architecture:

- **Dual AI Implementation:** Google Gemini conversational assistant and hybrid scikit-learn recommendation engine
- **Google Gemini:** Generative AI model for natural-language product search and chat responses
- **Hybrid Recommendation Engine:** Behavioral events, TF-IDF content similarity, and co-purchase PMI scoring

Natural Language Processing:

- **TF-IDF Vectorization:** Text feature extraction for product similarity and recommendation scoring
- **Scikit-learn:** Machine learning library for content-based recommendation computations
- **Intent Detection:** Pattern matching and extraction for shopping assistant query understanding
- **Multi-language Support:** Arabic, English, and French catalog localization and UI translation

AI Service Integration:

- **Google Generative AI API:** Integration with Gemini for conversational shopping assistance
- **Context Management:** In-memory chat sessions with product context and follow-up handling

- **Response Generation:** Product search results and conversational replies based on user queries
- **Fallback Mechanisms:** Offline keyword search when the Gemini API is unavailable

AI Chat Features:

- **Shopping Assistance:** AI-powered product discovery, filtering, and catalog navigation
- **Product Recommendations:** Hybrid realtime and batch recommendation endpoints
- **Personalized Suggestions:** Recommendations based on views, searches, wishlist, cart, and purchases
- **Multilingual Chat:** Seamless support for Arabic, English, and French user interactions

Data Processing:

- **Interaction Storage:** Persistent user interaction events in PostgreSQL for recommendation learning
- **User Context:** Integration with catalog data, cart contents, and browsing behavior
- **Analytics:** Sentiment analysis on reviews and feedback using TextBlob
- **Batch Recompute:** Admin-triggered recommendation batch cache refresh

Performance Optimization:

- **Response Caching:** Efficient caching of common responses
- **Rate Limiting:** API usage control and cost management
- **Error Handling:** Robust error handling for AI service failures
- **Real-time Processing:** Fast response times for chat interactions

Security and Privacy:

- **Data Minimization:** Only necessary data sent to AI services
- **User Consent:** Clear consent mechanisms for AI interactions
- **Data Protection:** Secure handling of user conversation data
- **API Security:** Secure communication with AI service providers

Results and Discussion

Web and Mobile Features

This chapter presents the comprehensive results of implementing the FurniFlow e-commerce platform, showcasing the successful development of a multi-platform application with specialized interfaces for customers, sellers, warehouse teams, drivers, cashiers, support staff, and administrators on both web and mobile clients.

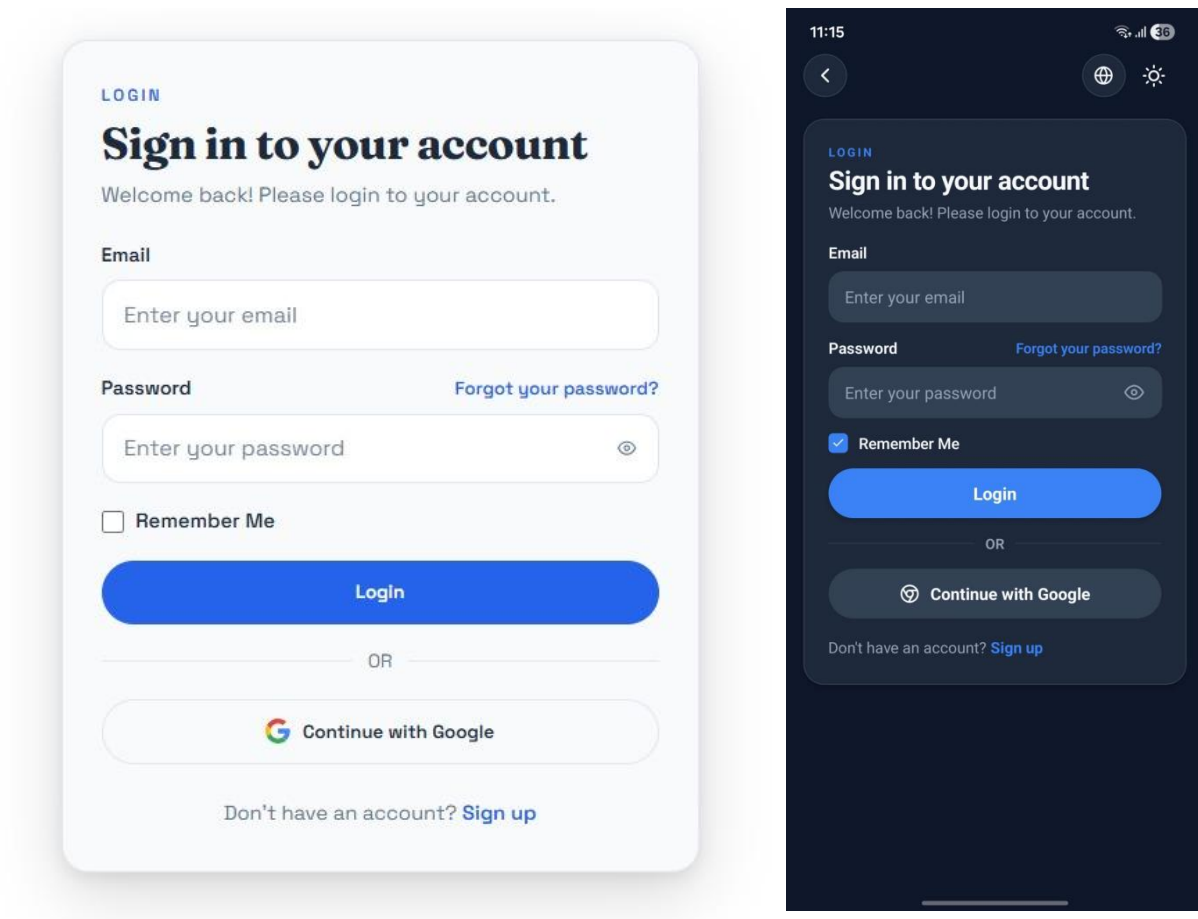
Common Features Among Users

Authentication System

Login Screen

- **Implementation:** Professional login interface with FurniFlow branding
- **Features:** Email and password authentication, Google OAuth sign-in, and optional persistent session (Remember Me)
- **Security:** JWT access tokens with refresh-token mechanism and token version invalidation
- **UI/UX:** Responsive design with animated logo and form validation

1: login screen



Registration (Multi-step)

- **Implementation:** Customer registration with email verification workflow
- **Features:** Account creation with role assignment by administrators; staff roles created through admin user management
- **Validation:** Real-time form validation and error handling
- **UI/UX:** Clean registration form with validation and verification flow

2: signup page

SIGN UP

Create your account

Create a new account to get started.

First Name * **Last Name ***

Enter your first name Enter your last name

Email *

Enter your email

Phone (Optional)

Enter your phone number

Country (Optional) City (Optional) Street (Optional)

Enter your country Enter your city Enter your street

Password *

Enter your password

Confirm Password *

Confirm your password

Sign Up

OR

 Continue with Google

Already have an account? [Login](#)

11:15   3G

SIGN UP

Create your account

Create a new account to get started.

First Name * **Last Name ***

Enter your first Enter your last

Email *

Enter your email

Phone (Optional)

Enter your phone number

Country (Optional)

Enter your country

City (Optional) Street (Optional)

Enter your city Enter your street

Password *

Enter your password

Confirm Password *

Confirm your password

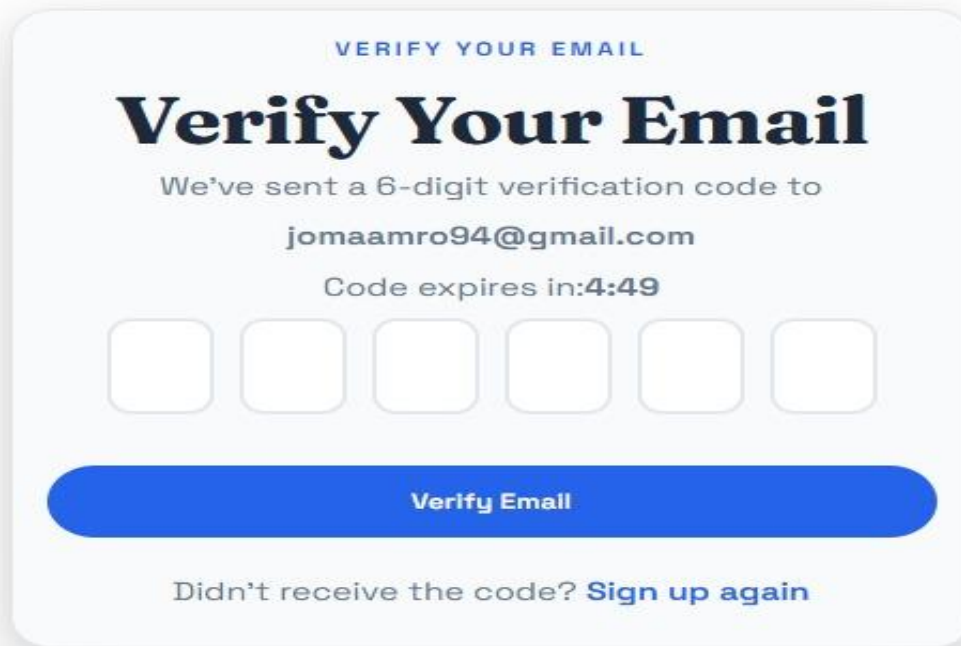
Sign Up

Email Verification

- **Implementation:** Email verification system using SMTP (fastapi-mail)
- **Features:** Verification code generation and validation

- **Security:** Secure token-based email verification
- **UI/UX:** Clean verification interface with resend functionality

3: *signup page(verify code)*

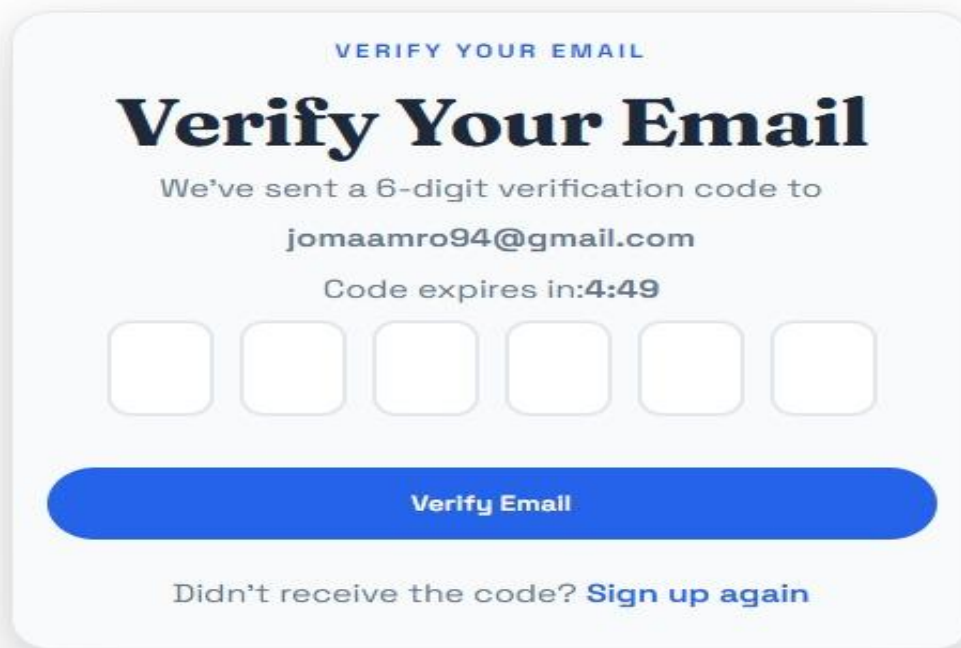


A mockup of an email verification interface. At the top, it says "VERIFY YOUR EMAIL" in blue. Below that is the main heading "Verify Your Email" in large, bold, dark blue font. Under the heading, it says "We've sent a 6-digit verification code to" followed by the email address "jomaamro94@gmail.com" in a monospace font. Below the email address, it says "Code expires in: 4:49". There are six empty square input boxes for the verification code. Below the input boxes is a large blue button with the text "Verify Email" in white. At the bottom, it says "Didn't receive the code? Sign up again" in blue.

Forgot Password

- **Implementation:** Password reset functionality with email verification codes
- **Features:** Secure reset code generation and email notifications
- **Security:** Time-limited reset tokens and secure password hashing
- **UI/UX:** Simple form with clear instructions

4: reset password page(verify code)



A verification email form with a light gray background and rounded corners. At the top, it says "VERIFY YOUR EMAIL" in small blue capital letters. Below that is the main heading "Verify Your Email" in a large, bold, dark blue serif font. The text "We've sent a 6-digit verification code to" is in a small gray font, followed by the email address "jomaamro94@gmail.com" in a medium gray font. Below the email address, it says "Code expires in:4:49" in a small gray font. There are six empty square input boxes for the verification code. Below the input boxes is a large blue button with the text "Verify Email" in white. At the bottom, it says "Didn't receive the code? Sign up again" in a small gray font, with "Sign up again" being a link.

VERIFY YOUR EMAIL

Verify Your Email

We've sent a 6-digit verification code to

jomaamro94@gmail.com

Code expires in:4:49

Verify Email

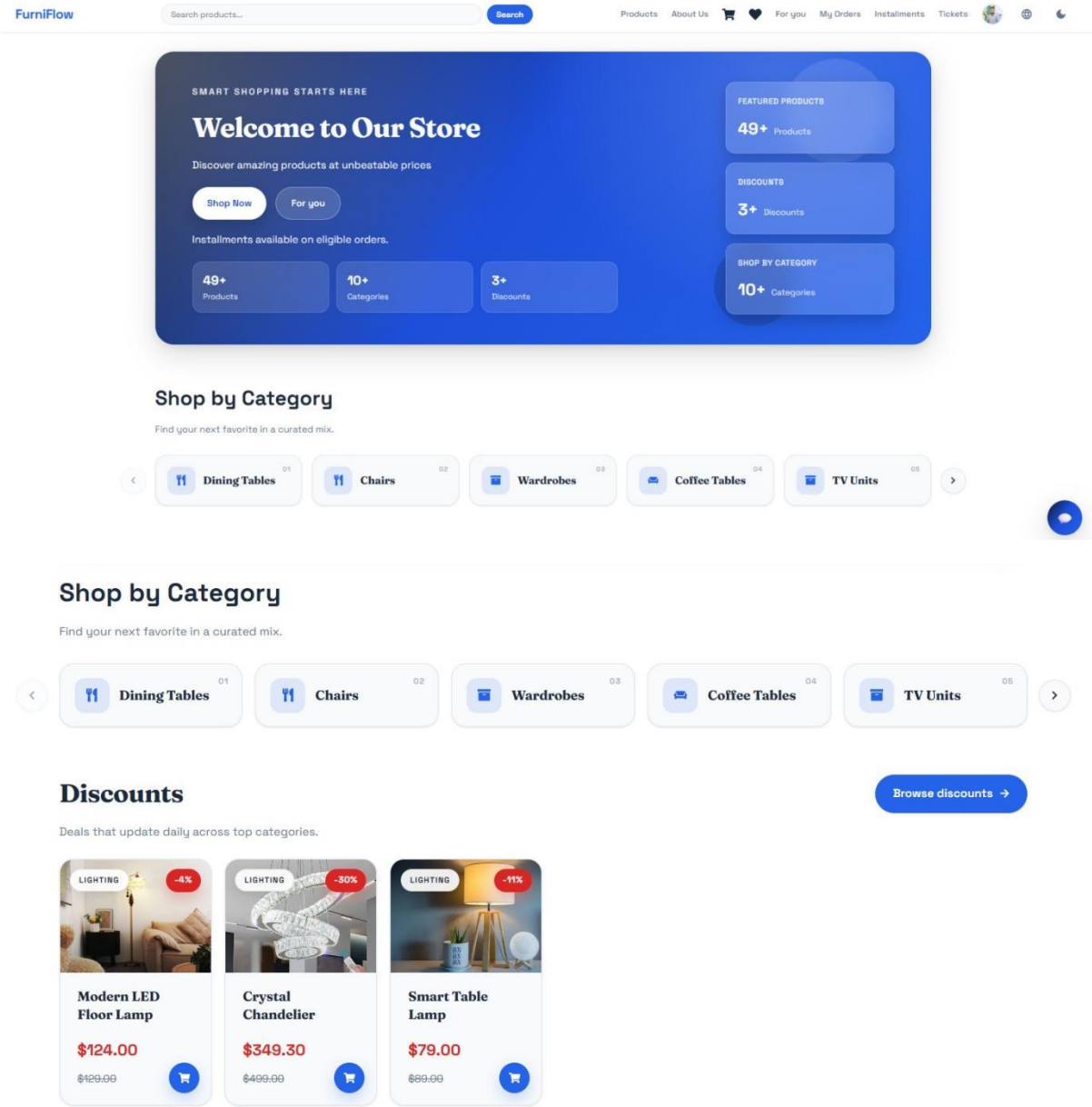
Didn't receive the code? [Sign up again](#)

Home Page & Navigation

Dashboard Overview

- **Implementation:** Role-based dashboards with personalized operational content
- **Features:** Product categories, featured items, statistics, and role-specific quick actions
- **UI/UX:** Premium interface with stat cards, action cards, and panel navigation
- **Responsive:** Mobile-first design with adaptive layouts

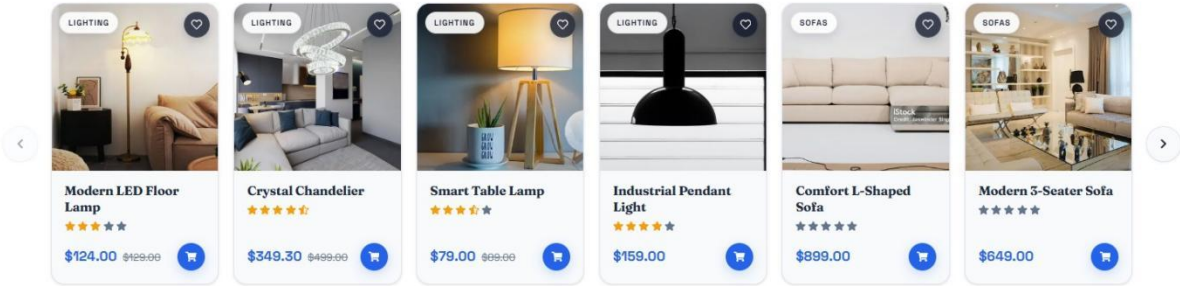
5: dashboard page (customer , web)



Featured Products

[View All Products →](#)

Handpicked picks based on what shoppers love.



FurniFlow

Your trusted online shopping destination

Quick Links

[Products](#)
[Home](#)

Account

[Login](#)
[Sign Up](#)

Contact

Email: support@ecommerce.com
Phone: +1 (555) 123-4567

© 2026 FurniFlow. All rights reserved.

OUR STORY

About Us

We are a modern online store focused on quality products, fair prices, and a smooth shopping experience from browse to delivery.

Why shoppers choose us



Fast delivery

Track every order in real time with instant updates.



Secure payments

Flexible cards, cash, and wallet options, protected end to end.



Always here to help

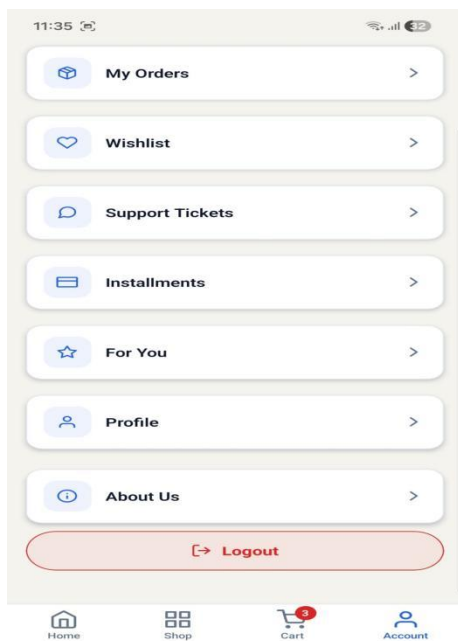
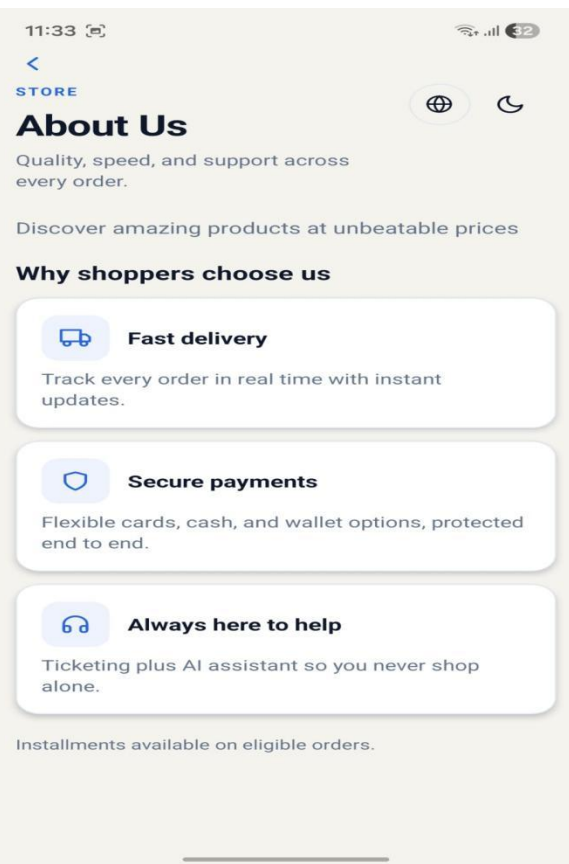
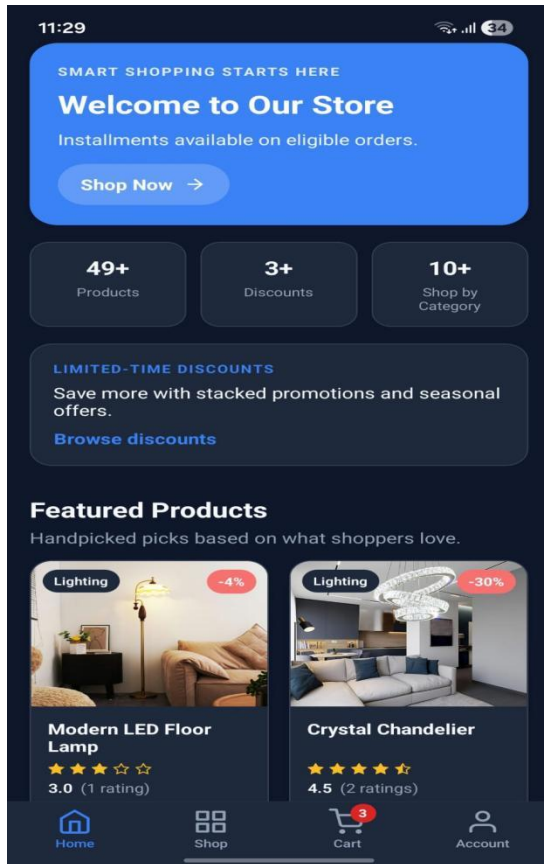
Ticketing plus AI assistant so you never shop alone.

Limited-time discounts

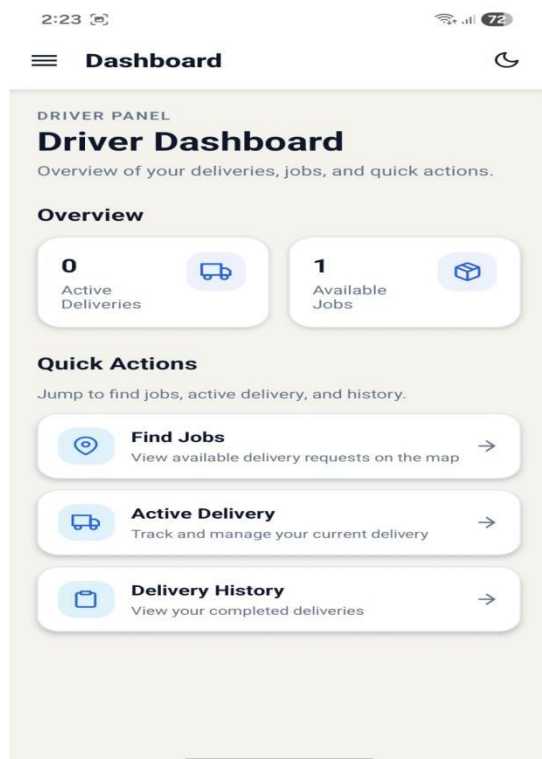
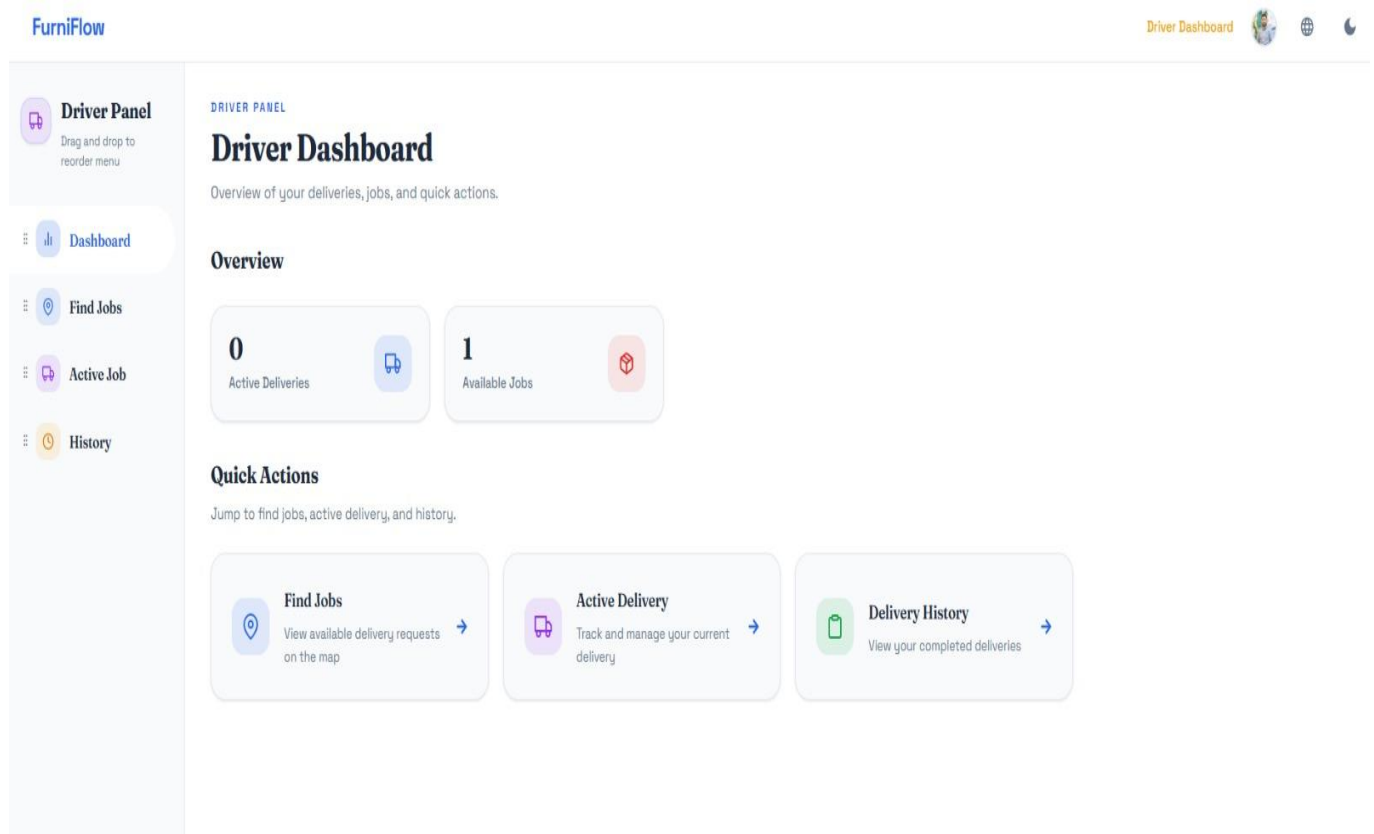
Save more with stacked promotions and seasonal offers.

[Browse discounts](#)

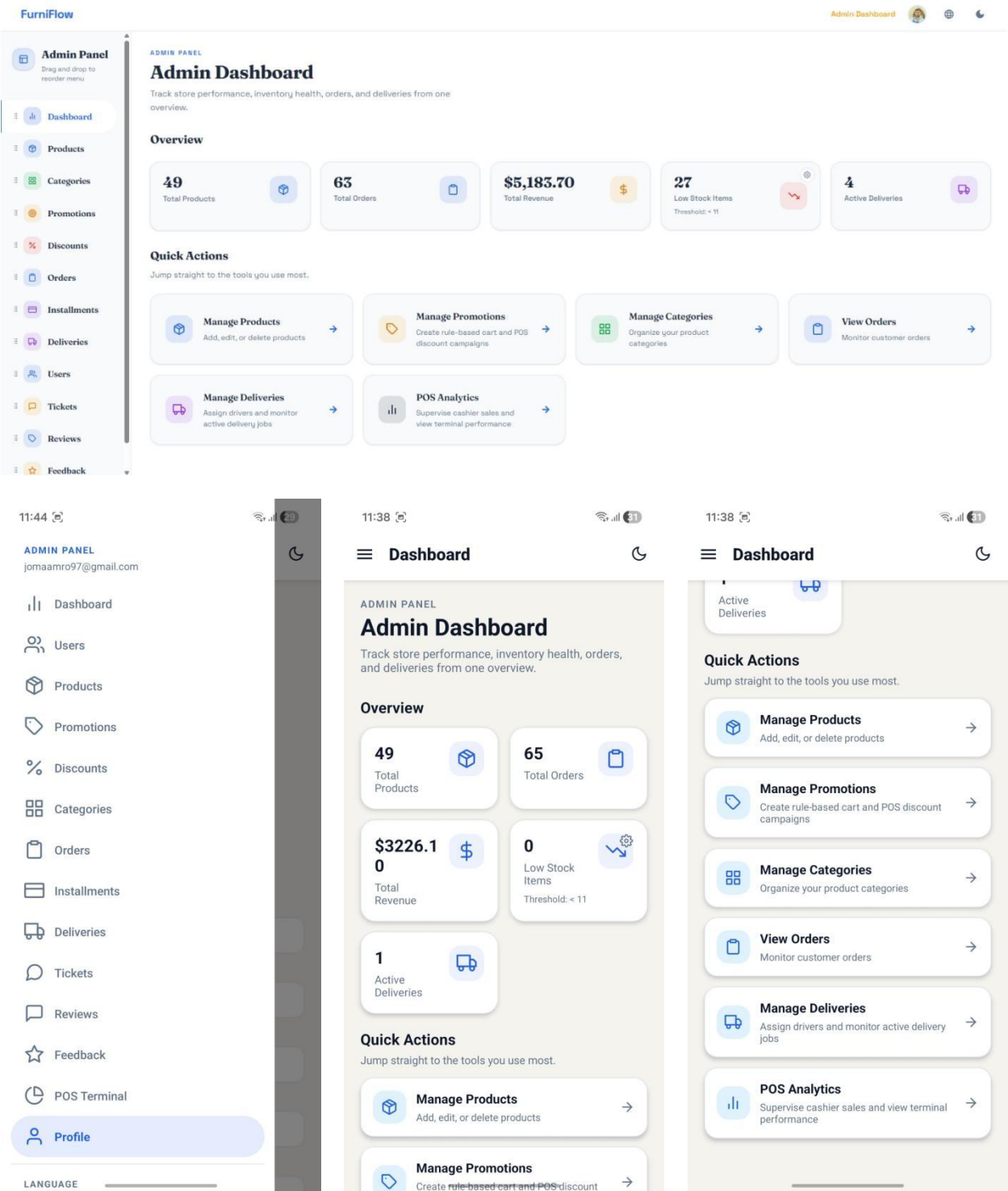
6: dashboard page (customer , mobile)



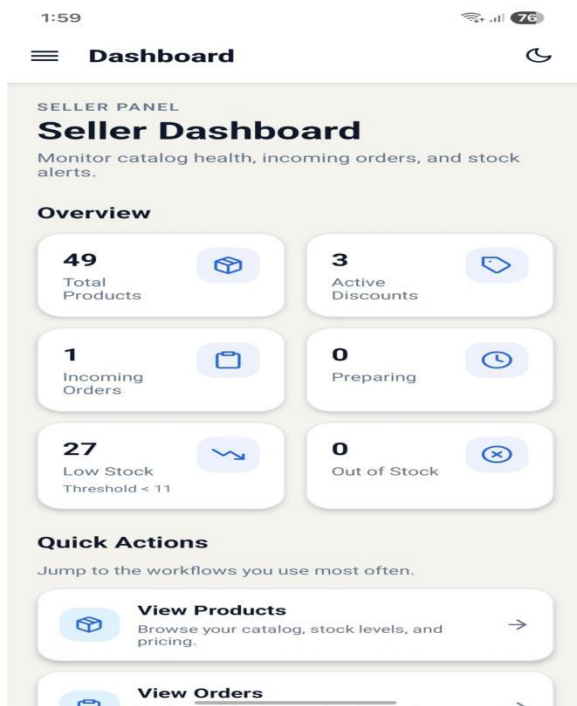
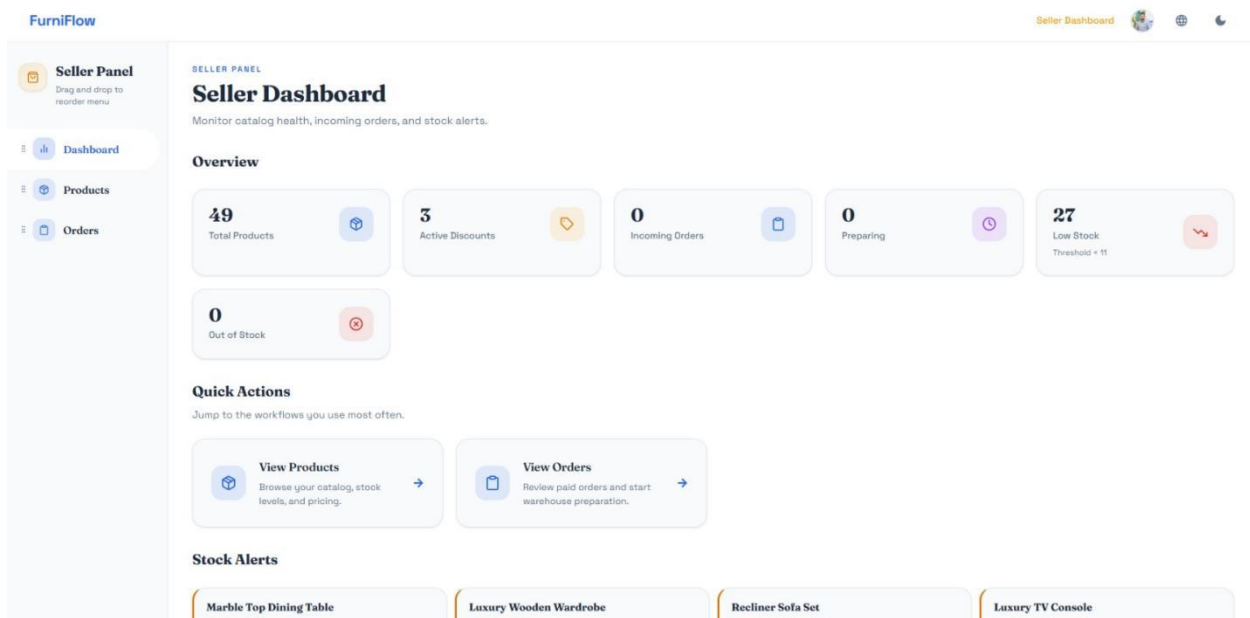
7: dashboard page (driver)



8: dashboard page (admin)



9: dashboard page (seller)



10: dashboard page (cashier)

FurniFlow

Cashier Dashboard

My sales today

All categories

Beds

Chairs

Coffee Tables

Dining Tables

Lighting

Mattresses

Office Desks

Sofas

Storage Cabinets

TV Units

Wardrobes

49 products

Today's revenue: \$0.00

3-Door Sliding Wardrobe
\$1,199.00 each
Stock: 7

Adjustable Standing Desk
\$749.00 each
Stock: 7

Comfort L-Shaped Sofa
\$899.00 each
Stock: 10

Compact Apartment Sofa
\$499.00 each
Stock: 20

Compact Study Desk
\$249.00 each
Stock: 20

Corner TV Cabinet
\$429.00 each
Stock: 9

Corner Wardrobe Unit
\$899.00 each
Stock: 7

Crystal Chandelier
\$349.30 each
Stock: 5

Decorative Display Cabinet
\$649.00 each
Stock: 8

Ergonomic Dining Chair Set
\$249.00 each
Stock: 20

Executive Office Chair
\$349.00 each
Stock: 15

Executive Wooden Office Desk
\$899.00 each
Stock: 8

Extendable Dining Table
\$699.00 each
Stock: 8

Floating Entertainment Unit
\$649.00 each
Stock: 7

Home Office Desk with Drawers
\$399.00 each
Stock: 15

Hybrid Pocket Spring Mattress
\$799.00 each
Stock: 12

Industrial Pendant Light
\$199.00 each
Stock: 15

Kids Comfort Mattress
\$299.00 each
Stock: 25

Kids Single Bed
\$499.00 each
Stock: 15

Kids Wardrobe Cabinet
\$599.00 each
Stock: 12

King Size Luxury Bed
\$1,299.00 each
Stock: 7

L-Shaped Workstation Desk
\$999.00 each
Stock: 10

Luxury Pillow Top Mattress
\$999.00 each
Stock: 8

Luxury TV Console
\$799.00 each
Stock: 5

Current sale 1

Customer name (optional)

3-Door Sliding Wardrobe

\$1,199.00 each

- 1 +

\$1,199.00

Comfort L-Shaped Sofa

\$899.00 each

- 1 +

\$899.00

Executive Office Chair

\$349.00 each

- 1 +

\$349.00

Promotion

-\$119.90

Total

\$2,327.10

Complete sale

11:28

Search by name...

49 products

Today's revenue: \$3226.10

All categories

Beds

Chairs

Coffee Tables

3-Door Sliding Wardrobe
\$1199.00
Stock: 6

Adjustable Standing Desk
\$749.00
Stock: 7

Comfort L-Shaped Sofa
\$899.00
Stock: 8

Compact Apartment Sofa
\$499.00
Stock: 20

Compact Study Desk
\$249.00
Stock: 20

Corner TV Cabinet
\$429.00
Stock: 9

Corner Wardrobe Unit
\$899.00
Stock: 7

Crystal Chandelier
\$349.30
Stock: 5

Decorative Display Cabinet
\$649.00
Stock: 8

Ergonomic Dining Chair Set
\$249.00
Stock: 20

Executive Office Chair
\$349.00
Stock: 15

Executive Wooden Office Desk
\$899.00
Stock: 8

Extendable Dining Table
\$699.00
Stock: 8

Floating Entertainment Unit
\$649.00
Stock: 7

Home Office Desk with Drawers
\$399.00
Stock: 15

Hybrid Pocket Spring Mattress
\$799.00
Stock: 12

Industrial Pendant Light
\$199.00
Stock: 15

Kids Comfort Mattress
\$299.00
Stock: 25

Kids Single Bed
\$499.00
Stock: 15

Kids Wardrobe Cabinet
\$599.00
Stock: 12

King Size Luxury Bed
\$1,299.00
Stock: 7

L-Shaped Workstation Desk
\$999.00
Stock: 10

Luxury Pillow Top Mattress
\$999.00
Stock: 8

Luxury TV Console
\$799.00
Stock: 5

Current sale 1

Customer name (optional)

3-Door Sliding Wardrobe

Promotion

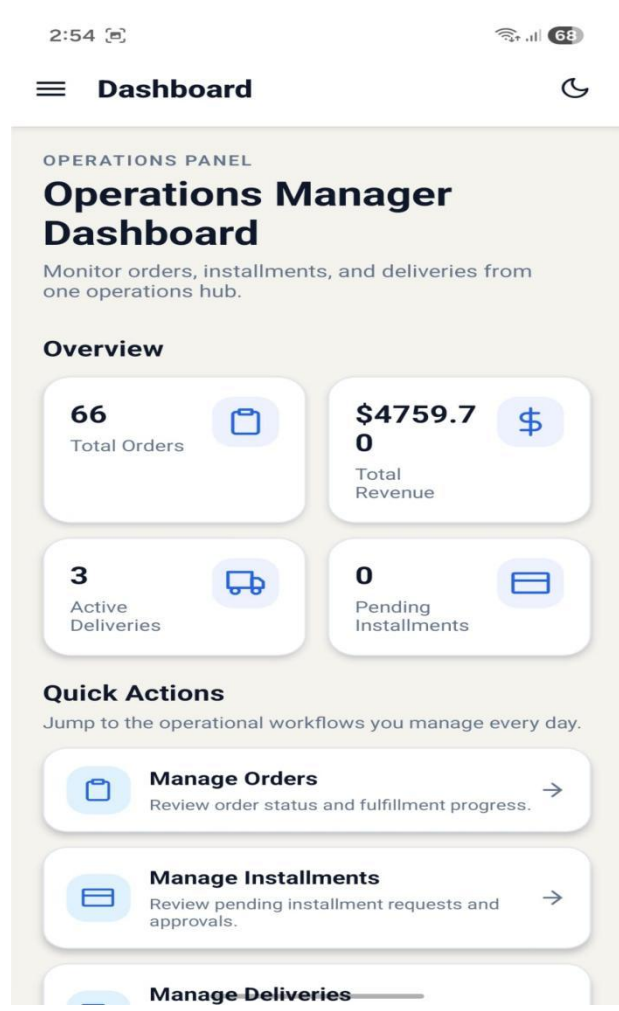
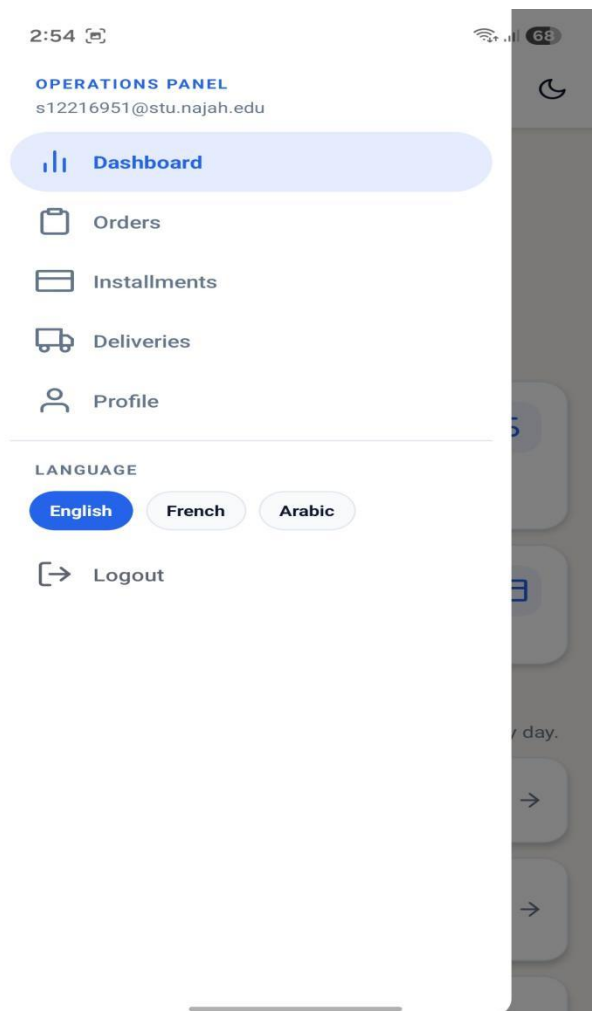
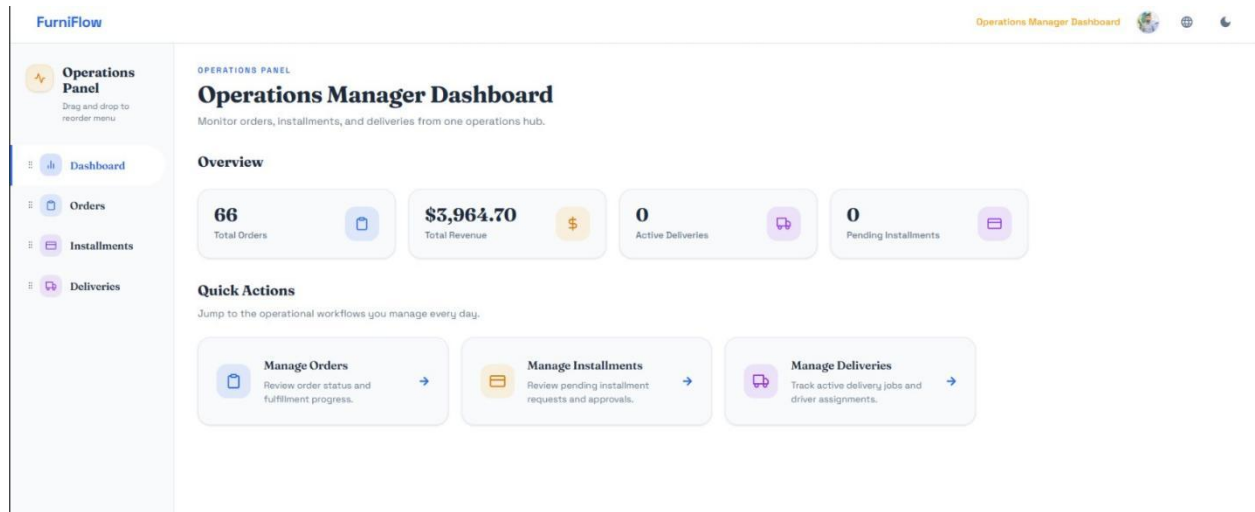
-\$119.90

Total

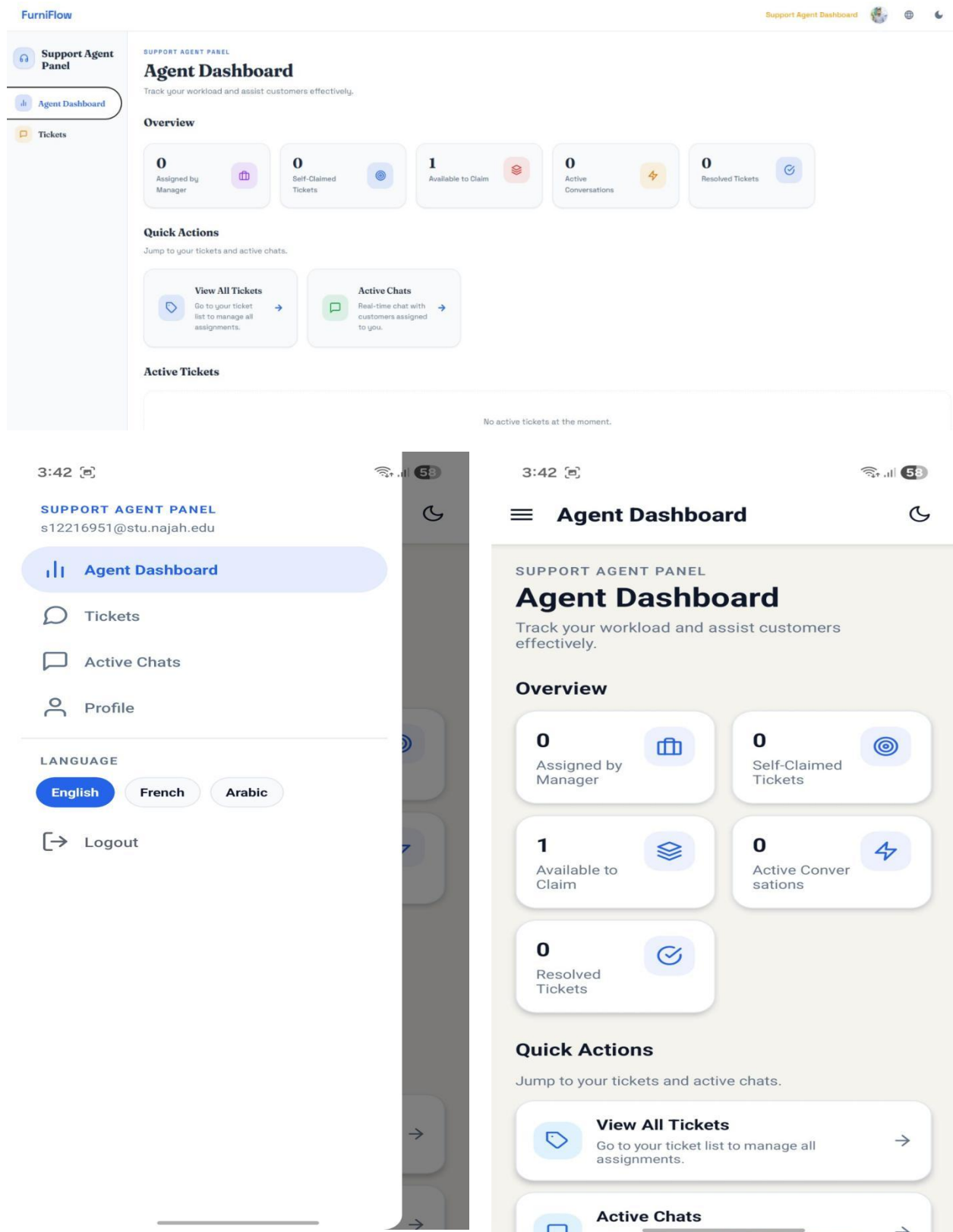
\$1079.10

Complete sale

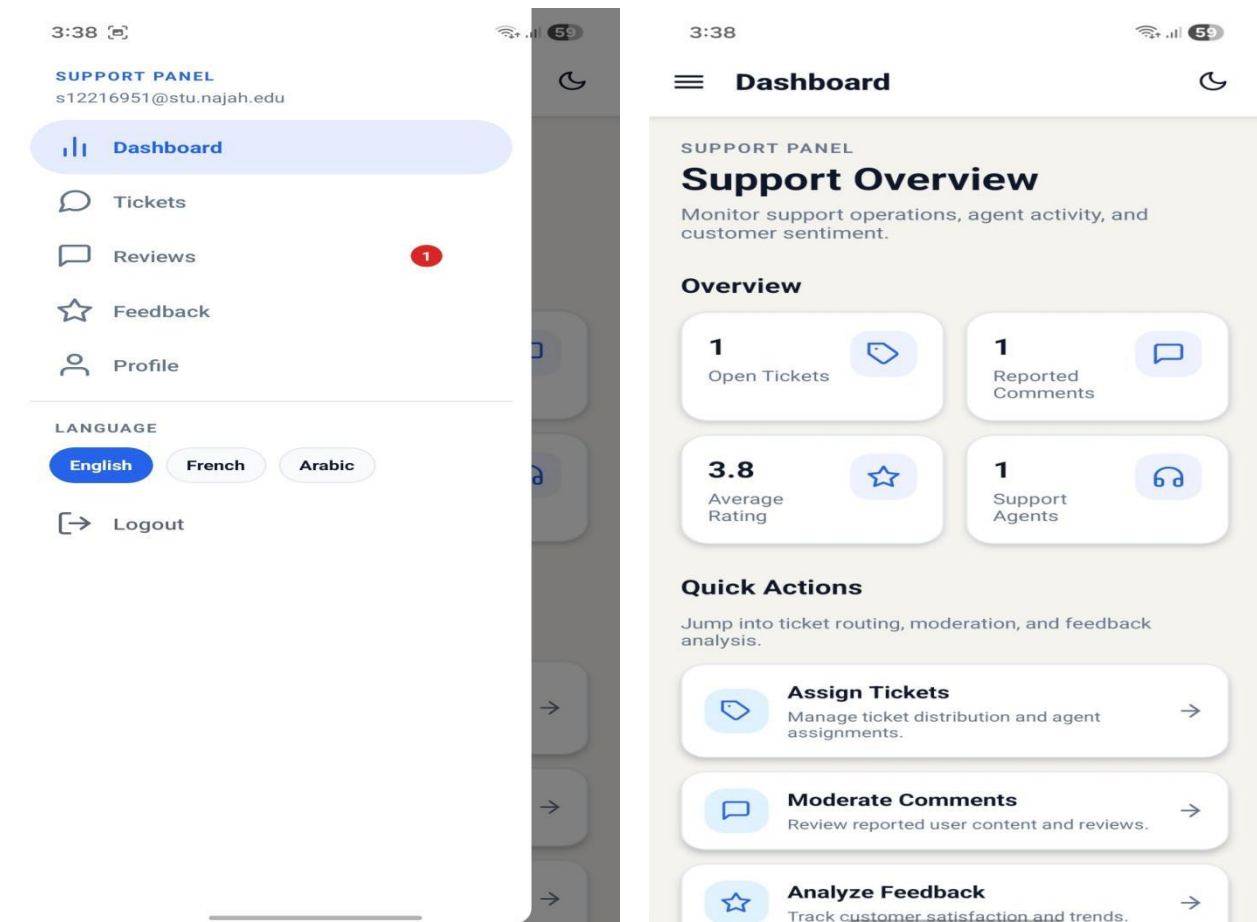
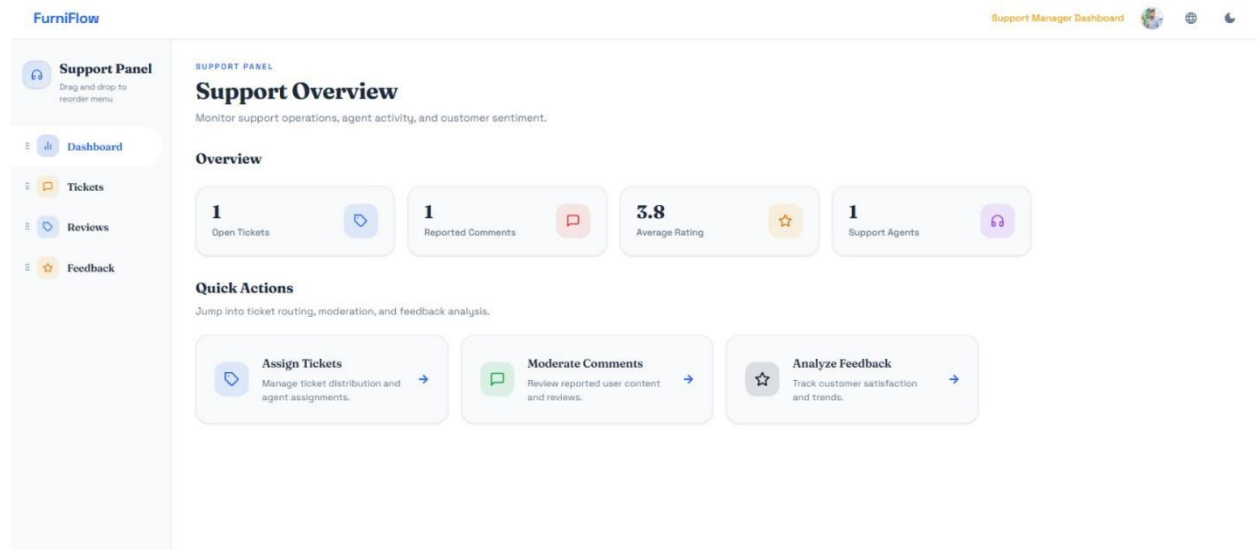
11: dashboard page (operations manager)



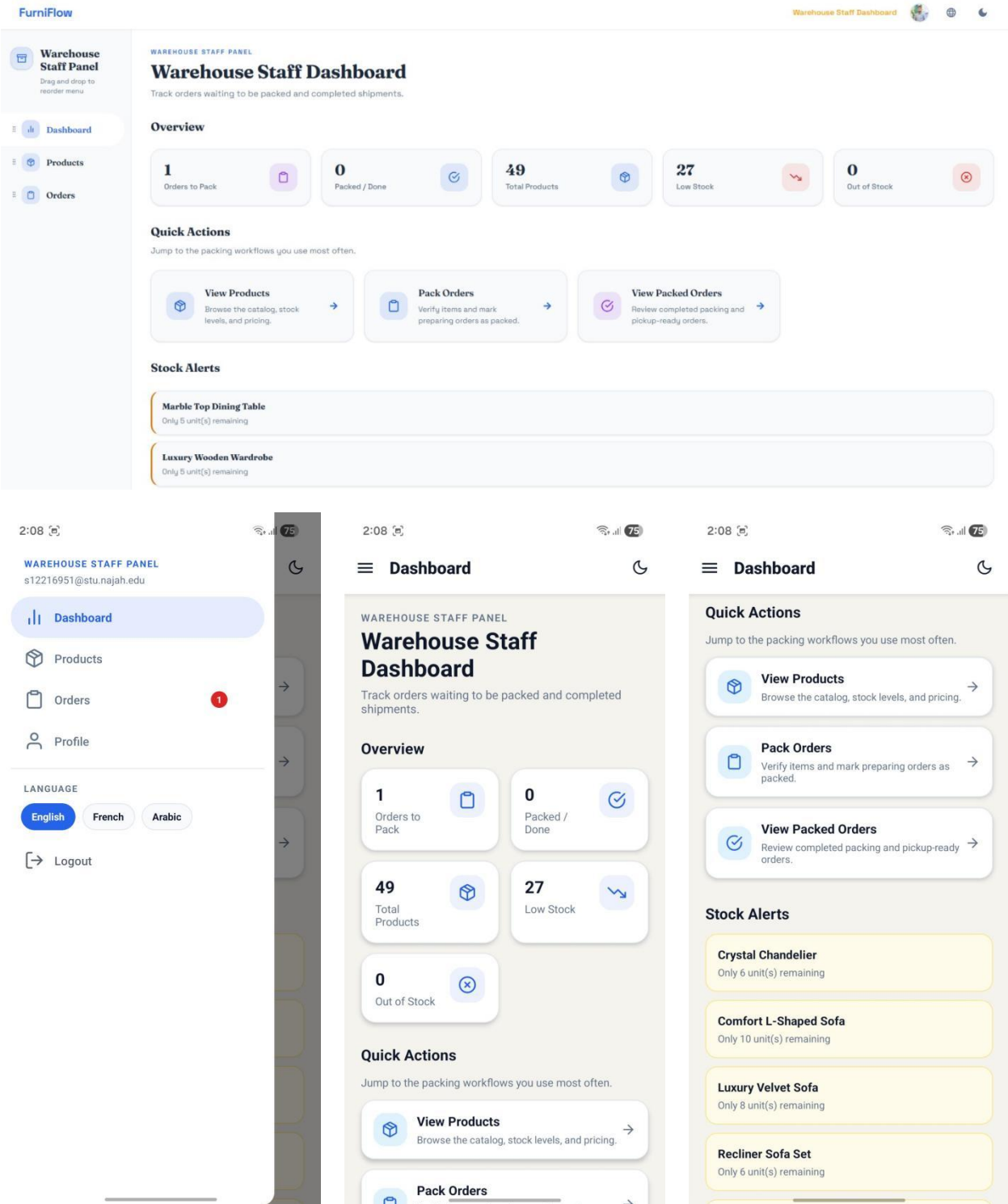
12: dashboard page (support agent)



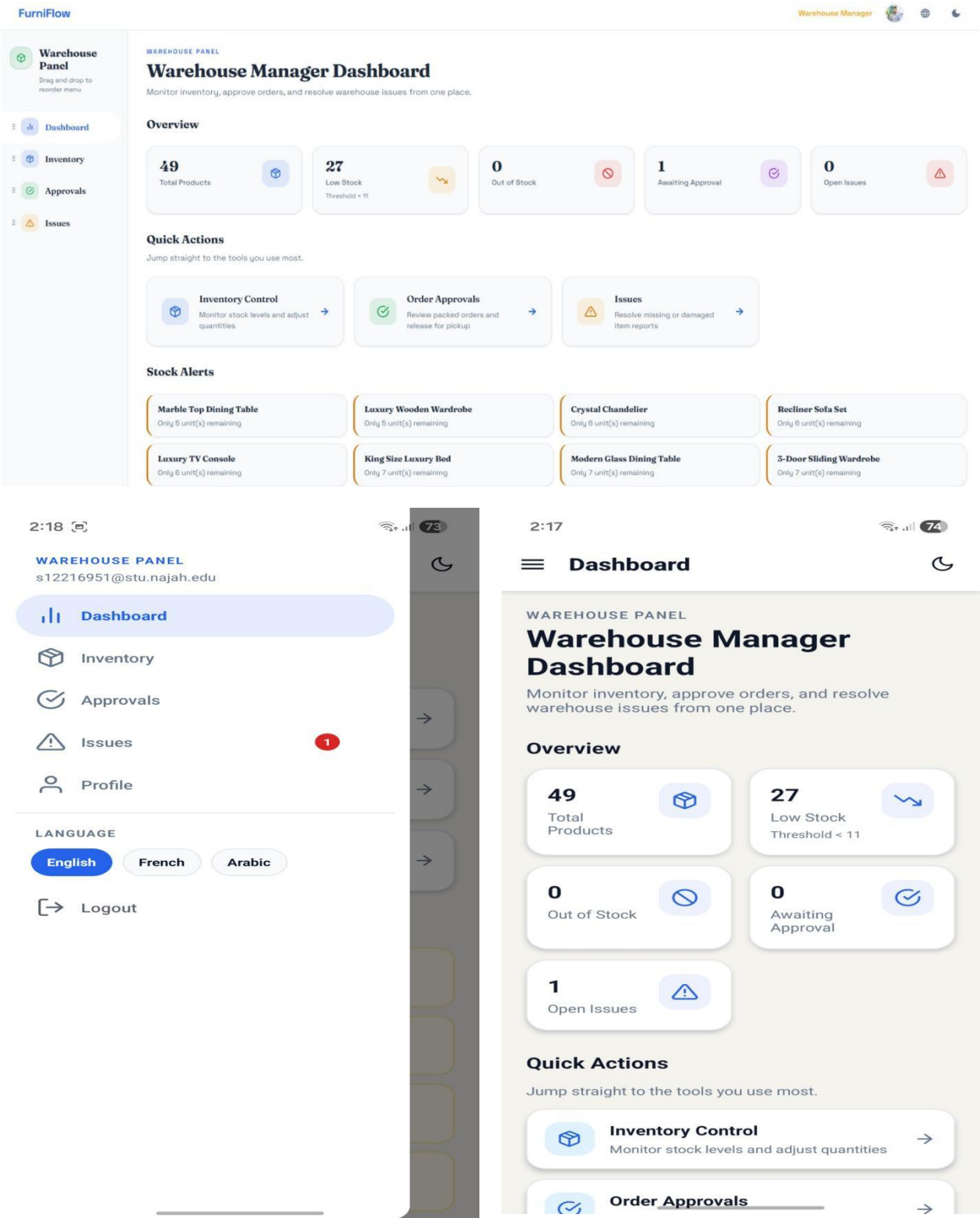
13: dashboard page (support manager)



14: dashboard page (warehouse staff)



15: dashboard page (warehouse manager)



Profile Management

Profile Page

- **Implementation:** Comprehensive user profile display with avatar support
- **Features:** Personal information, profile image upload, and account settings
- **UI/UX:** Clean profile layout with edit functionality
- **Data:** Real-time profile data from PostgreSQL via /users/me endpoints

Edit Profile

- **Implementation:** Profile editing with validation and image upload
- **Features:** Form validation, image upload, and real-time updates
- **UI/UX:** Scrollable form with save/cancel actions
- **Security:** Input sanitization and validation

16 : profile page (in all roles)



عمرو كمال فلاح جمعة
s12216951@stu.najah.edu
Customer Member Since: April 30, 2026

[Choose Image](#) [Delete Image](#)

Account Information

EMAIL: s12216951@stu.najah.edu	NAME: عمرو كمال فلاح جمعة	PHONE: 0597587484
ADDRESS: Al ramah, Ramallah, Palestinian Authority	ROLE: Customer	MEMBER SINCE: April 30, 2026

[Update Profile](#)



DANGER ZONE

Delete account

Permanently remove your account, orders, cart, and wishlist data.

- Your orders and purchase history
- Your cart, wishlist, and saved preferences

[Delete account](#)

11:32 

[STORE](#)  

My Profile

Manage your account details and password.



[Choose Image](#) [Delete Image](#)

Account Information

EMAIL:
s12216951@stu.najah.edu

FIRST NAME

LAST NAME

PHONE

COUNTRY

CITY

Customer Features

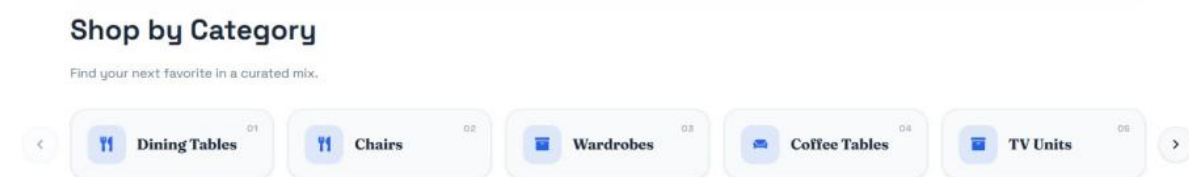
Order Management

Browse Products

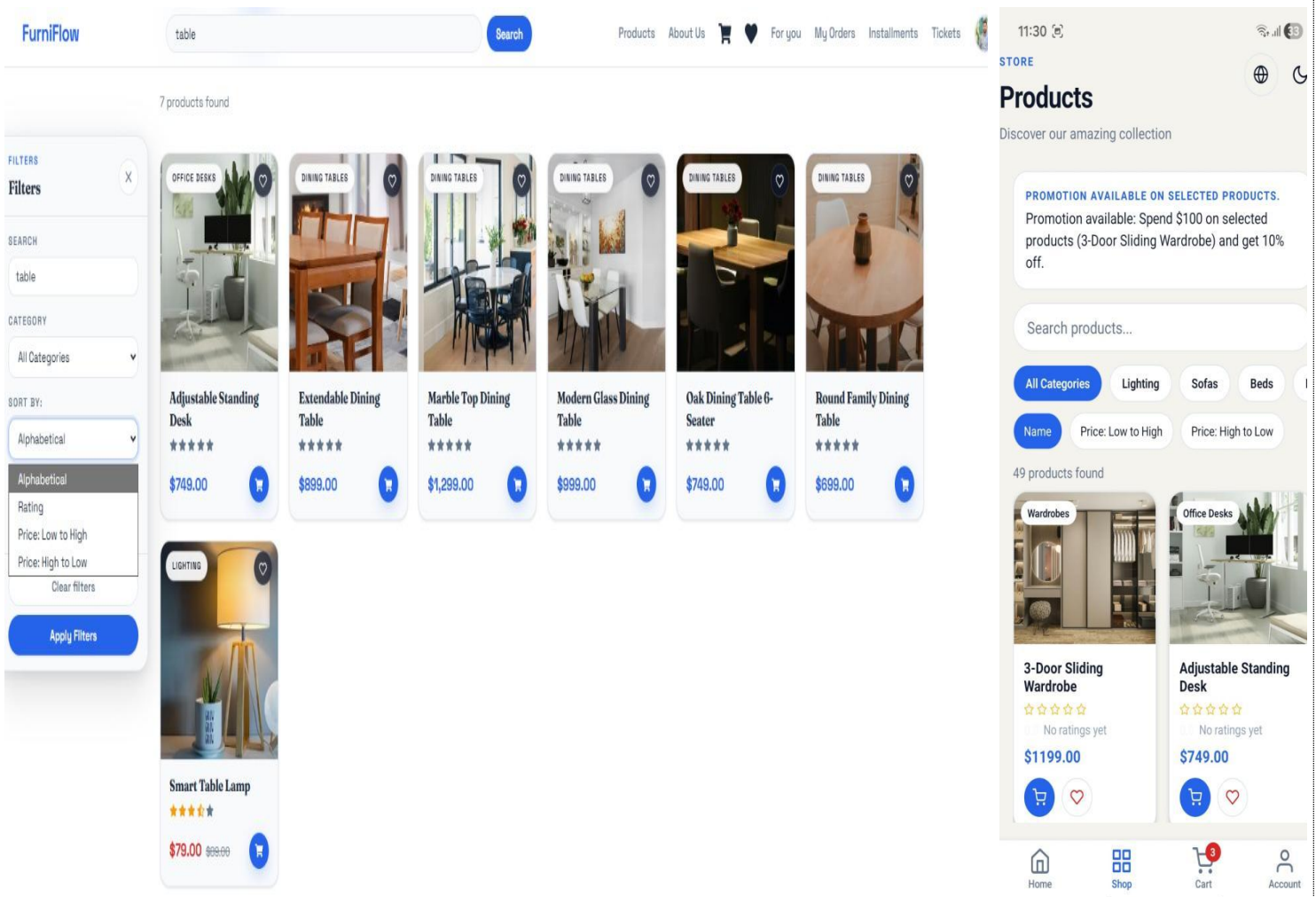
- **Implementation:** Product catalog with category filtering, search, and sorting

- **Features:** Category filtering, price range filters, multilingual product names, and ratings
- **UI/UX:** Responsive product grid with premium card design
- **Performance:** Paginated catalog with skeleton loading states

17: browse by category (customer)



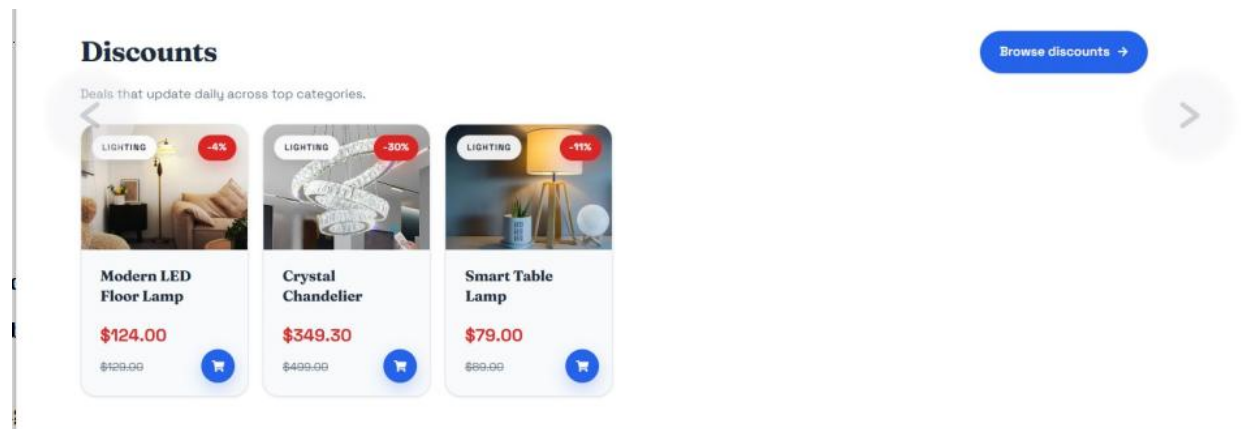
18: search product by filters/search (customer)



19: product search(customer)



20: products discounts (customer)



Product Catalog

- **Implementation:** Dynamic product display with image gallery and localized content
- **Features:** Product search, discount badges, stock availability, comments, report other customers comments and star ratings
- **UI/UX:** Product cards and detail pages with Framer Motion animations
- **Integration:** Real-time inventory quantities and applied discounts

21: product catalog (customer)

Smart Table Lamp



\$79.00

★★★★☆ 3.7 (3 ratings)

Available

DESCRIPTION

A modern smart table lamp with adjustable brightness and multiple lighting modes.

♡ Add to Wishlist

QUANTITY: - 1 +

Add to Cart

Open Comments & Reviews

LIGHTING

More in this category

More products from this category you may like.



Modern LED Floor Lamp
★★★★★
\$124.00



Crystal Chandelier
★★★★★
\$349.30



Industrial Pendant Light
★★★★★

22 : product comments & reviews (customer)

Smart Table Lamp



\$79.00

★★★★☆ 3.7 (3 ratings)

Available

DESCRIPTION

A modern smart table lamp with adjustable brightness and multiple lighting modes.

♡ Add to Wishlist

QUANTITY: - 1 +

Add to Cart

Hide Comments & Reviews

Comments & Reviews 3

SORT: Newest

✍ Edit your comment

You can post one comment per product. Use Edit your comment to update it.



عمرو كمال فلاح جمعة

3 weeks ago

★★★★☆ 3/5

Your review

amazing



Amro Jomaa

Mar 11, 2026

★★★★★ 4/5

cc

11:30

<

3-Door Sliding Wardrobe

Wardrobes

[Back to Products](#)



★★★★★

No ratings yet

\$1199.00

Available

Quantity: - 1 +

Add to Cart

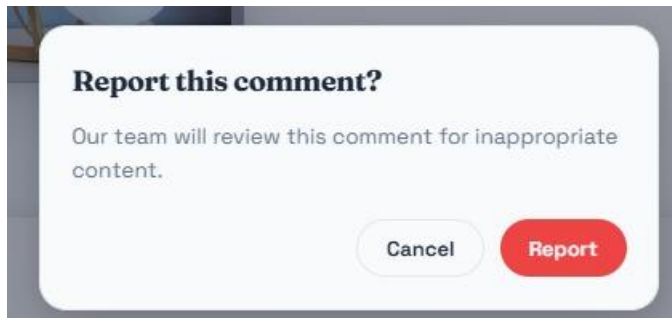
♡

Description

A spacious three-door sliding wardrobe with multiple shelves and hanging sections for organized storage.

[Open Comments & Reviews](#)

23 : report other customer comment (customer)



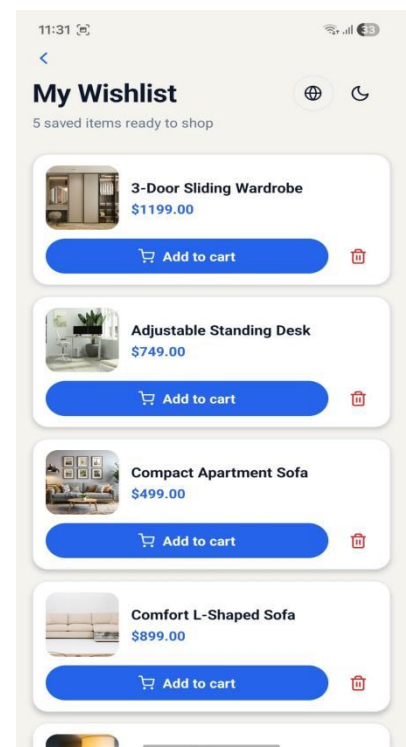
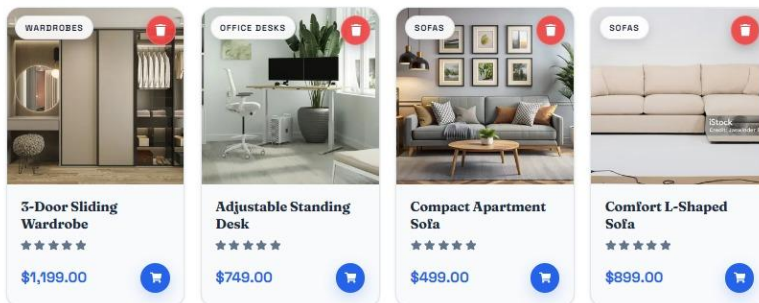
Wishlist

- **Implementation:** Saved-item database registry mapped per user
- **Features:** Add/remove wishlist items and direct add-to-cart transition options
- **UI/UX:** Clean layout displaying product status badges and one-click transfer buttons

24 : customer wishlist (customer)

My Wishlist

4 saved item ready to shop



Promotions

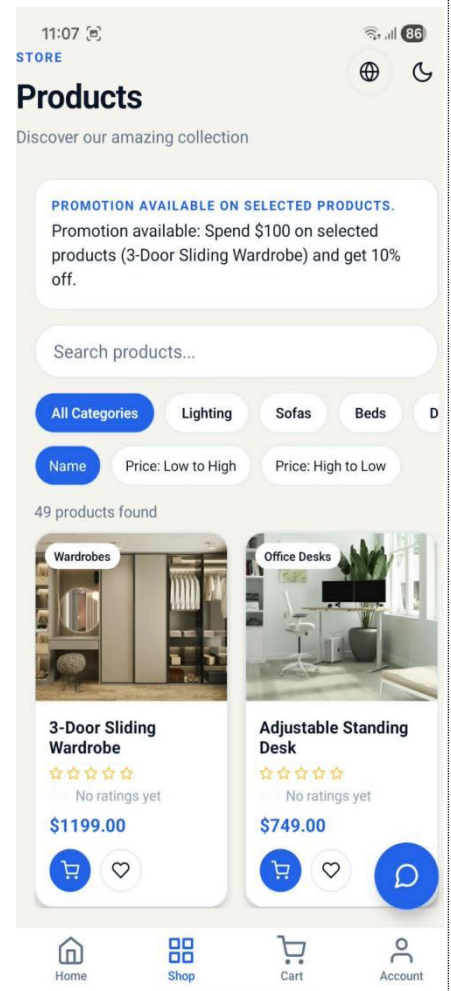
- **Implementation:** The promotions feature allows customers to see and use available discounts during shopping and checkout.
- **Features:** Customers can view discounted products, active promotion offers, and the reduced price before placing the order.
- **UI/UX:** Promotion labels and discounted prices are displayed clearly to help customers recognize special offers and make purchasing decisions.
- **Integration:** Promotions are connected to the product catalog and checkout total, so valid discounts are applied automatically.

25 : Promotions (customer)



PROMOTION AVAILABLE

Spend \$100.00 on selected products (3-Door Sliding Wardrobe) and get 10% off.



Shopping Cart

- **Implementation:** Server-backed persistent cart with promotion calculation
- **Features:** Add/remove items, quantity adjustment, promotion discounts, and total calculation
- **UI/UX:** Cart page with item management and checkout navigation
- **State Management:** React Context API (CartContext) with backend synchronization

26 : Cart page (customer)

Shopping Cart



Modern LED Floor Lamp

~~\$129.00~~ **\$124.00**

-

1

+

\$124.00

×



Smart Table Lamp

~~\$89.00~~ **\$79.00**

-

1

+

\$79.00

×

Order Summary

2 ITEMS

Modern LED Floor Lamp

1 × \$124.00

\$124.00

Smart Table Lamp

1 × \$79.00

\$79.00

Subtotal:

\$203.00

Shipping:

Calculated at checkout

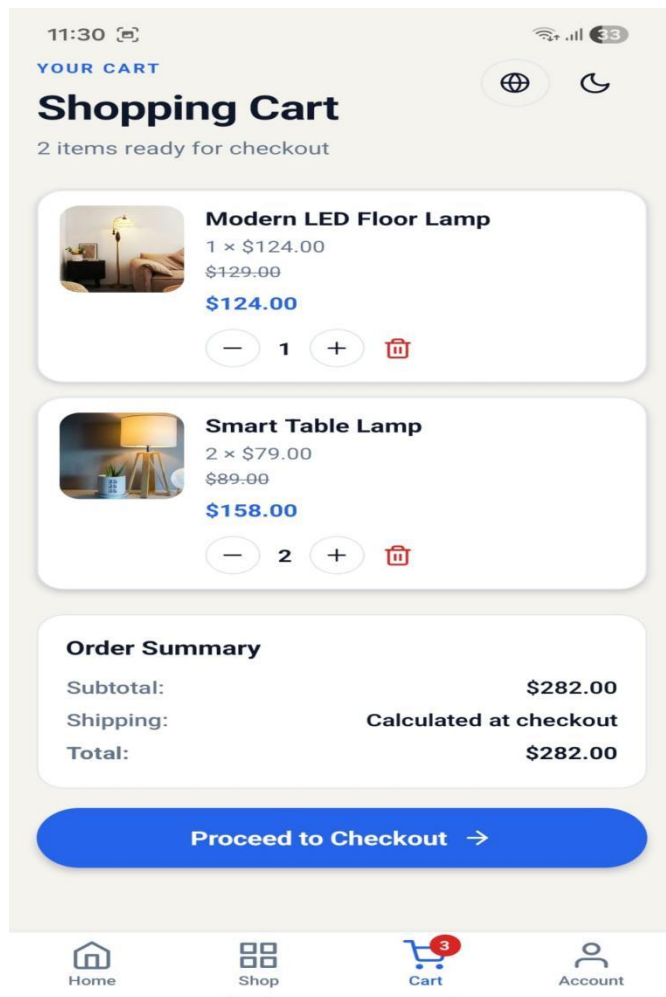
Total:

\$203.00

Proceed to Checkout →

Continue Shopping

Delete all



Order Address Management

- **Implementation:** Shipping address capture during checkout with geocoded delivery metadata
- **Features:** Address fields stored in order metadata for delivery job creation
- **UI/UX:** Checkout form with region selection and address validation
- **Maps:** Geocoding via Nominatim for delivery coordinate assignment

Order Placement

- **Implementation:** Checkout flow with shipping information and order creation
- **Features:** Shipping address, order summary, promotion application, and order confirmation
- **UI/UX:** Step-by-step checkout form with validation

- **Integration: Stripe Payment Intents for secure card payment**

27 : Checkout page (customer)

Checkout

Enter your delivery details to complete your order.

Shipping Information

Address *

Al ramah

City *

jinen

Country

Palestinian Authority

Zip Code *

00970

Shipping method

☒ Shipping to West Bank and Gaza Strip — \$20.00

☐ International Shipping — \$40.00

Place Order →

Order Summary

3 ITEMS

Modern LED Floor Lamp

1 × \$124.00

\$124.00

Smart Table Lamp

2 × \$79.00

\$158.00

Subtotal:

\$282.00

Shipping:

\$20.00

Total:

\$302.00

My Orders

14 order in your history

ORDER #69

Created

\$369.30

Created at: June 9, 2026 · 1 item

Installments

Pay Now

Cancel

ORDER #68

Paid

\$2,647.10

Created at: June 9, 2026 · 3 item

11:31

Checkout

Enter your delivery details to complete your order.

Shipping Information

Shipping to West Bank and Gaza Strip +\$20.00

International Shipping +\$40.00

Address *

City *

Zip Code *

Country

Order Summary

Subtotal:

\$282.00

Shipping:

\$20.00

Total:

\$302.00

Place Order

Order Tracking

- **Implementation:** The customer can view all previous and current orders from the order tracking page.
- **Features:** The page shows order details, products, total price, payment status, and current order status(from paid, preparing, packed, assigned, picked up, delivering, until delivered).
- **UI/UX:** Visual order list and detail views with status indicators
- **Real-time:** Delivery chat via WebSocket and polling-based badge updates

Delivery Tracking

- **Implementation:** The delivery tracking feature allows the customer to follow the delivery process after the order is assigned to a driver.
- **Features:** The customer can see the driver assignment, pickup status, delivery progress, and final delivered status.
- **UI/UX:** The delivery information is shown in a simple tracking view so the customer can understand where the order is in the delivery process.
- **Tracking:** The system updates the delivery status as the driver moves through the delivery workflow.

28: order tracking (customer)

ORDER #72

Picked up

\$369.30

Created at: June 10, 2026 · 1 item

Order Information

Created At: June 10, 2026

Total Amount: \$369.30

📦 Delivery Tracking

Order paid

Driver assigned

Picked up

On the way

Delivered

Delivery Address:

Al ramah, jinen, Palestinian Authority

💬 Chat with Driver

🛒 Products (1)

Crystal Chandelier

Quantity: 1

\$349.30 each

Total: \$349.30

Order #68

Paid

6/9/2026, 4:37:41 PM

\$2647.10

Order #67

Paid

6/9/2026, 4:35:42 PM

\$1617.60

Order #66

Driver assigned

6/8/2026, 8:43:56 PM

\$919.00

Order #65

Cancelled

5/28/2026, 6:04:37 PM

29: Driver tracking (customer)

ORDER #74

Driver assigned

\$99.00

Created at: June 10, 2026 · 1 item

Order Information

Created At: June 10, 2026

Total Amount: \$99.01

🚚 Delivery Tracking

Order paid

Driver assigned

Picked up

On the way

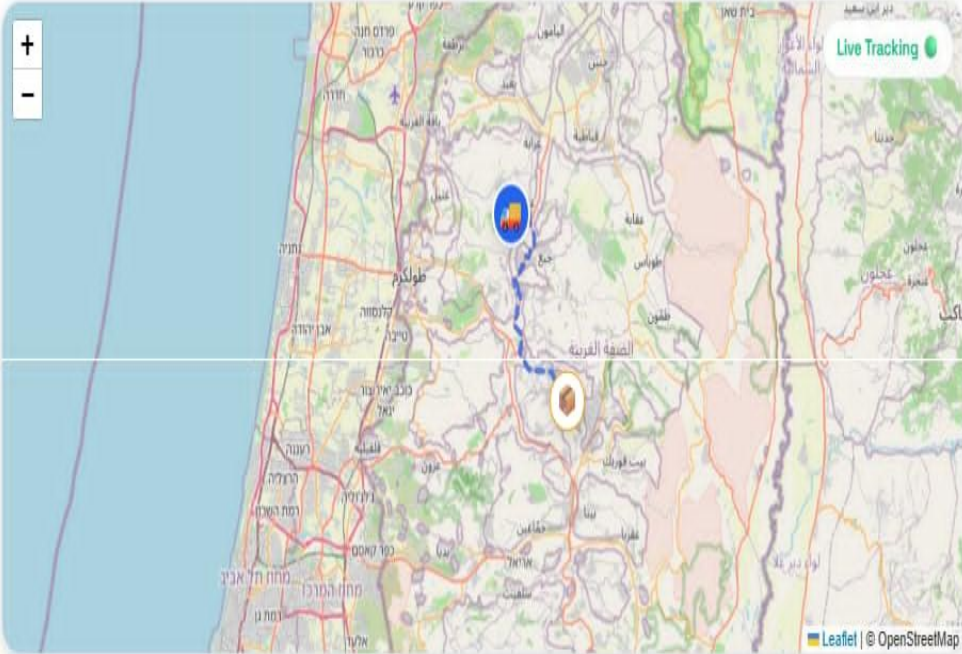
Delivered

Delivery Address: Al ramah, jinen, Palestinian Authority

+

-

Live Tracking



Leaflet | © OpenStreetMap

11:05

86

<

My Orders

1 order in your history

Order #74

6/10/2026, 8:23:50 PM

Driver assigned

\$99.00

 Smart Table Lamp

Quantity: 1

\$79.00

Delivery Tracking

Live tracking



Leaflet | © OpenStreetMap

Chat with Driver

Installment Financing

Installment Application

- **Implementation:** Installment request form with identity document upload
- **Features:** Order item selection, duration selection(3-12 months), and ID document verification
- **UI/UX:** Comprehensive multipart form with image upload for ID front, back, and selfie
- **Validation:** Form validation and error handling

30: new installment request (customer)

New Installment Request

You are requesting installments for Order: #75 (\$144.00)

Duration (months)

6months

Select Installment Plan Option:

☒ **Option A: Standard Installment Plan**
Pay 100% of the total amount in monthly installments. No upfront down payment required.

☐ **Option B: Down Payment Plan (30% Upfront)**
Pay a 30% down payment (\$37.20) upfront, and pay only the remaining 70% in monthly installments.

Estimated monthly payment **\$20.67**

Order Summary	
Subtotal	\$124.00
Promotion	-\$0.00
Total	\$124.00

ID front

ID back

Selfie with ID

Choose file No file chosen

Choose file No file chosen

Choose file No file chosen

☐ I am certain that all the information I have provided is correct to the best of my knowledge, and that the application will be rejected if there are any problems.

Optional note

Add extra details for admin review...

Submit request

10:50

88

Installments

Request a plan, upload your verification documents, and track your payment schedule.

Cancel

ORDER

#74 · \$99.00

DURATION (MONTHS)

3m 6m 9m 12m

Add extra details for admin review...

Choose file (id front)

Choose file (id back)

Choose file (selfie with id)

Submit request

Installment Schedule

- **Implementation:** Installment schedule review and payment interface
- **Features:** Schedule due dates, remaining balance, and Stripe payment for installments
- **UI/UX:** Installment dashboard with payment actions
- **Integration:** Admin review workflow and automatic delivery job creation on approval

31 : installment schedule (customer)

INSTALLMENT PAYMENTS

Installment Payments

Request a plan, upload your verification documents, and track your payment schedule.

New request unavailable (pending/approved exists)

Verification documents



ID Front ID Back Selfie with ID

Payment Schedule

Request #1

Due date 7/9/2026

Status: pending

\$58.22

Request #2

Due date 8/9/2026

Status: pending

\$58.22

Request #3

Due date 9/9/2026

Status: pending

\$58.22

Request #4

Due date 10/9/2026

Status: pending

\$58.22

My Installment Requests

Sort:Newest

Request #14

Order #69

Approved

\$349.30

Request #13

Order #68

Approved

\$1,079.10

Request #12

Order #54

Completed

\$170.00

Request #11

Order #54

Completed

\$170.00

Request #10

Order #54

Completed

\$170.00

Request #9

Order #54

Completed

\$170.00

Request #8

Order #54

Cancelled

\$170.00

Request #7

Order #54

Cancelled

\$170.00

Request #12

Order #54

Completed

Total amount:\$170.00 Remaining balance:\$0.00 Monthly payment:\$56.67

Duration:3months Created at:May 8, 2026 Next payment: Not scheduled yet

ID front

ID back

Selfie with ID

View full image View full image View full image

Payment Schedule

#	Due date	Amount	Status	Action
1	June 8, 2026	\$56.67	Paid	Paid
2	July 8, 2026	\$56.67	Paid	Paid
3	August 8, 2026	\$56.66	Paid	Paid

Payment History

- May 8, 2026 - \$56.66
- May 8, 2026 - \$56.67
- May 8, 2026 - \$56.67

New request unavailable (pending/approved exists)

My Installment Requests

Sort:Newest

💡 Pay Remaining Balance at Once & Get a 10% Discount!

Pay Remaining Balance Now

Original: ~~\$349.30~~ → Pay Only: **\$314.37**

Save \$34.93!



Request a plan, upload your verification documents, and track your payment schedule.

New Installment Request

Order #69
approved · 6/9/2026, 4:53:49 PM
Duration: 6m

\$349.30

#1 - \$58.22 - pending
#2 - \$58.22 - pending
#3 - \$58.22 - pending
#4 - \$58.22 - pending
#5 - \$58.22 - pending
#6 - \$58.20 - pending

Cancel request

Pay with Stripe
Pay with Stripe
Pay with Stripe
Pay with Stripe
Pay with Stripe
Pay with Stripe

Order #68
approved - 6/9/2026, 4:39:17 PM
Duration: 6m

\$1079.10

#1 · \$179.85 · pending
#2 · \$179.85 · pending
#3 · \$179.85 · pending
#4 · \$179.85 · pending
#5 · \$179.85 · pending
#6 · \$179.85 · pending

Cancel request

Pay with Stripe
Pay with Stripe
Pay with Stripe
Pay with Stripe
Pay with Stripe
Pay with Stripe

Recommendation system

- **Implementation:** Hybrid scikit-learn recommendation engine mapping behavioral events, content similarity, and co-purchase PMI scoring
- **Features:** Personalized suggestions based on views, searches, wishlist, cart, and purchases using TF-IDF content similarity **Data Processing:** Persistent user interaction events stored in PostgreSQL database with admin-triggered batch cache refresh
- **UI/UX:** Dedicated storefront product carousels/grids displaying customized recommendations
- **Performance:** Hybrid real-time and batch recommendation endpoints with predictive response caching

33 : Recommendation (customer)

Recommended for you

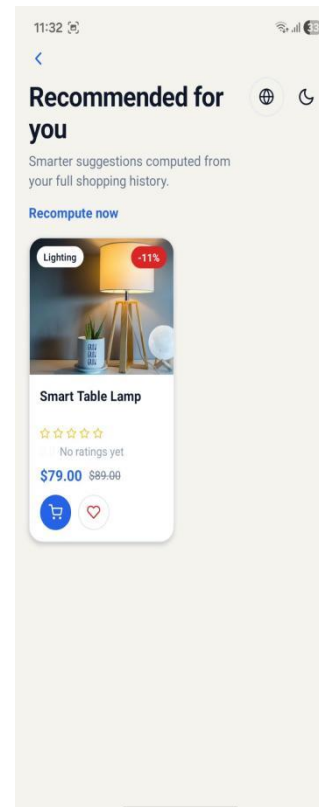
Uses your views, searches, wishlist, cart, and purchases. Log some activity, then refresh.

Realtime



Batch (cached)

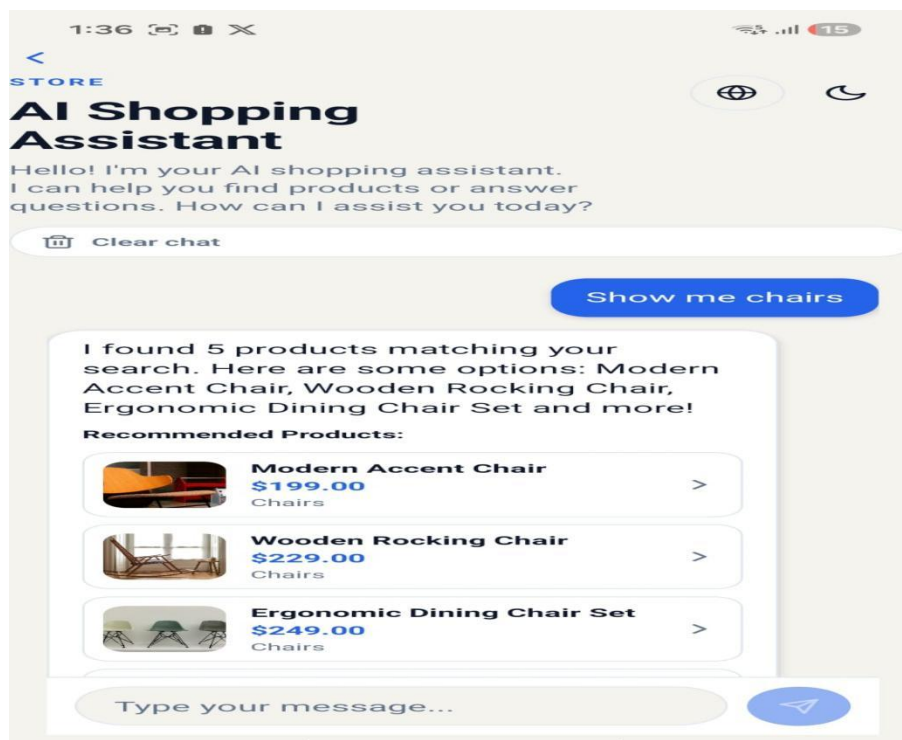
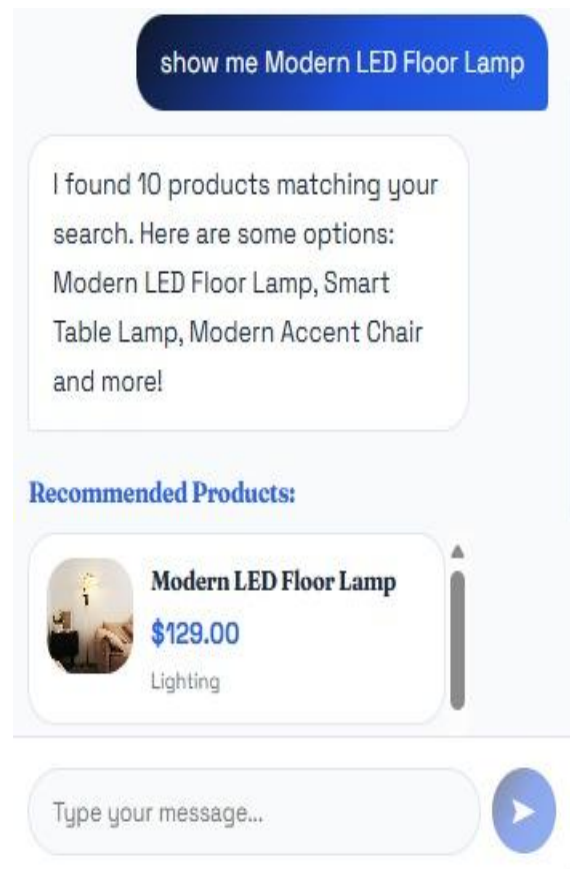
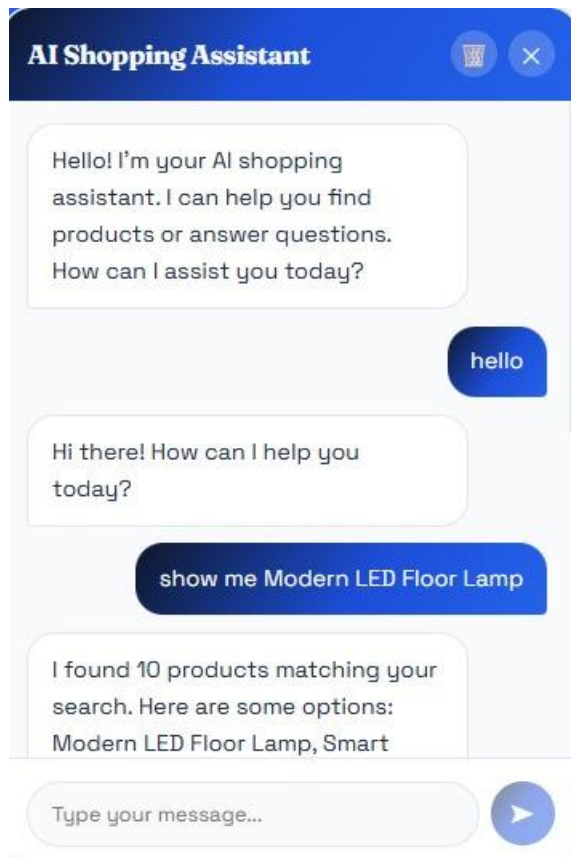
Smarter suggestions computed from your full shopping history.



AI Chatbot Assistant

- **Implementation:** Google Gemini conversational assistant via Google Generative AI API integration
- **Features:** Contextual shopping assistance, product discovery/filtering, catalog navigation, and multilingual chat in Arabic, English
- **Context Management:** In-memory chat sessions with intent detection pattern matching, product context, and follow-up handling Fallback
- **Mechanisms:** Offline keyword catalog search when the Google Gemini API is unavailable
- **UI/UX:** Floating chat widget with message bubbles, rich-media product result cards, and typing indicators
- **Performance:** Sub-second response times, response caching of common queries, rate limiting, and robust error handling

34 : AI Chat Assistant (customer)



Support Tickets

- **Implementation:** Ticketing DB registry and WebSocket client channel
- **Features:** Ticket creation form, status tracking, and live messaging with support agents
- **UI/UX:** Chat-room ticket workspace showing messaging timelines and input buttons
- **Performance:** Real-time event-driven updates via WebSockets and efficient message sorting

35 : My Tickets (customer)

SUPPORT

My Tickets

View status, chat with your agent, and manage your support requests.

Close your current ticket before opening a new one.

In Progress

TKT-18

hello

Created: June 9, 2026

DESCRIPTION

hello

RESPONSES (1)

Amro Jomaa

Support

hi

June 9, 2026

ADD A QUICK NOTE

Type your response...

Send Response

Live support

Agent connected: عمرو جمعة

Status

Your agent is ready to help

ASSIGNED AGENT

عمرو جمعة

Start live chat

Support hours

Mon-Fri

9:00 AM - 6:00 PM

Sat-Sun

10:00 AM - 4:00 PM

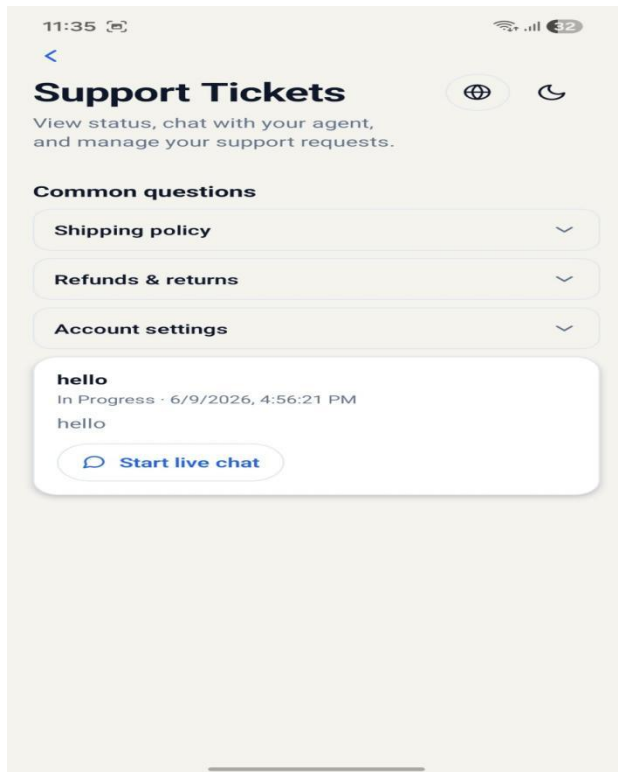
Timezone: UTC-5 (Eastern Time)

Common questions

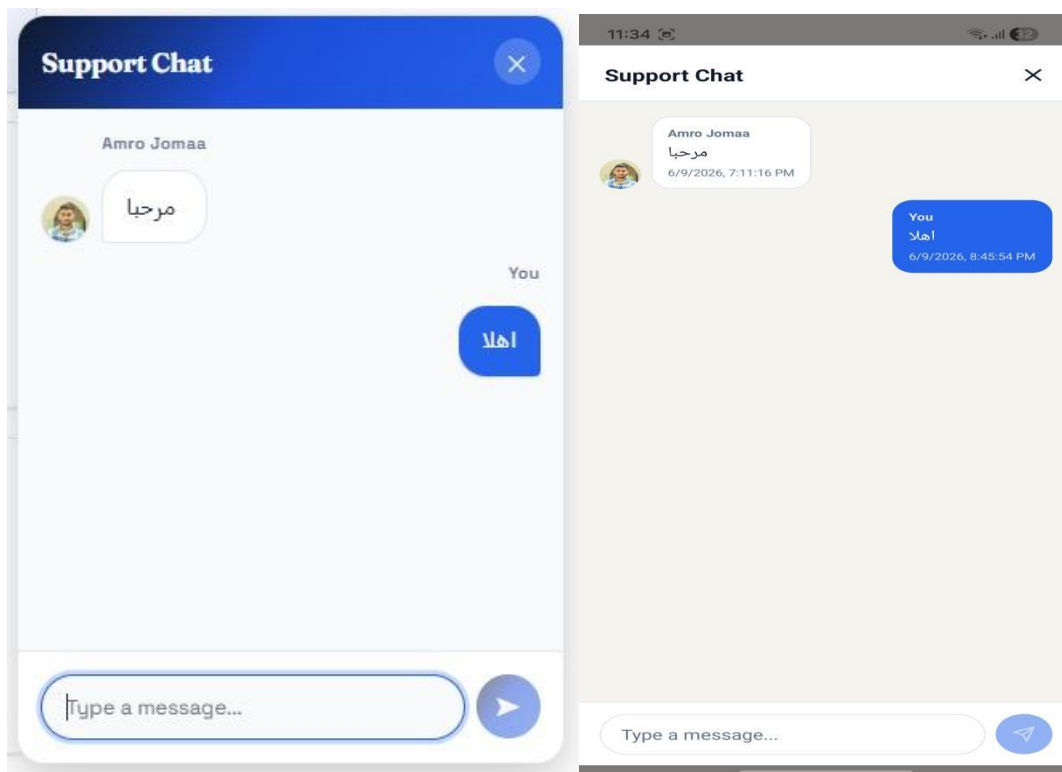
Shipping policy

Refunds & returns

Account settings



36 : Chatting System in Ticket (customer)



Customer Feedback

- **Implementation:** General site feedback collector endpoint
- **Features:** Star ratings, textual reviews, and submission states
- **UI/UX:** Modally positioned clean card form with animation feedback
- **Performance:** Lightweight non-blocking API posting

37 : Site Services Feedback (customer)

Customer Feedback
Rate your overall experience from 1 to 5 stars and add an optional comment.

★★★★☆ 4/5

Comment (optional)
Share your feedback (optional)

0/1000

Submit Feedback

You already submitted feedback this month. You can submit again next month.

Last updated: June 9, 2026

Cashier Features

POS Terminal

- **Implementation:** Showroom cashier point-of-sale console dashboard
- **Features:** Instant search matching, cashier basket assembly, automated promo code previewing, and immediate receipt generation
- **UI/UX:** High-density screen layout featuring search sidebars, numeric payment keypads, and checkout alerts

38: POS Terminal (cashier)

FurniFlow

Search by name...

Cashier Dashboard

My sales today

🌐 🌙

All categories

Beds

Chairs

Coffee Tables

Dining Tables

Lighting

Mattresses

Office Desks

Sofas

Storage Cabinets

TV Units

Wardrobes

49 products

Today's revenue: \$0.00



3-Door Sliding Wardrobe
\$1,199.00 each
Stock: 7



Adjustable Standing Desk
\$749.00 each
Stock: 7



Comfort L-Shaped Sofa
\$899.00 each
Stock: 10



Compact Apartment Sofa
\$499.00 each
Stock: 20



Compact Study Desk
\$249.00 each
Stock: 20



Corner TV Cabinet
\$429.00 each
Stock: 9



Corner Wardrobe Unit
\$899.00 each
Stock: 7



Crystal Chandelier
\$349.30 each
Stock: 5



Decorative Display Cabinet
\$649.00 each
Stock: 8



Ergonomic Dining Chair Set
\$249.00 each
Stock: 20



Executive Office Chair
\$349.00 each
Stock: 15



Executive Wooden Office Desk
\$899.00 each
Stock: 8



Extendable Dining Table
\$899.00 each
Stock: 8



Floating Entertainment Unit
\$649.00 each
Stock: 7



Home Office Desk with Drawers
\$399.00 each
Stock: 15



Hybrid Pocket Spring Mattress
\$799.00 each
Stock: 12



Industrial Pendant Light
\$199.00 each
Stock: 15



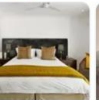
Kids Comfort Mattress
\$299.00 each
Stock: 25



Kids Single Bed
\$499.00 each
Stock: 15



Kids Wardrobe Cabinet
\$599.00 each
Stock: 12



King Size Luxury Bed
\$1,299.00 each
Stock: 7



L-Shaped Workstation Desk
\$699.00 each
Stock: 10



Luxury Pillow Top Mattress
\$999.00 each
Stock: 8



Luxury TV Console
\$799.00 each
Stock: 5

Current sale 3

Customer name (optional)

3-Door Sliding Wardrobe

\$1,199.00 each

- 1 +

\$1,199.00

Comfort L-Shaped Sofa

\$899.00 each

- 1 +

\$899.00

Executive Office Chair

\$349.00 each

- 1 +

\$349.00

Promotion

-\$119.90

Total

\$2,327.10

Complete sale

FurniFlow

Search by name...

All categories

Beds

Chairs

Coffee Tables

Dining Tables

Lighting

Mattresses

Office Desks

Sofas

Storage Cabinets

TV

5 products



Kids Single Bed
\$499.00
Stock: 15



King Size Luxury Bed
\$1,299.00
Stock: 7



Modern Upholstered Bed
\$949.00
Stock: 9

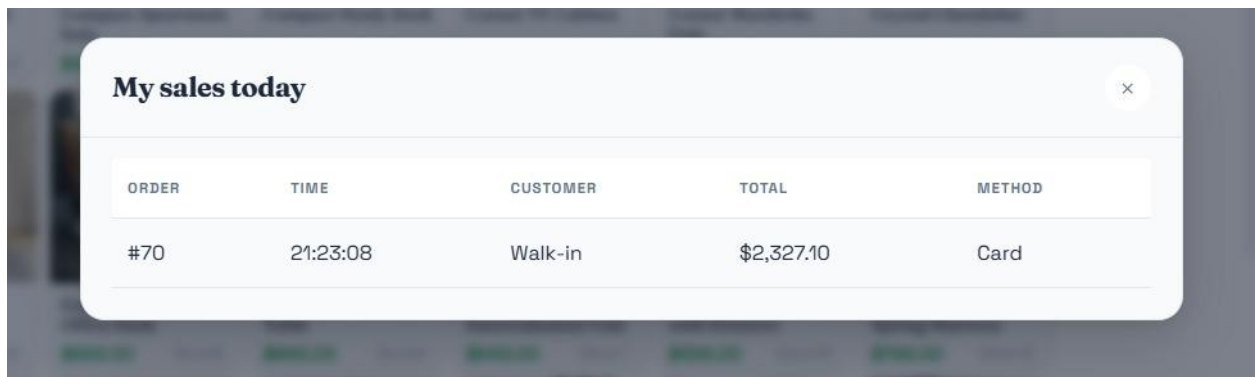
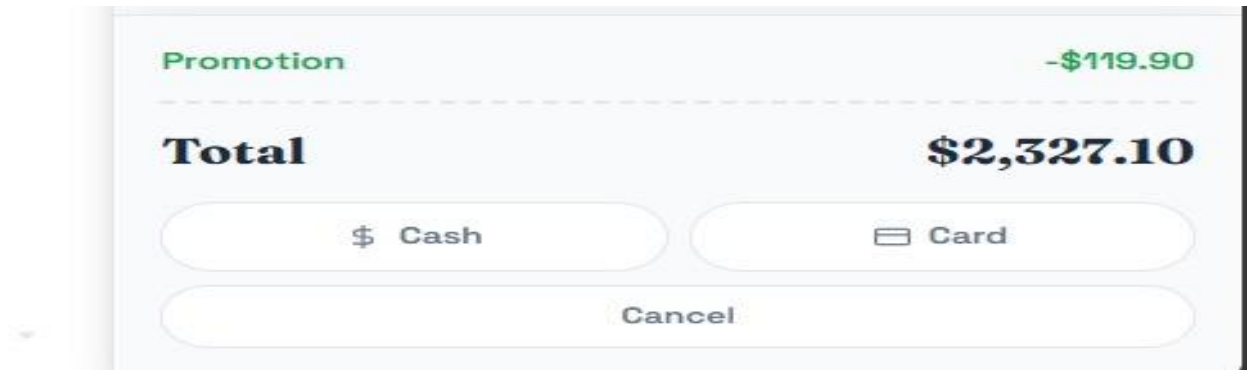
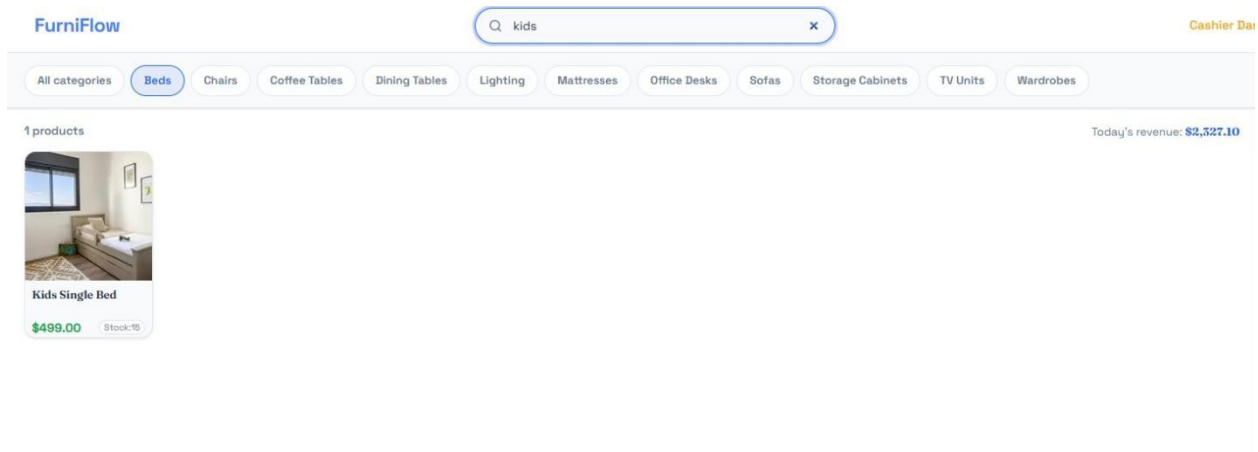


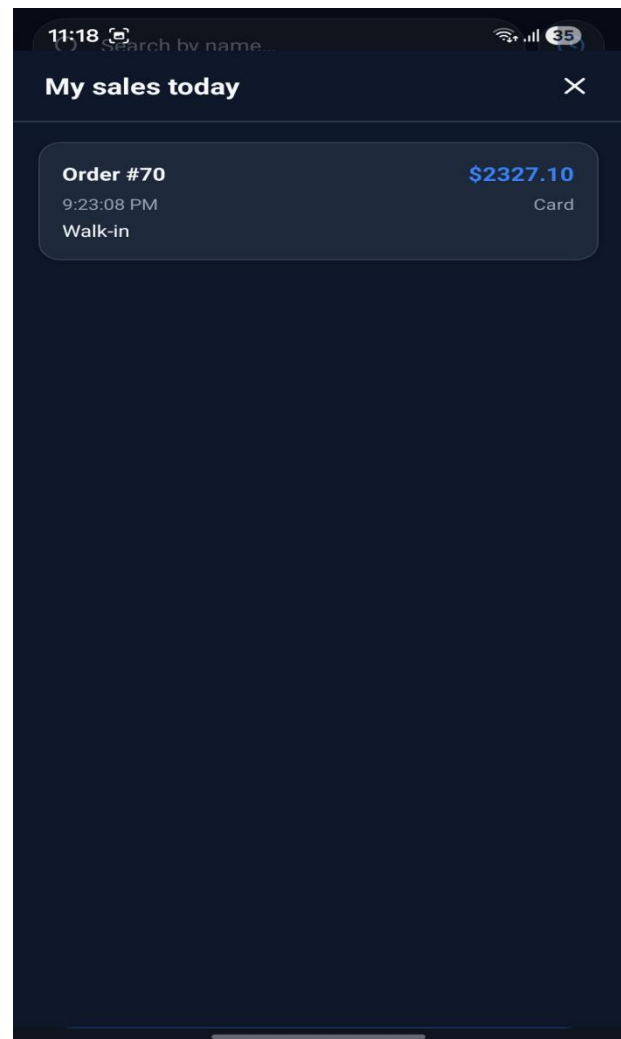
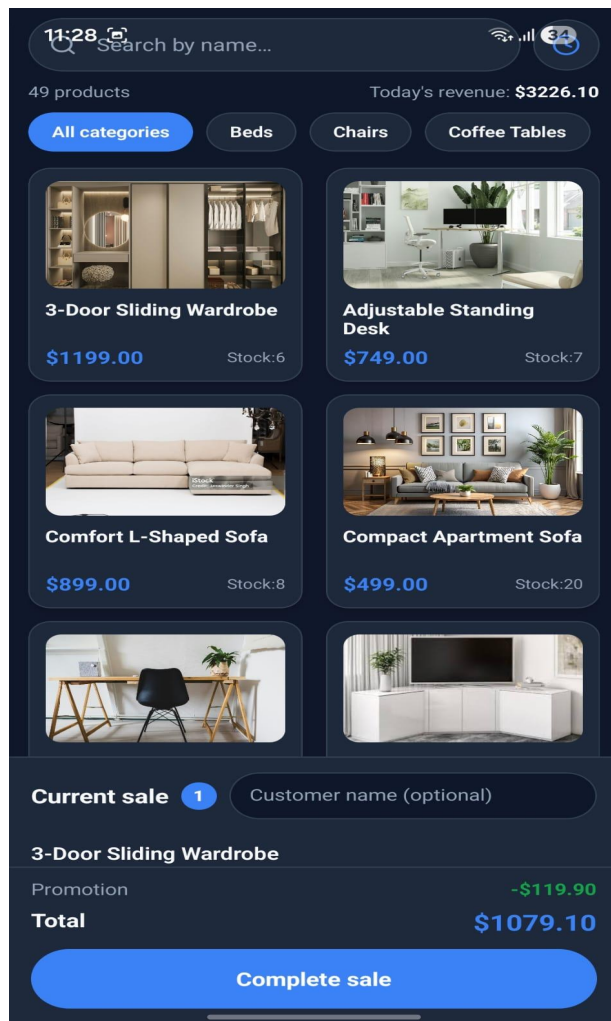
Queen Platform Bed
\$799.00
Stock: 10



Wooden Storage Bed
\$899.00
Stock: 7

39: POS search / Total sales for day / payment method(cashier)





Seller Features

Products Overview

- **Implementation:** Seller products page for viewing the seller's product catalog
- **Features:** View product list, product images, prices, stock quantities, categories, discounts, and availability status
- **UI/UX:** Product table/cards with search, status indicators, and quick actions for view products
- **Data:** Product information is loaded from PostgreSQL through seller-scoped backend APIs

40 : Products Overview (Seller)

FurniFlow

Seller Dashboard

2:00

Seller Panel

Drag and drop to reorder menu

Dashboard

Products

Orders

SELLER PANEL

Products

View your catalog, stock levels, and pricing.

Search products...

IMAGE	PRODUCT	CATEGORY	PRICE	DISCOUNT	STOCK
	Modern LED Floor Lamp	Lighting	\$129.00 \$124.00	\$5.00	20
	Crystal Chandelier	Lighting	\$499.00 \$349.30	30%	7
	Smart Table Lamp	Lighting	\$89.00 \$79.00	\$10.00	25
	Industrial Pendant Light	Lighting	\$159.00	—	15
	Comfort L-Shaped Sofa	Sofas	\$899.00	—	10
	Modern 3-Seater Sofa	Sofas	\$849.00	—	15
	Luxury Velvet Sofa	Sofas	\$1,099.00	—	8
	Modern 3-Seater Sofa	Sofas	\$649.00	—	15

Products

Search products...

Modern LED Floor Lamp

Lighting

~~\$129.00~~ \$124.00 \$5.00

20

Crystal Chandelier

Lighting

~~\$499.00~~ \$349.30 30%

6

Smart Table Lamp

Lighting

~~\$89.00~~ \$79.00 \$10.00

25

Industrial Pendant Light

Lighting

\$159.00

15

Comfort L-Shaped Sofa

Sofas

\$899.00

10

Modern 3-Seater Sofa

Sofas

\$649.00

15

Order Management

- **Implementation:** Seller order processing interface for incoming paid orders
- **Features:** Order status updates from paid to preparing, and order detail views
- **UI/UX:** Order list with status badges and action controls
- **Real-time:** Polling-based order count updates on seller dashboard

41 : Start Preparing order (seller)

FurniFlow

Seller Dashboard

 **Seller Panel**
Drag and drop to reorder menu

 Dashboard

 Products

 **Orders**

SELLER PANEL

Orders

Review paid orders and move them into preparation.

Filter by Status: All

1 order

ORDER #	DATE	CUSTOMER	ITEMS	TOTAL	STATUS	ACTION
#72	June 10, 2026	s12216951@stu.najah.edu [عمرو كمال فلاح جمعة]	1	\$369.30	Paid	Start Preparing

 **Crystal Chandelier**
Qty: 1 × \$349.30 = \$349.30

2:00

SELLER PANEL

s12216951@stu.najah.edu

 **Dashboard**

 Products

 Orders 1

 Profile

LANGUAGE

English

French

Arabic

 Logout

2:00

Orders

SELLER PANEL

Orders

Review paid orders and move them into preparation.

1 order

#72

عمرو كمال فلاح جمعة

6/10/2026, 1:55:26 PM · 1 items

\$369.30

Paid



Crystal Chandelier

Qty: 1 × \$349.30 = \$349.30

[Start Preparing](#)

42 : Preparing order (seller)

Seller Panel
Drag and drop to reorder menu

Dashboard

Products

Orders

SELLER PANEL

Orders

Filter by Status: All

Review paid orders and move them into preparation.

ORDER #	DATE	CUSTOMER	ITEMS	TOTAL	STATUS	ACTION
#72	June 10, 2020	s12216951@stu.najah.e... (عمرو كمال فلاح جمعة)	1	\$369.30	Preparing	In Progress

Orders

Review paid orders and move them into preparation.

1 order

#72 **\$369.30**

عمرو كمال فلاح جمعة

6/10/2020, 1:55:26 PM - 1 items

Crystal Chandelier
Qty: 1 × \$349.30 = \$349.30

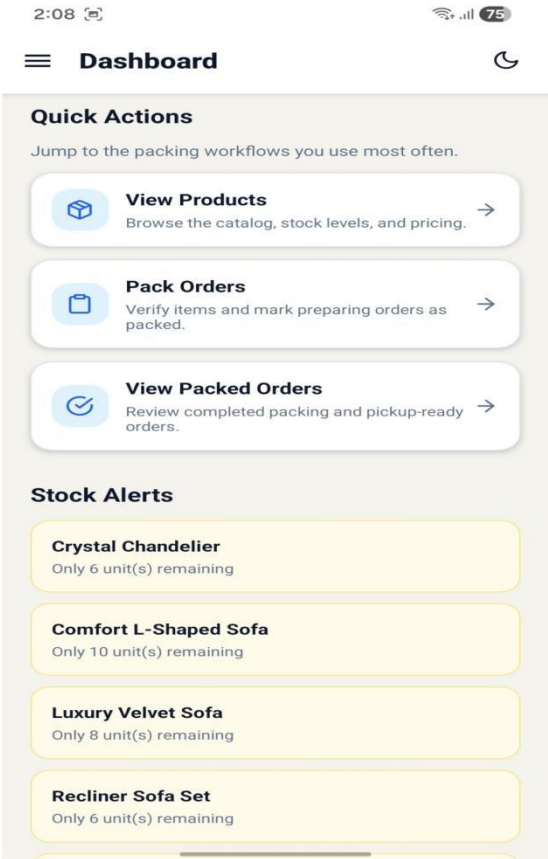
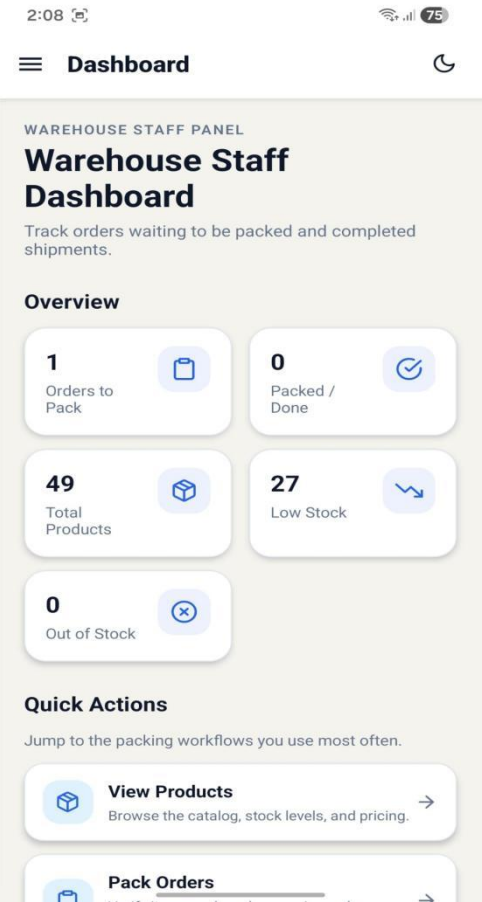
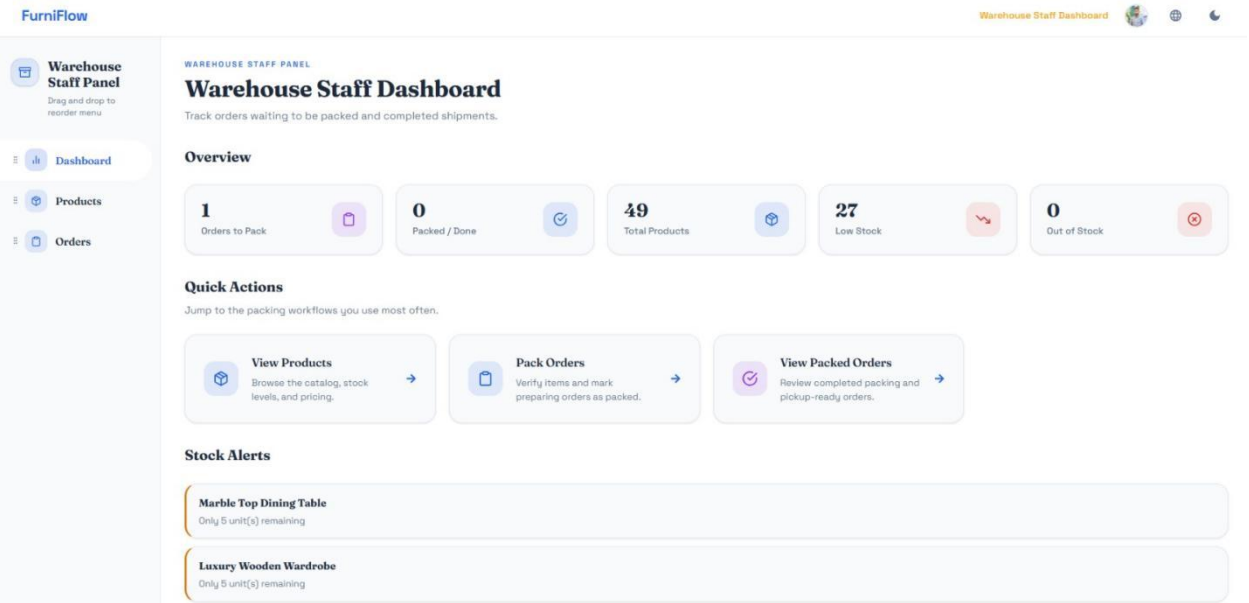
In Progress

Warehouse Staff Features

Warehouse Staff Dashboard

- **Implementation:** Warehouse staff dashboard for monitoring daily preparation work
- **Features:** Shows assigned preparation tasks, preparing orders and packed orders
- **UI/UX:** Simple dashboard cards with counters and quick access to order preparation screens
- **Workflow:** Helps warehouse staff quickly identify orders that need verification and packing

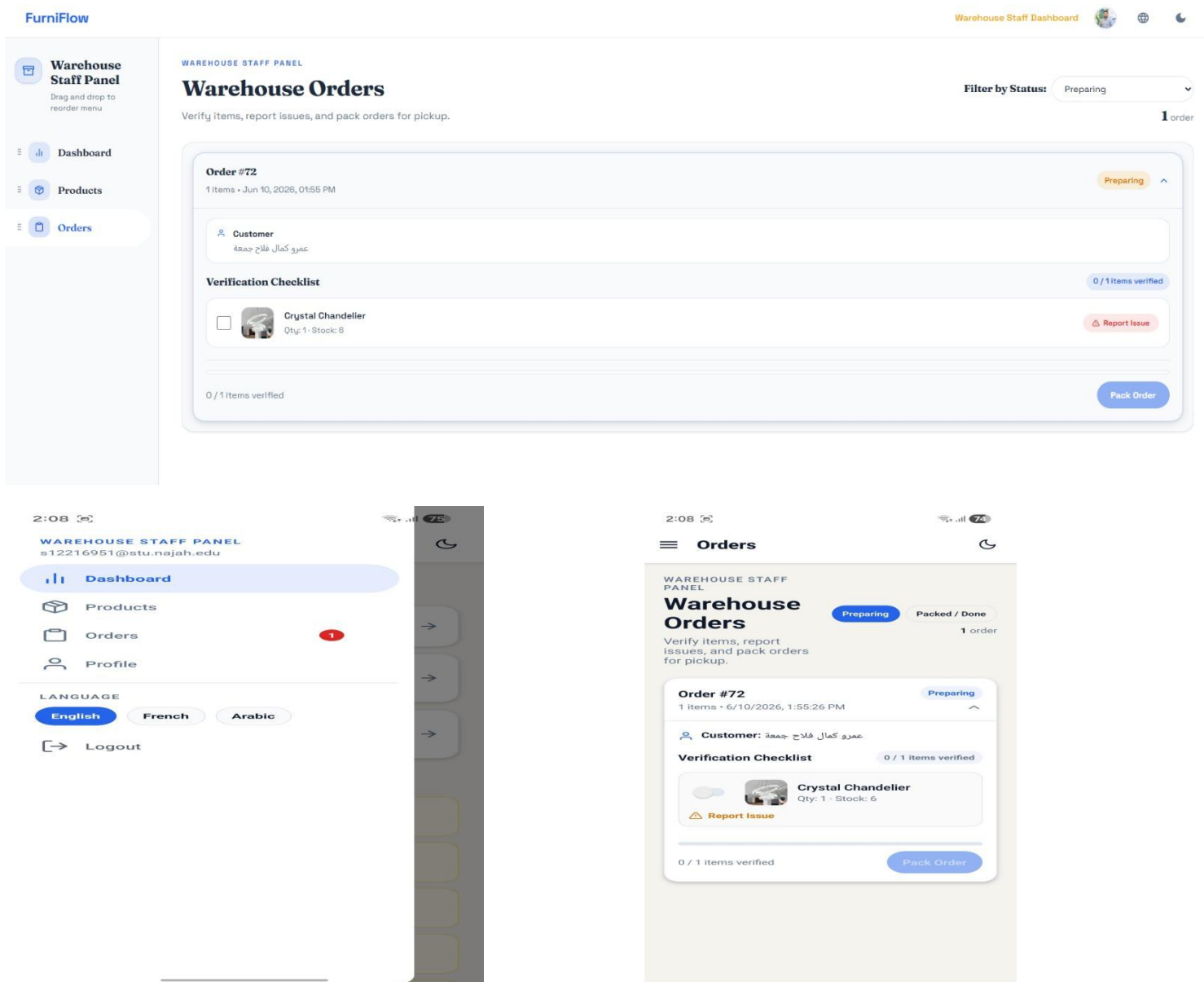
43: warehouse staff dashboard(warehouse staff)



Warehouse Staff Orders

- **Implementation:** Warehouse staff order preparation panel
- **Features:** View preparing orders, verify individual order items, pack completed orders, and report missing, damaged, or unavailable items
- **UI/UX:** Order cards with item verification controls, packing actions, and report issue options
- **Workflow:** Orders move from preparing to packed after item verification, while reported issues are sent to the warehouse manager for review and resolution

44: warehouse staff start packing (warehouse staff)



45: reporting (warehouse staff)

Report Issue — Crystal Chandelier

Issue Type

Damaged

Description

Describe the issue...

Cancel Report Issue

2:08

WAREHOUSE STAFF PANEL

Warehouse Orders

Preparing Packed / Done

1 order

Verify items, report issues, and pack orders

Report Issue — Crystal Chandelier

Issue Type

Damaged Missing Other

Description

Describe the issue...

Cancel Report Issue

46 : done packed (warehouse staff)

WAREHOUSE STAFF PANEL

Warehouse Orders

Verify items, report issues, and pack orders for pickup.

Filter by Status: Packed / Done

1 order

Order #72

1 items • Jun 10, 2026, 01:55 PM

Packed

Customer: عمرو كمال فلاح جمعة

Verification Checklist

Crystal Chandelier

Qty: 1 - Stock: 8

2:08

WAREHOUSE STAFF PANEL

Warehouse Orders

Preparing Packed / Done

1 order

Verify items, report issues, and pack orders for pickup.

Order packed successfully

Order #72

1 items • 6/10/2026, 1:55:26 PM

Packed

Customer: عمرو كمال فلاح جمعة

Verification Checklist

Crystal Chandelier

Qty: 1 - Stock: 6

Warehouse Staff Products

- **Implementation:** Warehouse staff product and stock viewing screen
- **Features:** View product information, stock quantity, category, discounts and availability status
- **UI/UX:** Product table/cards with search and status indicators
- **Workflow:** Helps staff verify product availability while preparing customer orders

47 : staff see products (warehouse staff)

The screenshot displays the 'Warehouse Staff Panel' in the FurniFlow system. The main section is titled 'Products' and includes a search bar and a table of products. The table has columns for Image, Product, Category, Price, Discount, and Stock. The products listed are Modern LED Floor Lamp, Crystal Chandelier, Smart Table Lamp, Industrial Pendant Light, and Comfort L-Shaped Sofa. A mobile app view on the right shows the same products in a card format with search and stock indicators.

IMAGE	PRODUCT	CATEGORY	PRICE	DISCOUNT	STOCK
	Modern LED Floor Lamp	Lighting	\$129.00 \$124.00	\$5.00	20
	Crystal Chandelier	Lighting	\$499.00 \$349.30	30%	6
	Smart Table Lamp	Lighting	\$89.00 \$79.00	\$10.00	25
	Industrial Pendant Light	Lighting	\$159.00	—	15
	Comfort L-Shaped Sofa	Sofas	\$899.00	—	10

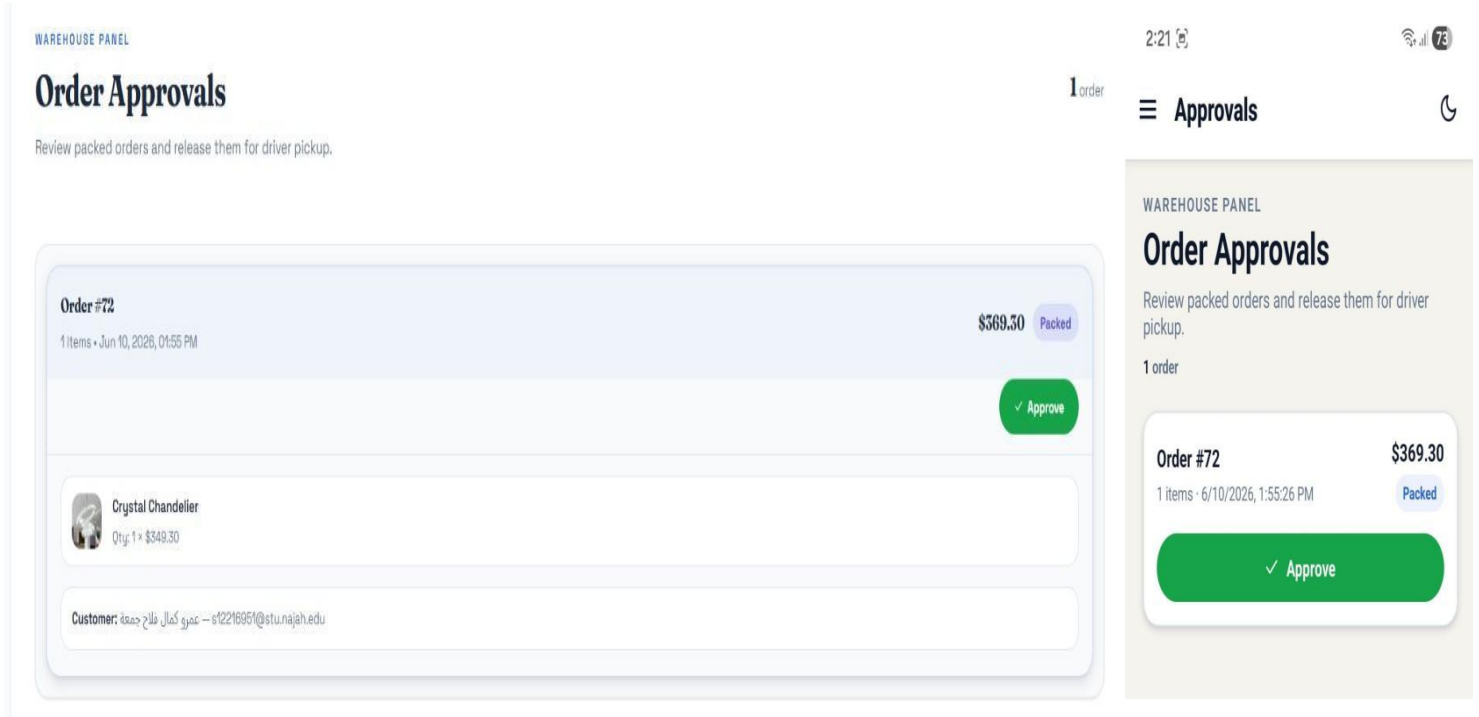
Warehouse Manager Features

Warehouse Manager Approvals

- **Implementation:** Warehouse manager review and approval screen for packed orders
- **Features:** Review packed orders, check preparation status, approve ready-for-pickup status, and reject or handle problematic orders

- **UI/UX: Approval list with order details, status badges, and action buttons**
- **Integration: Approved orders become available for operations delivery assignment**

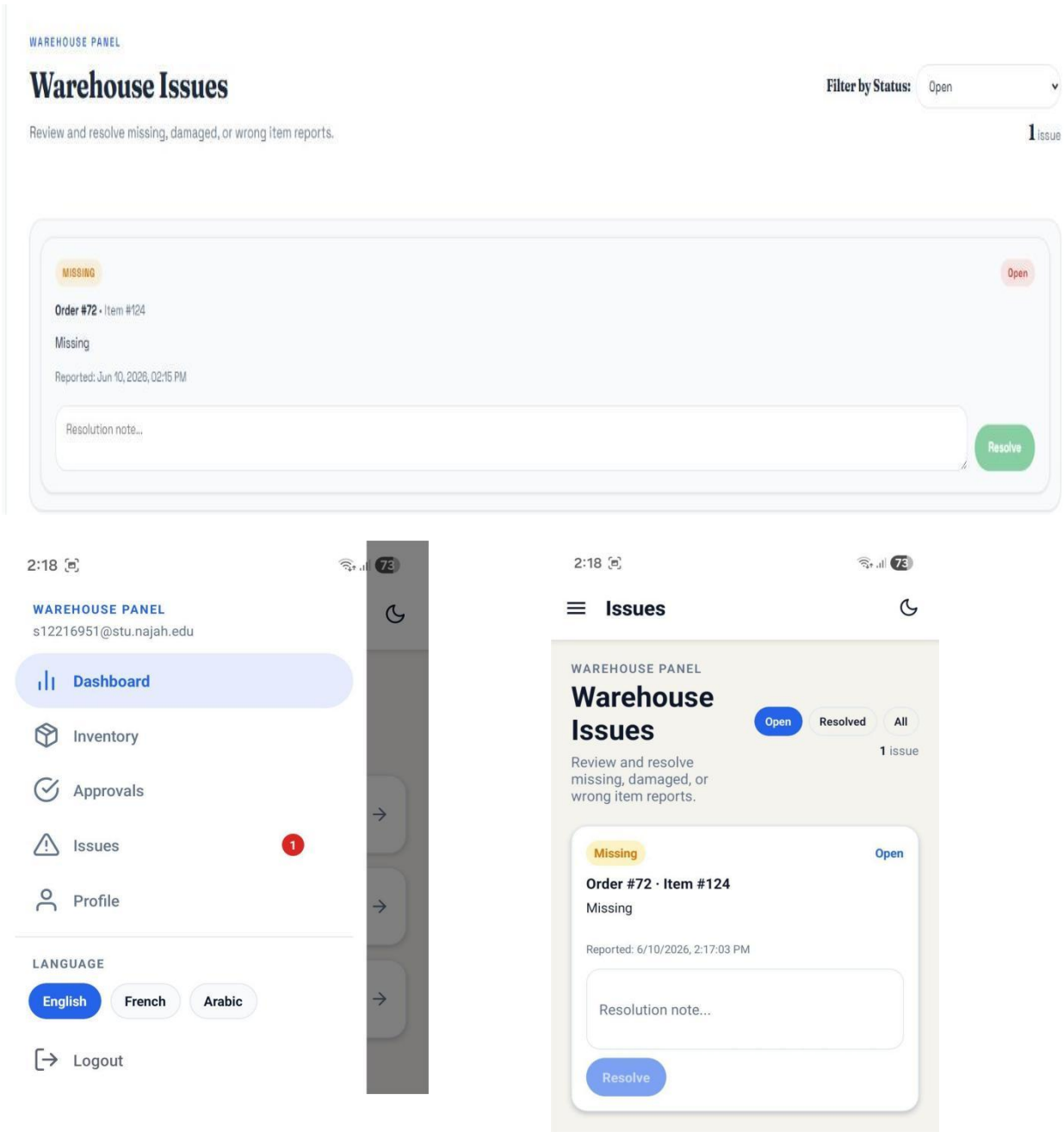
48: approves order packing from the warehouse staff(warehouse manager)



Warehouse Manager Issues

- **Implementation: Warehouse issue management screen**
- **Features: View reported packing or stock issues, inspect issue details, update issue status, and resolve warehouse problems**
- **UI/UX: Issue list with clear priority/status indicators and resolution actions**
- **Workflow: Helps keep the order preparation process controlled before orders move to delivery**

49: warehouse manager solving issues reports from warehouse staff (warehouse manager)



Warehouse Manager Inventory

- **Implementation:** Warehouse inventory management screen
- **Features:** View product stock levels, update inventory quantities, monitor low-stock products, and check product availability
- **UI/UX:** Inventory table with search, filters, and stock status indicators
- **Integration:** Inventory updates support accurate product availability in the customer catalog

50: warehouse manager Inventory control stocks (warehouse manager)

WAREHOUSE PANEL

Inventory Control

Track stock levels and update product quantities in real time.

Q Search products...

PRODUCT	CATEGORY	PRICE	STATUS	STOCK
 Modern LED Floor Lamp	Lighting	\$129.00	In Stock	20
 Crystal Chandelier	Lighting	\$499.00	Low Stock	6
 Smart Table Lamp	Lighting	\$89.00	In Stock	25
 Industrial Pendant Light	Lighting	\$159.00	In Stock	15
 Comfort L-Shaped Sofa	Sofas	\$899.00	Low Stock	10
 Modern 3-Seater Sofa	Sofas	\$649.00	In Stock	15

2:18

74

Filter by Stock: All Stock Levels

Inventory

Q Search products...



Modern LED Floor Lamp

Lighting - \$129.00

In Stock

Stock

20



Crystal Chandelier

Lighting - \$499.00

Low Stock

Stock

6



Smart Table Lamp

Lighting - \$89.00

In Stock

Stock

25



Industrial Pendant Light

Lighting - \$159.00

In Stock

Stock

15

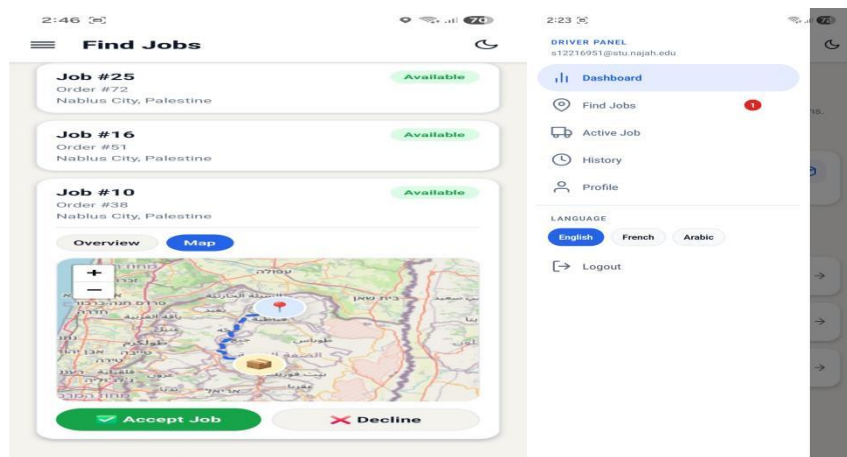
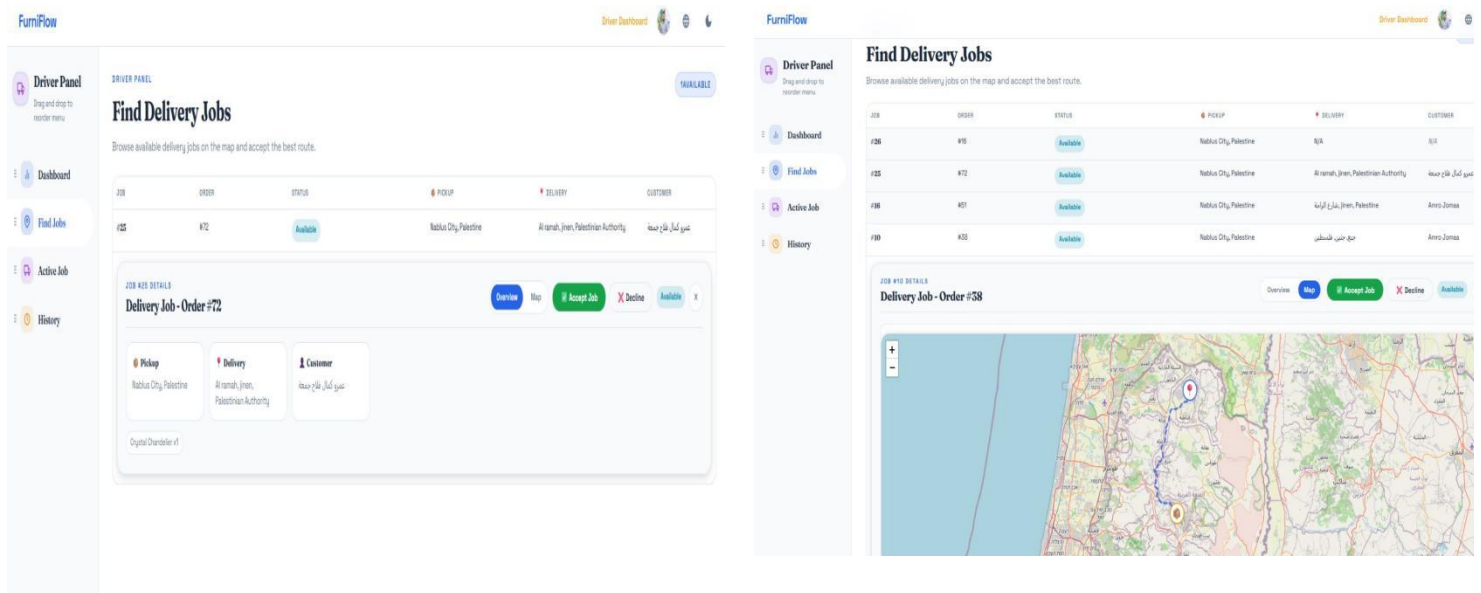
Driver Features

Driver Delivery Management

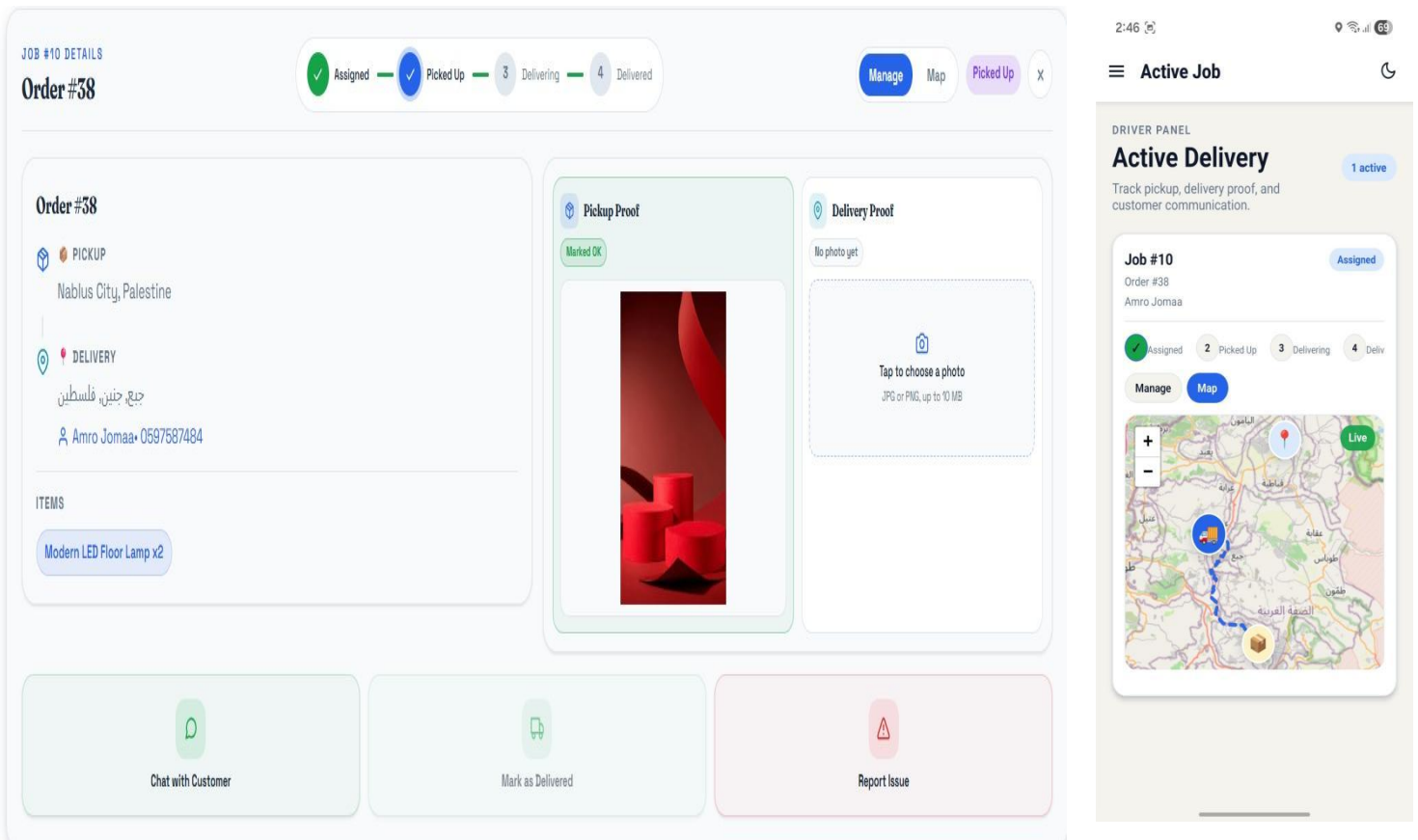
Available Orders

- **Implementation:** Driver delivery panel for managing assigned delivery jobs
- **Features:** View available or assigned deliveries, accept delivery jobs, see pickup and customer details, update delivery status, upload proof photos, report delivery issues, and track completed delivery history
- **UI/UX:** Delivery cards, status buttons, map view, and action controls for pickup and delivery progress
- **Workflow:** The driver moves the order through assigned, picked up, delivering, and delivered status until the delivery is completed

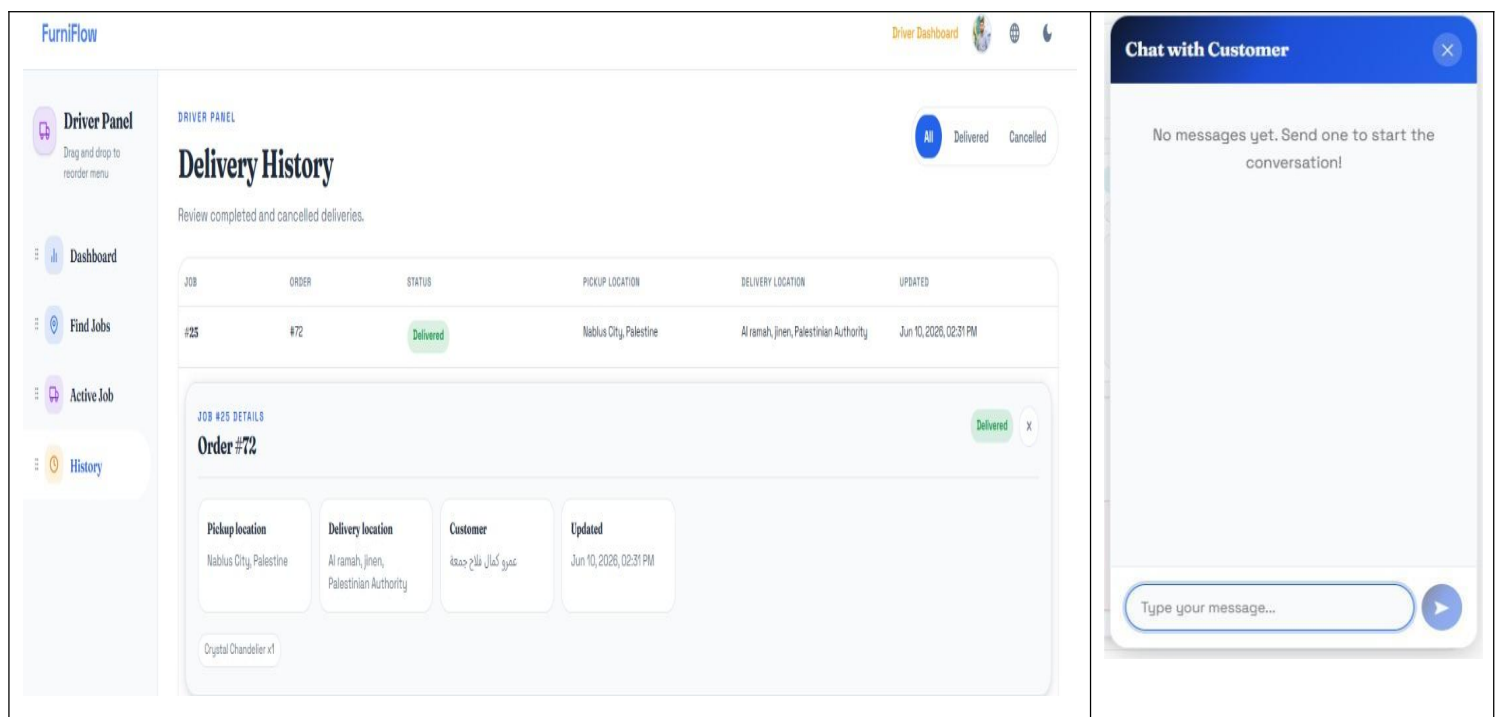
51 : find job(driver)



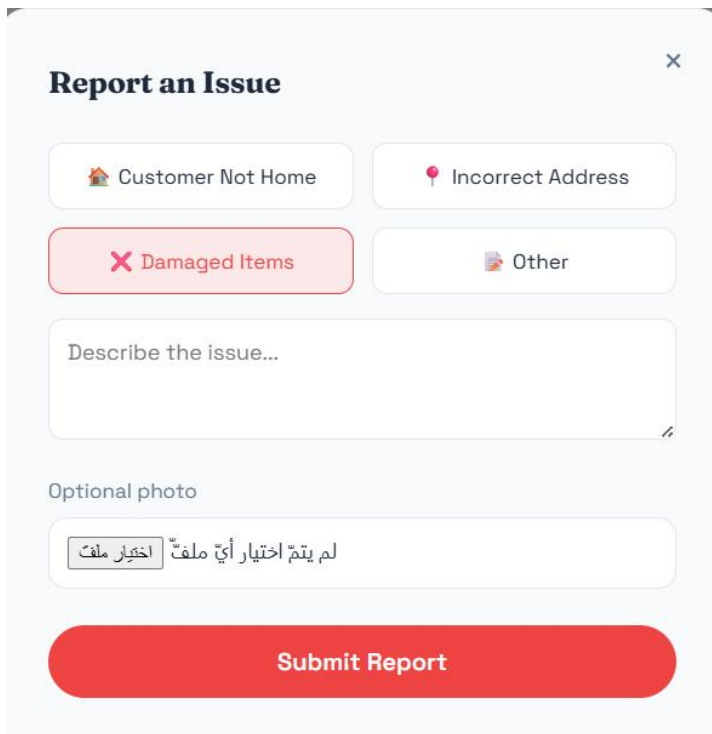
52 : active job & uploaded proof image (driver)



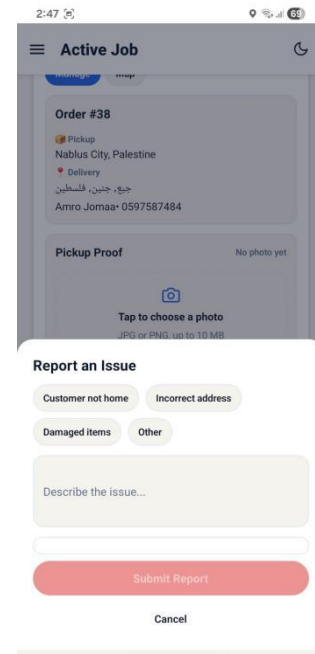
53 : chat with customer & history page showing done delivered orders when delivery proof image approved (driver)



54 : report issue to the admin/operations manager (driver)



The web interface for reporting an issue features a title bar with a close button. Below the title, there are four buttons: 'Customer Not Home' (with a house icon), 'Incorrect Address' (with a location pin icon), 'Damaged Items' (with a red 'X' icon), and 'Other' (with a puzzle piece icon). A text input field labeled 'Describe the issue...' is positioned below these buttons. Underneath the text field is a section for an optional photo, containing a button with Arabic text 'لم يتم اختيار أي ملف' and 'اختيار ملف'. At the bottom of the form is a large red 'Submit Report' button.



The mobile app interface for reporting an issue shows a header with a menu icon, the title 'Active Job', and a moon icon. The main content area displays 'Order #38' with pickup and delivery details for Nablus City, Palestine, and a contact number. Below this is a 'Pickup Proof' section with a camera icon and a prompt to 'Tap to choose a photo'. A 'Report an Issue' section follows, with buttons for 'Customer not home', 'Incorrect address', 'Damaged items', and 'Other'. A text input field for 'Describe the issue...' is also present. At the bottom are 'Submit Report' and 'Cancel' buttons.

Operations Manager Features

Operations and Delivery Management

- **Implementation:** Operations manager panel for supervising the delivery workflow after warehouse approval
- **Features:** View ready-for-pickup orders, assign drivers, monitor active deliveries, track driver locations, review delivery proof photos, handle reported delivery issues, and follow delivery status until completion
- **UI/UX:** Dashboard cards, delivery lists, status badges, driver assignment controls, issue details, and map-based tracking view
- **Workflow:** The operations manager moves approved orders into assigned delivery jobs and monitors them through pickup, delivery, and final completion
- **Installments:** The operations manager can manage installment requests like the admin, including viewing customer applications, reviewing uploaded documents, approving or rejecting requests, monitoring installment schedules, and following payment status.

55 : orders managements(operations manager)

2:54
68

Orders

Filter by time:

All time
Day
Month
Year

Q Search

Order #72
s12216951@stu.najah.edu
\$369.30 | 6/10/2026, 1:55:26 PM
Ready for pickup
Change status...

Order #71
POS
\$899.00 | 6/9/2026, 11:20:31 PM
Paid
Change status...

Order #70
POS
\$2327.10 | 6/9/2026, 9:23:08 PM
Paid
Change status...

Order #69
s12216951@stu.najah.edu
\$369.30 | 6/9/2026, 4:51:59 PM
Delivered
Change status...

2:55
68

Deliveries

Job #10
Order #38
Delivered

PAYMENT \$20.00
DRIVER عمرو كمال فلاح جمعة

CREATED 3/28/2026

Overview
Live tracking

Delivery Proof Photos

Pickup
Nablu City, Palestine
(32.2211, 35.2544)

Delivery
جبع, جنين, فلسطين
(32.4619, 35.2976)

Customer
Amro Jomaa | 0597587484

Driver
عمرو كمال فلاح جمعة

Items
Modern LED Floor Lamp x2

Job #9
Amro → جبع, jinen, Palestine
\$20.00 | 3/28/2026, 2:27:14 PM
Delivered
Order Details

56 : tracking driver (operations manager)

JOB #21
Order #66
Driver Assigned

PAYMENT \$919.00

DRIVER عمرو كمال فلاح جمعة

CREATED June 8, 2026

Overview
Live tracking

+
-

Live Tracking

57 : *installments management(operations manager)*



Operations Panel

Drag and drop to reorder menu

Dashboard

Orders

Installments

Deliveries

ADMIN PANEL

Installment Requests

Review installment applications, verify documents, and approve or reject requests.

Filter by Status:

All

14 requests

ID	CUSTOMER	ORDER	TOTAL	REMAINING	STATUS
#14	s122169561@stu.najah.edu 05975671854	#09	\$349.30	\$349.30	Approved
#13	s122169561@stu.najah.edu 05975671854	#08	\$1,076.10	\$1,076.10	Approved
#12	s122169561@stu.najah.edu 05975671854	#54	\$170.00	\$0.00	Completed
#11	s122169561@stu.najah.edu 05975671854	#54	\$170.00	\$0.00	Completed
#10	s122169561@stu.najah.edu 05975671854	#54	\$170.00	\$0.00	Completed
#9	s122169561@stu.najah.edu 05975671854	#54	\$170.00	\$0.00	Completed
#8	s122169561@stu.najah.edu 05975671854	#54	\$170.00	\$0.00	Cancelled
#7	s122169561@stu.najah.edu 05975671854	#54	\$170.00	\$0.00	Cancelled
#6	s122169561@stu.najah.edu 05975671854	#54	\$170.00	\$170.00	Rejected
#5	s122169561@stu.najah.edu 05975671854	#54	\$170.00	\$0.00	Cancelled

Request #14

- Order #89

CUSTOMER:

s122169561@stu.najah.edu

PHONE:

0597587484

DURATION:

6months

TOTAL AMOUNT:

\$549.30

REMAINING BALANCE:

\$549.30

MONTHLY PAYMENT:

\$58.22

NEXT PAYMENT DATE:

July 9, 2026

CREATED:

June 9, 2026

Verification documents



ID Front



ID Back



Selfie with ID

Payment Schedule

#	DUE DATE	AMOUNT	STATUS
1	July 9, 2026	\$58.22	Pending

58 : approve proofs images from delivery management(operations manager)

ADMIN PANEL

Delivery Management

Track delivery jobs, assign drivers, review proof photos, and resolve driver issues.

Filter by Status: All
25 jobs

JOB ID	ORDER ID	DRIVER	STATUS	PICKUP	DELIVERY	PAYMENT	CREATED
#25	#72	عمرو كمال فلاح جمعة	Delivered	Nablus City, Palestine	Al ramah, jinen, Palestinian Authority	\$369.30	June 10, 2026

JOB #25

Order #72

Delivered

X

PAYMENT

\$369.30

DRIVER

عمرو كمال فلاح جمعة

CREATED

June 10, 2026

Overview

Live tracking

Delivery Proof Photos

PICKED UP

Checked OK

DELIVERED

Checked OK



June 10, 2026



June 10, 2026

59 : reported issues management(operations manager)

The screenshot displays a web application interface for managing delivery issues. At the top, a yellow notification bar states "1 delivery issue report needs admin attention." with a bell icon and buttons for "View Issue orders" and "Clear". Below this is a table with columns: JOB ID, ORDER ID, DRIVER, STATUS, PICKUP, DELIVERY, PAYMENT, and CREATED. The first row shows JOB ID #24, ORDER ID #36, DRIVER yazan Saleh, STATUS Picked Up, PICKUP Nablus City, Palestine, DELIVERY ...بي التخصصي, نابلس, فلسطين, PAYMENT \$300.00, and CREATED May 19, 2026. A modal window for "Order #36" is open, showing details for JOB #24. It includes fields for PAYMENT (\$300.00), DRIVER (yazan Saleh), and CREATED (May 19, 2026). Below these are tabs for Overview, Live tracking, Delivery Proof Photos, and Issue Reported: (active). A yellow banner below the tabs reads "Issue Reported: damaged Items". At the bottom, an "Issue Discussion (Admin ↔ Driver)" section shows "No messages yet." and a text input field "Reply to driver..." with "Send" and "Mark as Solved" buttons. On the left side of the modal, there is a vertical text label in Arabic: "تنشيط التتبع إلى".

JOB ID	ORDER ID	DRIVER	STATUS	PICKUP	DELIVERY	PAYMENT	CREATED
#24	#36	yazan Saleh	Picked Up	Nablus City, Palestine	...بي التخصصي, نابلس, فلسطين	\$300.00	May 19, 2026

JOB #24
Order #36

PAYMENT: \$300.00
DRIVER: yazan Saleh
CREATED: May 19, 2026

Overview | Live tracking | Delivery Proof Photos | **Issue Reported:**

Issue Reported: damaged Items

Issue Discussion (Admin ↔ Driver)
No messages yet.
Reply to driver... [Send] [Mark as Solved]

تنشيط التتبع إلى

Support Agent Features

Support Ticket Handling

- **Implementation:** Support agent panel for handling assigned customer support tickets
- **Features:** View assigned tickets, read customer issues, send replies, update ticket status, continue support chat conversations, and request ticket deletion when needed
- **UI/UX:** Ticket cards, status badges, chat-style messages, and simple response controls
- **Workflow:** The support agent follows assigned tickets from open to resolved by communicating with customers and updating the ticket progress

60 : self claimed or assigned by support manager/admin ticket(Support agent)

The screenshot shows the 'Support Agent Panel' in the 'Support Tickets' section. The ticket is titled 'hello' and is in the 'Available for Claim' state. The description is 'hello'. There are no responses yet. The ticket is assigned to 'عمرو كمال فلاح جمعة' (Amro Kamil Falah Juma) with email 's12216951@stu.najah.edu' and is dated 'June 10, 2026'. The interface includes a sidebar with 'Support Agent Panel', 'Agent Dashboard', and 'Tickets'. The top right shows 'Support Agent Dashboard' and 'Support Agent Panel'.

61 : in progress ticket(Support agent)

The left screenshot shows the 'Support Tickets' section with a ticket titled 'hello' in the 'In Progress' state. The description is 'hello'. The 'Update Status' section shows 'In Progress' selected, with 'Resolved' and 'Closed' options. There are no responses yet. The 'Add Response' section has a text input field and a 'Send Response' button. The 'Delete Ticket' button is also visible. The right screenshot shows the 'Support Chat' interface with a message from 'You' saying 'hi' at '6/10/2026, 3:36:53 PM'. The chat input field is at the bottom.

62 : resolved ticket(Support agent)

The screenshot shows the 'Support Agent Panel' in the 'Support Tickets' section. The ticket is titled 'hello' and is in the 'Resolved' state. The description is 'hello'. There are no responses yet. The ticket is assigned to 'عمرو كمال فلاح جمعة' (Amro Kamil Falah Juma) with email 's12216951@stu.najah.edu' and is dated 'June 10, 2026'. The interface includes a sidebar with 'Support Agent Panel', 'Agent Dashboard', and 'Tickets'. The top right shows 'Support Agent Dashboard' and 'Support Agent Panel'.

Support Manager Features

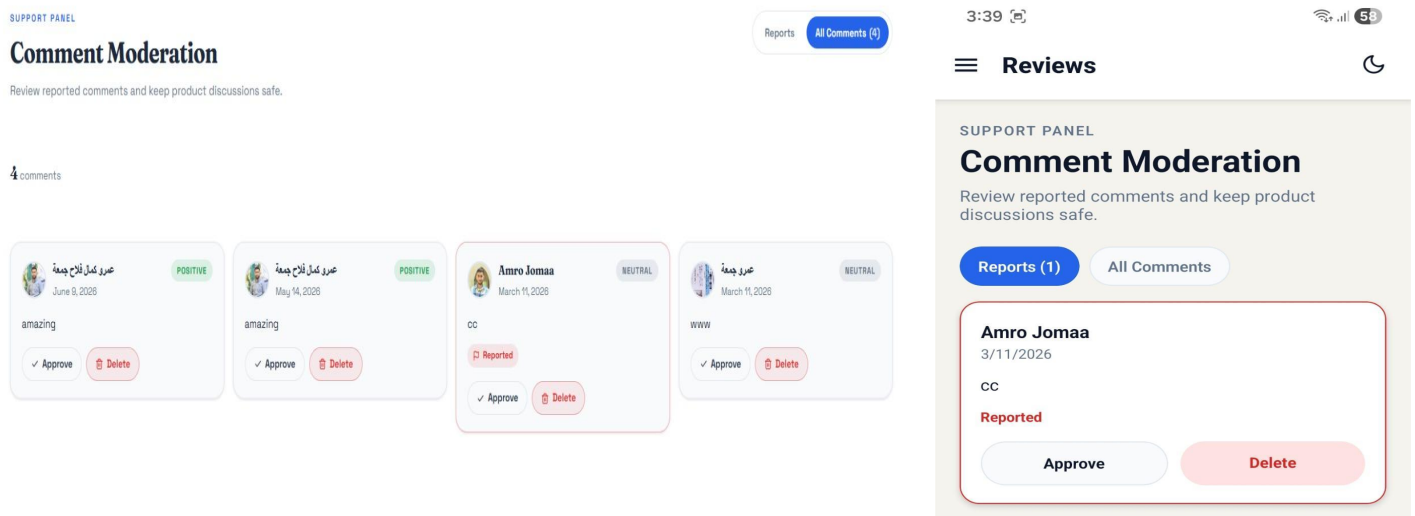
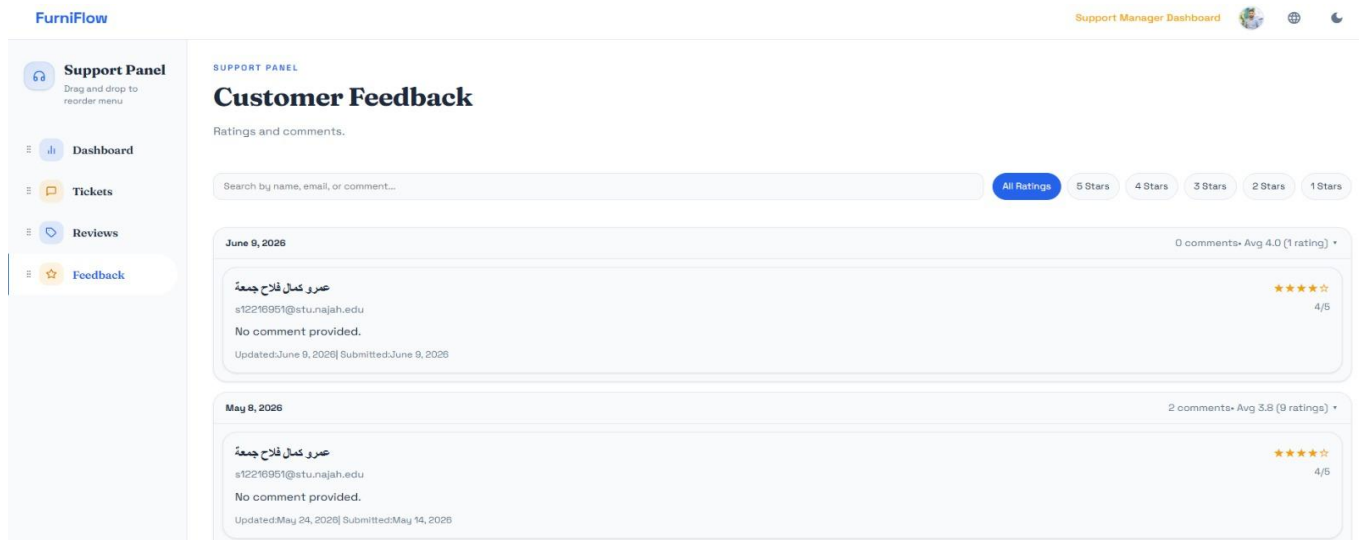
Support Supervision and Moderation

- **Implementation:** Support manager panel for supervising customer support and platform feedback
- **Features:** View all customer tickets, assign tickets to support agents, monitor ticket progress, approve or reject ticket deletion requests, manage reported comments, delete inappropriate comments, and view sentiment analysis for customer comments
- **UI/UX:** Dashboard cards, ticket lists, assignment controls, comment moderation tables, status badges, and sentiment indicators
- **Workflow:** The support manager organizes support work, controls ticket handling, and maintains safe customer communication across the platform

63 :view all tickets & take ticket or assign support agent to it(Support Manager)

The screenshot displays the 'Support Panel' interface. On the left, a sidebar shows 'All Tickets' with a description: 'Review support tickets, assign agents, update status, and manage delete requests.' The main area shows a ticket list with filters for 'Filter by Status' (All) and 'Filter by Assigned To' (All). A ticket is selected, showing a description 'hello' and a status 'Open'. Below the description, there are fields for 'Assign to Support Agent' and 'Update Status'. A 'Support Chat' window is open, showing a conversation with a customer. The chat window has a header 'Support Chat' and a close button. The chat content shows a message from the customer: 'hello' and a response from the support agent: 'hi'. The chat window also has a 'Type a message...' input field and a 'Send' button. On the right, a sidebar shows 'Tickets' with a description: 'Review support tickets, assign agents, update status, and manage delete requests.' The sidebar also has filters for 'Filter by Status' (All, Open, In Progress, Resolved) and 'Filter by Assigned To' (All, Unassigned, عمرو). Below the filters, there are two ticket cards. The first card shows a ticket with the title 'hello' and a status 'Open'. The second card shows a ticket with the title 'مساعدة' and a status 'Assign'.

64 : view customers feedbacks & all comment(filtered based on sentiment with AI) & manage reported comments (Support Manager)

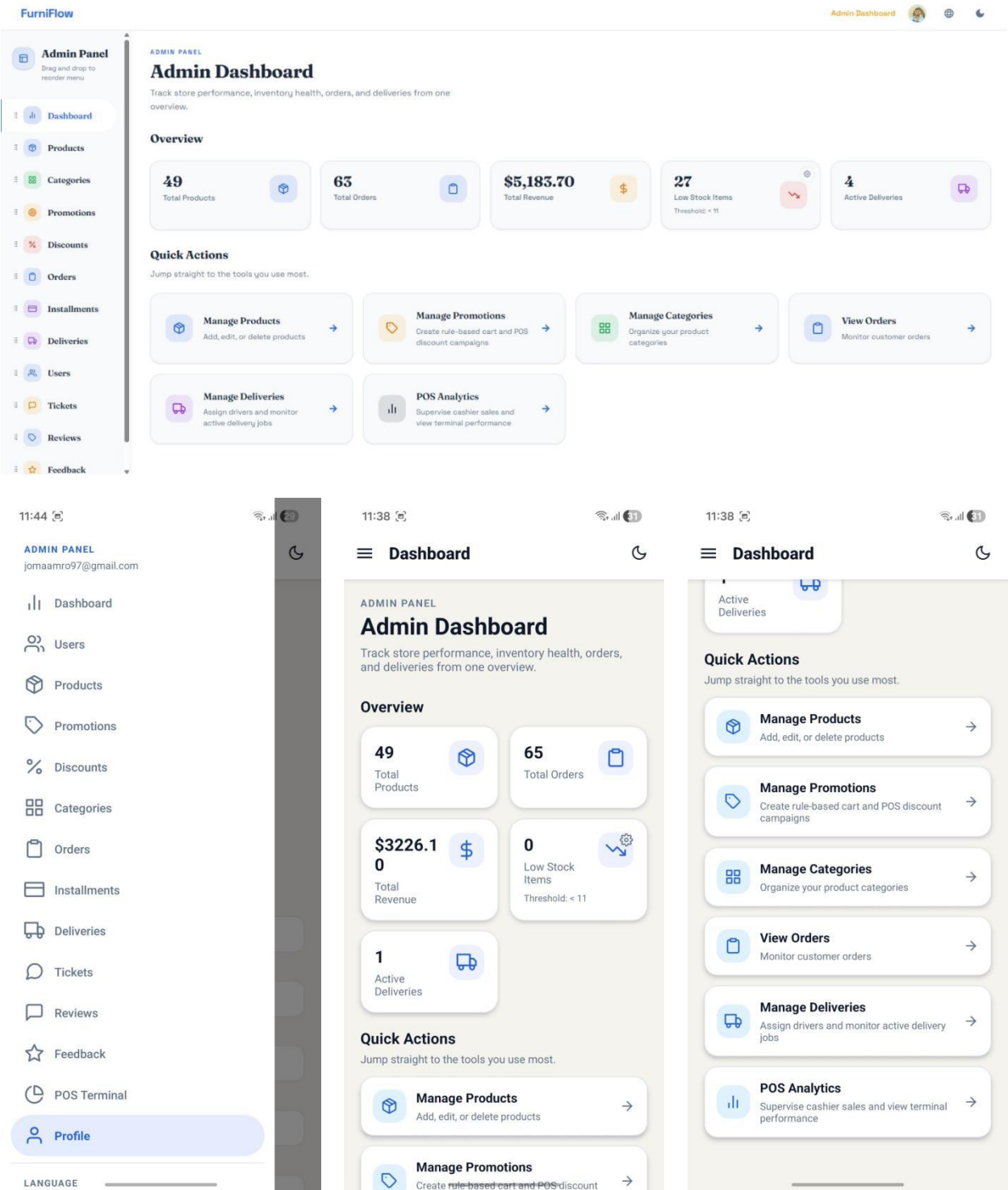


Admin Features

Admin Dashboard

- **Implementation:** Comprehensive admin dashboard with operational statistics
- **Features:** View system statistics, user activity, order summaries, product counts, delivery status, and important platform indicators
- **UI/UX:** Dashboard cards, counters, charts, and quick access shortcuts
- **Workflow:** Helps the admin get a full overview of the system before managing specific sections

65 : dashboard page (admin)



Products

- **Implementation:** Admin product management page for supervising all platform products
- **Features:** View products, product images, prices, stock quantities, discounts, categories, and availability status
- **UI/UX:** Product table/cards with search, filters, status labels, and action buttons
- **Integration:** Product data is connected to the customer catalog, seller products, cart, orders, and recommendations

Categories

- **Implementation:** Admin category management page for organizing furniture products
- **Features:** Create, edit, delete, and localize product categories in English, Arabic, and French
- **UI/UX:** Category table/cards with forms and action buttons
- **Integration:** Categories are used in product filtering, product forms, storefront browsing, and AI search context

66: Products page (admin)

FurniFlow Admin Dashboard

Manage Products

Track inventory, update details, and manage your catalog faster.

Search by product or category...

Total: 49 | Low Stock: 27 | Discounted: 3

Product Name	Price *	Stock	Total 0 reviews
Modern LED Floor Lamp	\$124.00 (\$129.00)	20	0
Crystal Chandelier	\$349.30 (\$499.00)	6	0
Smart Table Lamp	\$79.00 (\$89.00)	25	0
Industrial Pendant Light	\$159.00	15	0
Comfort L-Shaped Sofa	\$899.00	10	0
Modern 3-Seater Sofa	\$649.00	15	0
Luxury Velvet Sofa			
Compact Apartment Sofa			
Recliner Sofa Set			
Queen Platform Bed			
King Size Luxury Bed			
Modern Upholstered Bed			

67: Products add/update (admin)

Edit Product

Update product details, stock, and images.

Product details

Product Name *
Crystal Chandelier

Category Name *
Lighting

Description *
An elegant crystal chandelier designed to add luxury and sophistication to dining rooms and halls.

Localization

Product name (Arabic)
ثريا كريستال فاخرة

Product name (French)
Lustre en cristal

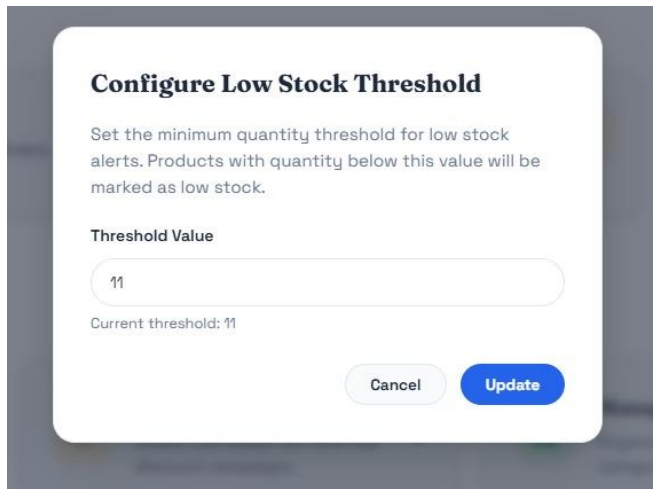
Description (Arabic)
ثريا كريستال أنيقة تضيف الفخامة والرفق لعرف الطعام، ومصالات الاستقبال.

Description (French)
Lustre élégant en cristal apportant luxe et sophistication à votre intérieur.

Product Images * (1-3 IMAGES REQUIRED)
0/3 images selected. [Add](#)

[In stock](#)

68 : configure low stock threshold (admin)



Configure Low Stock Threshold

Set the minimum quantity threshold for low stock alerts. Products with quantity below this value will be marked as low stock.

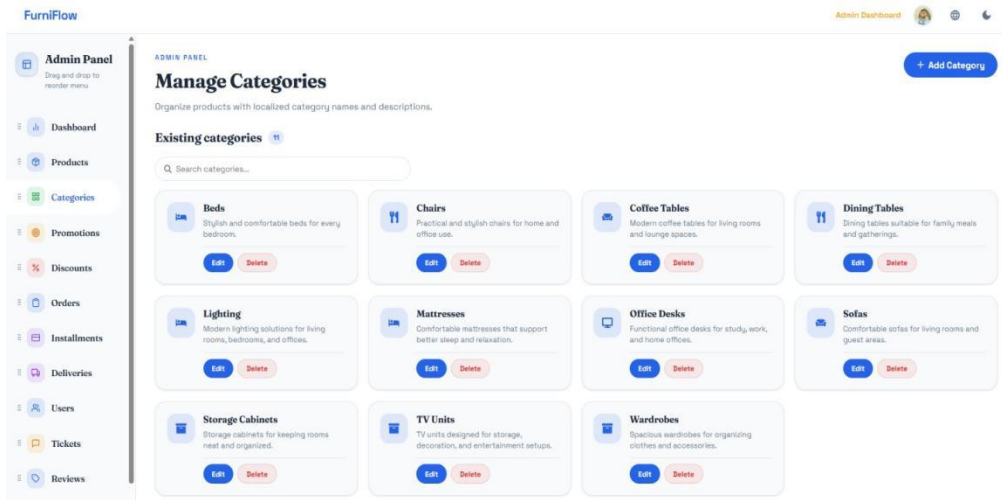
Threshold Value

Current threshold: 11

Cancel Update

The image shows a modal dialog box with a white background and rounded corners, set against a dark grey background. The dialog has a title 'Configure Low Stock Threshold' in bold. Below the title is a descriptive sentence. A label 'Threshold Value' is positioned above a text input field containing the number '11'. Below the input field, it says 'Current threshold: 11'. At the bottom right, there are two buttons: 'Cancel' (light grey) and 'Update' (blue).

69 : category page (admin)



ADMIN PANEL

Manage Categories

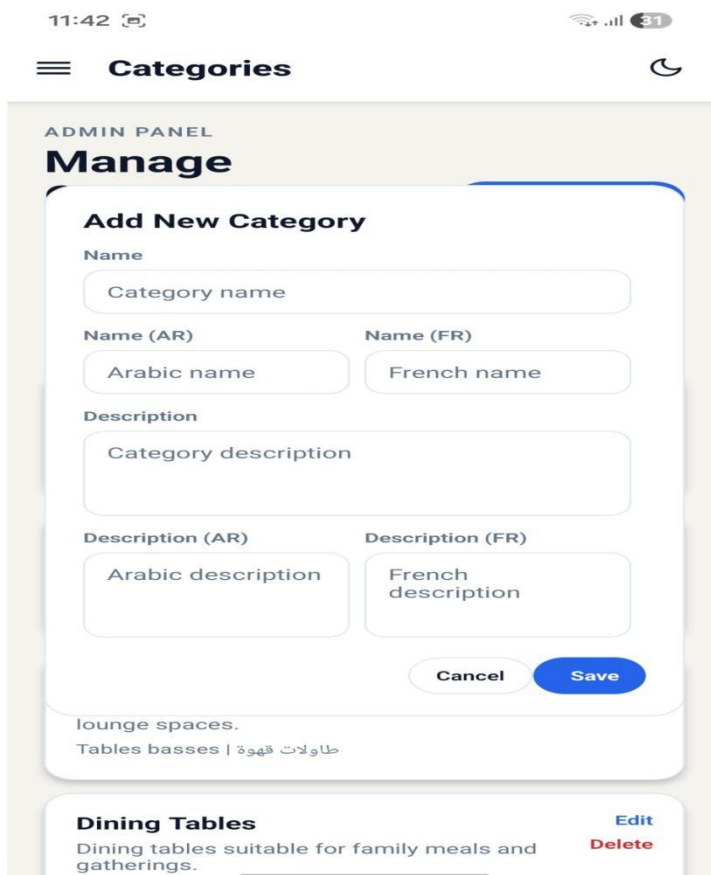
Organize products with localized category names and descriptions.

Existing categories 1

 Clear

**Beds**
Stylish and comfortable beds for every bedroom.
Edit Delete

70 :add/update category (admin)



EDIT CATEGORY X

Edit Category

Category Name *

Product name (Arabic)

Product name (French)

living room

Descriptions

Description *

all product you need for living room

Description (Arabic)

Description (French)

Promotions

- **Implementation:** Admin promotions management page for creating and controlling promotional offers
- **Features:** Add promotions, edit promotion details, activate/deactivate offers, and connect promotions to products or checkout discounts
- **UI/UX:** Promotion list with status badges, forms, and management actions
- **Integration:** Active promotions appear to customers and affect product prices or checkout totals

71 :create promotion (admin)

ADMIN PANEL

Promotions

Create rule-based discounts for cart and POS using one active filter type per promotion.

Create promotion

Promotion name

Example: Weekend fruits deal

Target type

Amount

Target value

e.g. 250

Discount type

Percentage

Discount value

e.g. 10

Active filter type (only one)

Include products

Select products to include

Search products

Search products...

Choose product from list

Select product

No products selected yet.

☐ Set as active promotion

Clear form

Create promotion

Back to Promotions

11:41

51

Promotions

ADMIN PANEL

Promotions

Create promotion

Create rule-based discounts for cart and POS using one active filter type per promotion.

10% amount of 3-Door Sliding Wardrobe

Active

Spend 100 | 10% off | Include products

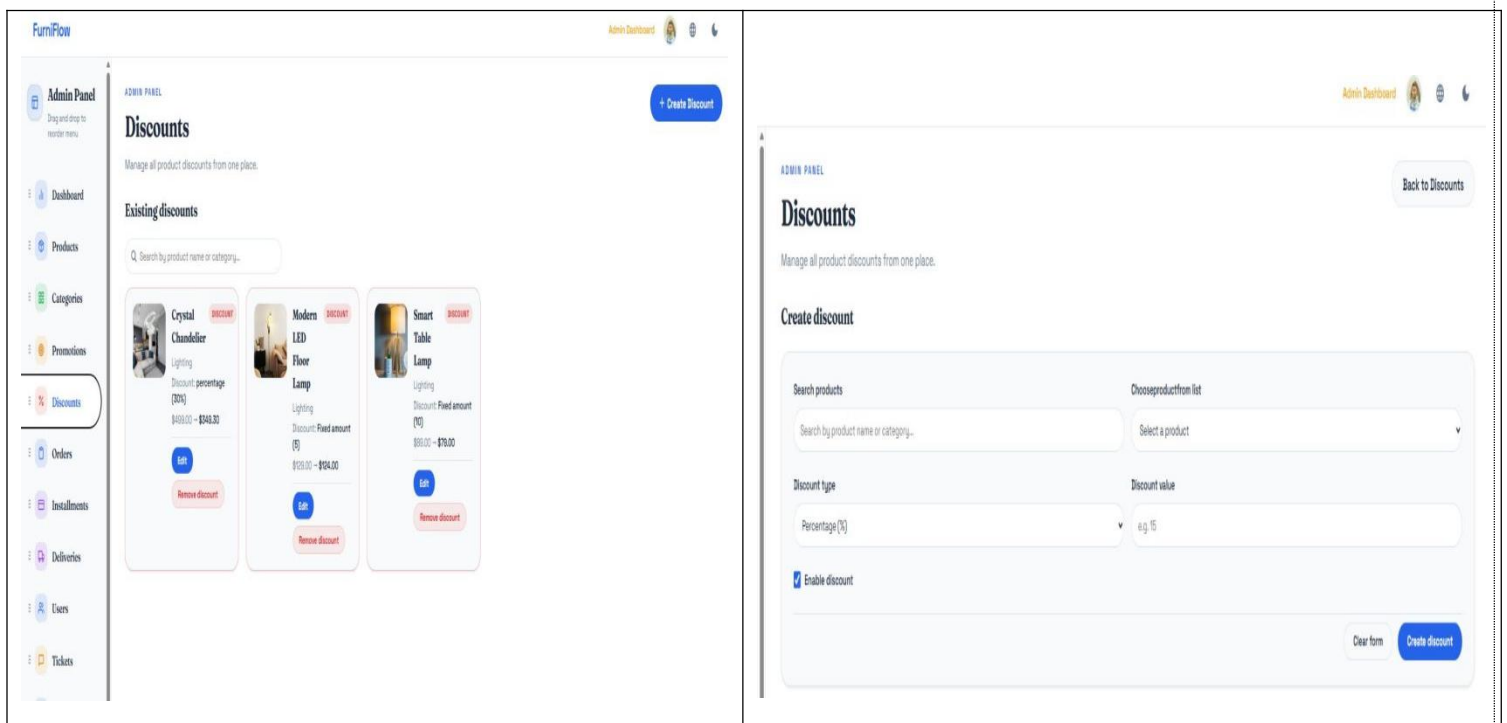
3-Door Sliding Wardrobe

Edit Disable Delete

Discounts

- **Implementation:** Admin discount management page for controlling product discounts
- **Features:** Add discount values, update discount type, enable or disable discounts, and monitor discounted products
- **UI/UX:** Discount controls with clear price/status indicators
- **Security:** Discounts are reflected in the product catalog, product details, cart, and checkout pages

72 :Discounts page & creation (admin)



Orders

- **Implementation:** Admin order management page for supervising all customer orders
- **Features:** View order details, customer information, products, payment status, and order workflow status
- **UI/UX:** Order list with status badges, filters, and detailed order views
- **Validation:** Allows the admin to monitor orders from creation and payment until preparation, delivery, and completion

73 :orders page & filters (admin)

ADMIN PANEL

All Orders

Review, filter, and update order status across online and in-store sales.

Filter by Status: all

Filter by time: Day 09/08/2028

3 orders

ORDER ID	CUSTOMER	CHANNEL	DATE	ITEMS	TOTAL	STATUS	ACTIONS
#09	s12216951@stu.najah.edu (عمرو كمال نياح صفا)	Online	June 8, 2028	1	\$369.30	Created	Change status...
#08	s12216951@stu.najah.edu (عمرو كمال نياح صفا)	Online	June 8, 2028	3	\$2,647.10	Paid	Change status...
#07	s12216951@stu.najah.edu (عمرو كمال نياح صفا)	Online	June 8, 2028	2	\$1,617.60	Paid	Change status...

Filter by Status: all

Filter by time: Day

all

revenue

POS

Created

Paid

Preparing

Packed

Ready for pickup

Driver assigned

Picked up

Delivering

Delivered

Cancelled

Change status...

TOTAL	STATUS
\$369.30	Created
\$2,647.10	Paid
\$1,617.60	Paid

Support Supervision and Moderation

- **Implementation:** Admin panel for supervising customer support and platform feedback
- **Features:** View all customer tickets, assign tickets to support agents, monitor ticket progress, approve or reject ticket deletion requests, manage reported comments, delete inappropriate comments, and view sentiment analysis for customer comments
- **UI/UX:** Dashboard cards, ticket lists, assignment controls, comment moderation tables, status badges, and sentiment indicators
- **Workflow:** The Admin will be as The support manager who organizes support work, controls ticket handling, and maintains safe customer communication across the platform

74 :view all tickets & take ticket or assign support agent to it(Admin)

SUPPORT PANEL

All Tickets

Review support tickets, assign agents, update status, and manage delete requests.

Filter by Status: All

Filter by Assigned To: All

2 tickets

**hello**
عمرو كمال فلاح جمعة · s12216951@stu.najah.edu · June 10, 2026

Open

Description
hello

ASSIGN TO SUPPORT AGENT:
Select Support Agent

UPDATE STATUS:
Open

Responses (0)
No responses yet.

Add Response
Type your response...

Send Response

Delete Ticket

Support Chat

You
hi

Type a message...

3:39



Tickets



SUPPORT PANEL

All Tickets

Review support tickets, assign agents, update status, and manage delete requests.

Filter by Status:

All Open In Progress Resolved

Closed

Filter by Assigned To:

All Unassigned عمرو

hello

Assign

hello

Customer: s12216951@stu.najah.edu · 6/10/2026, 12:42:50 PM

Open

مساعدة

Assign

مستورث مسكيش

Customer: jomaamr11@gmail.com · 3/5/2026, 9:28:36 PM

75 : view customer feedbacks & all comment(filtered based on sentiment with ai) & manage reported comments (Admin)

Customer Feedback

Ratings and comments.

All Ratings5 Stars4 Stars3 Stars2 Stars1 Stars

June 9, 20260 comments• Avg 4.0 (1 rating) •

عمر كمال فلاح جمعة

s12216951@stu.najah.edu

No comment provided.

Updated: June 9, 2026 | Submitted: June 9, 2026

★★★★☆4/5

May 8, 20262 comments• Avg 3.8 (9 ratings) •

عمر كمال فلاح جمعة

s12216951@stu.najah.edu

No comment provided.

Updated: May 24, 2026 | Submitted: May 14, 2026

★★★★☆4/5

Comment Moderation

Review reported comments and keep product discussions safe.

4 comments

عمر كمال فلاح جمعة

June 9, 2026

amazing

POSITIVE

✓ Approve

🗑 Delete

عمر كمال فلاح جمعة

May 14, 2026

amazing

POSITIVE

✓ Approve

🗑 Delete

Amro Jomaa

March 11, 2026

CC

NEUTRAL

Reported

✓ Approve

🗑 Delete

عمر كمال فلاح جمعة

March 11, 2026

www

NEUTRAL

✓ Approve

🗑 Delete

3:39



Reports All Comments (4)

Reviews



SUPPORT PANEL

Comment Moderation

Review reported comments and keep product discussions safe.

Reports (1)

All Comments

Amro Jomaa

3/11/2026

CC

Reported

Approve

Delete

User Management

- **Implementation:** User administration system with role management
- **Features:** User listing, role changes, block/unblock, and detailed user profiles
- **UI/UX:** Data table with row navigation to user detail page
- **Security:** Role-based access control with admin-only guards

Admin Panel

Dashboard

Products

Categories

Promotions

Discounts

Orders

Installments

Deliveries

Users

Tickets

ADMIN PANEL

Manage Users

Search accounts, filter by role, and manage access, verification, and permissions.

Name or email...

Filter by Role: All (9)

All (9)
Admin (1)
Support Manager (1)
Support Agent (1)
Operations Manager (0)
Warehouse Manager (0)
Seller (0)
Warehouse Staff (0)
Driver (1)
Customer (5)
Cashier (0)

ID	NAME	EMAIL	ROLE	VERIFIED	CREATED
31	عمرو جمعة	jomaamr10@gmail.com	Support Agent	✓ Verified	May 23, 2026
33	Amro Jomaa	jomaamro98@gmail.com	Customer	✗ Not Verified	Jun 9, 2026
15	Amro Jomaa	amro.kamal.jomaa@gmail.com	Customer	✓ Verified	Feb 24, 2026, 04:17 PM
50	Amro Jomaa	ae6f2acd@lumica.sbs	Customer	✓ Verified	May 15, 2026, 11:41 PM
8	Amro Jomaa	jomaamro97@gmail.com	Admin	✓ Verified	Feb 19, 2026, 01:15 PM
20	عمرو كمال فلاح جمعة	s12216951@stu.najah.edu	Customer	✓ Verified	Apr 30, 2026, 08:16 PM
21	Amro Jomaa	cs48b802@optix.work	Driver	✓ Verified	Apr 30, 2026, 08:23 PM

User Details

User Account Information

View profile, contact details, address, and account metadata.

Change User Role

Admin

Support Manager

Support Agent

Operations Manager

Warehouse Manager

Seller

Warehouse Staff

Driver

Customer

Cashier

Save

Change Role

Block

Delete

Profile

ADMIN PANEL

Profile

Manage your account details and password.

Choose image

Remove photo

Account Information

EMAIL

jomaamro97@gmail.com

FIRST NAME

Amro

LAST NAME

Jomaa

PHONE

0597587484

COUNTRY

Palestine

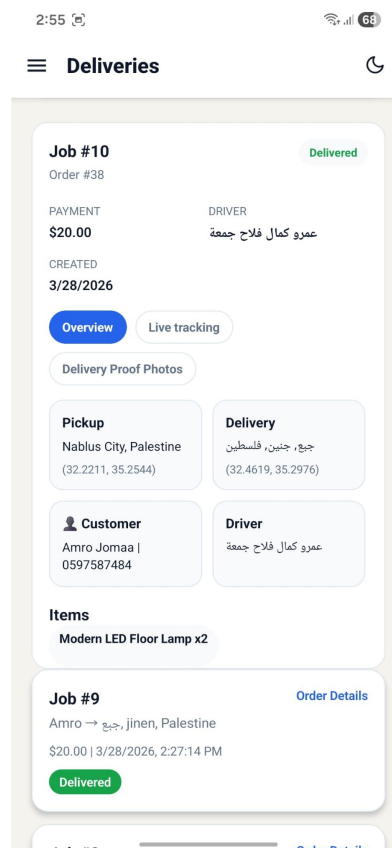
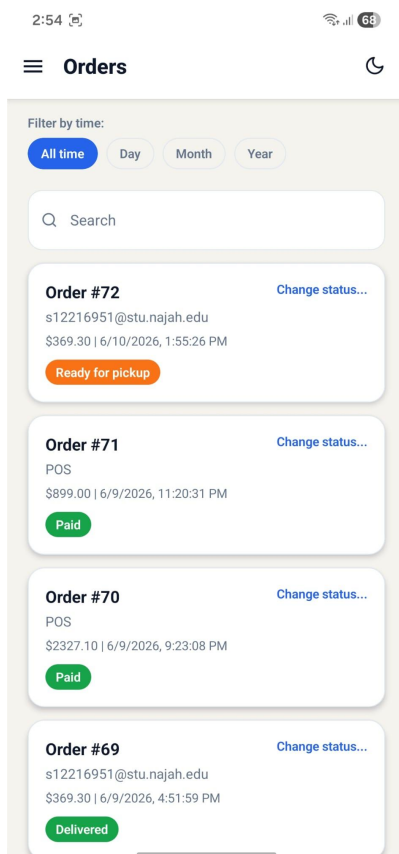
CITY

..

Operations and Delivery Management

- **Implementation:** Admin delivery management page for supervising delivery jobs
- **Features:** View delivery jobs, driver assignments, pickup status, delivery progress, proof photos, and reported delivery issues
- **UI/UX:** Delivery list, status indicators, photo review actions, and issue details
- **Workflow:** Helps the admin monitor the delivery process from assignment until delivered

77 : check deliveries orders(admin)



78 : tracking driver (admin)

JOB #21

Order #66

Driver Assigned

PAYMENT

\$919.00

DRIVER

عمرو كمال فلاح جمعة

CREATED

June 8, 2026

Overview

Live tracking

+

-

Live Tracking

79 : approves proofs images from delivery management(admin)

ADMIN PANEL

Delivery Management

Filter by Status: All

25 jobs

Track delivery jobs, assign drivers, review proof photos, and resolve driver issues.

JOB ID	ORDER ID	DRIVER	STATUS	PICKUP	DELIVERY	PAYMENT	CREATED
#25	#72	عمرو كمال فلاح جمعة	Delivered	Nablus City, Palestine	Al ramah, jnen, Palestinian Authority	\$369.30	June 10, 2026

JOB #25

Order #72

Delivered

PAYMENT

\$369.30

DRIVER

عمرو كمال فلاح جمعة

CREATED

June 10, 2026

Overview

Live tracking

Delivery Proof Photos

PICKED UP

Checked OK

DELIVERED

Checked OK

June 10, 2026

June 10, 2026

80 : reported issues management(admin)

1deliveryissue report needsadmin attention.

View issue orders

Clear

JOB ID	ORDER ID	DRIVER	STATUS	PICKUP	DELIVERY	PAYMENT	CREATED
#24	#36	yazan Saleh	Picked Up	Nablus City, Palestine	...بي التخصصي, نابلس, فلسطين	\$300.00	May 19, 2026

JOB #24

Order #36

Picked Up

PAYMENT

\$300.00

DRIVER

yazan Saleh

CREATED

May 19, 2026

Overview

Live tracking

Delivery Proof Photos

Issue Reported:

Issue Reported: damaged Items

Issue Discussion (Admin ↔ Driver)

No messages yet.

Reply to driver...

Send

Mark as Solved

Installments Management

- **Implementation:** Admin installment management page for reviewing customer installment requests
- **Features:** View applications, inspect uploaded documents, approve or reject requests, monitor payment schedules, and track installment status
- **UI/UX:** Installment tables/cards with document previews, status badges, and approval actions
- **Workflow:** Helps the admin control customer financing requests and follow their payment progress

Installment Requests

Review installment applications, verify documents, and approve or reject requests.

ID	CUSTOMER	ORDER	TOTAL	REMAINING	STATUS
#14	s12216951@stu.najah.edu 0597587484	#69	\$349.30	\$349.30	Approved
#13	s12216951@stu.najah.edu 0597587484	#68	\$1,079.10	\$1,079.10	Approved
#12	s12216951@stu.najah.edu 0597587484	#54	\$170.00	\$0.00	Completed
#11	s12216951@stu.najah.edu 0597587484	#54	\$170.00	\$0.00	Completed
#10	s12216951@stu.najah.edu 0597587484	#54	\$170.00	\$0.00	Completed
#9	s12216951@stu.najah.edu 0597587484	#54	\$170.00	\$0.00	Completed
#8	s12216951@stu.najah.edu 0597587484	#54	\$170.00	\$0.00	Cancelled
#7	s12216951@stu.najah.edu 0597587484	#54	\$170.00	\$0.00	Cancelled

Filter by Status:

- All
- All
- Pending
- Approved
- Rejected
- Cancelled
- Completed

Request #14

- Order #69

CUSTOMER:
s12216951@stu.najah.edu

PHONE:
0597587484

DURATION:
6months

TOTAL AMOUNT:
\$349.30

REMAINING BALANCE:
\$349.30

MONTHLY PAYMENT:
\$58.22

NEXT PAYMENT DATE:
July 9, 2026

CREATED:
June 9, 2026

Verification documents



Installments

Installment Requests

Review installment applications, verify documents, and approve or reject requests.

Pending: 0

- All
- pending
- Approve
- Reject
- cancelled
- completed

Request #14

s12216951@stu.najah.edu | Order #69
\$349.30 Total | \$349.30 Remaining

Approve

Request #13

s12216951@stu.najah.edu | Order #68
\$1079.10 Total | \$1079.10 Remaining

Approve

Request #12

s12216951@stu.najah.edu | Order #54
\$170.00 Total | \$0.00 Remaining

completed

Request #11

s12216951@stu.najah.edu | Order #54
\$170.00 Total | \$0.00 Remaining

Payment Schedule

#	DUE DATE	AMOUNT	STATUS
1	June 8, 2026	\$30.00	Paid
2	July 8, 2026	\$30.00	Paid
3	August 8, 2026	\$30.00	Paid
4	September 8, 2026	\$30.00	Paid
5	October 8, 2026	\$30.00	Paid
6	November 8, 2026	\$30.00	Paid

Payment History

- May 8, 2026 — \$30.00
- May 8, 2026 — \$30.00
- May 8, 2026 — \$30.00
- May 8, 2026 — \$30.00
- May 8, 2026 — \$30.00
- May 8, 2026 — \$30.00

83 : Installment scheduling (pending) (admin)

Verification documents



Payment Schedule

#	DUE DATE	AMOUNT	STATUS
1	July 9, 2026	\$58.22	Pending
2	August 9, 2026	\$58.22	Pending
3	September 9, 2026	\$58.22	Pending
4	October 9, 2026	\$58.22	Pending
5	November 9, 2026	\$58.22	Pending
6	December 9, 2026	\$58.20	Pending

POS Analysis

- **Implementation:** POS analytics page for monitoring cashier sales and in-store transactions
- **Features:** View total sales, number of POS orders, payment summaries, sold products, and cashier activity
- **UI/UX:** Analytics cards, tables, filters, and clear sales indicators
- **Data:** POS analytics are generated from cashier transactions and stored order records

84 : POS Analysis(admin)

11:44

POS Terminal

POS ANALYTICS
POS Analytics
Supervise cashier sales and view terminal performance
[← Dashboard](#)


2
Total Orders


\$3226.10
Total Revenue

Cashier

عمرو كمال فلاح جمعة
2 orders
\$3226.10

POS

Order #71
11:20:31 PM
Customer - عمرو كمال فلاح جمعة
\$899.00

Order #70
9:23:08 PM
Customer - عمرو كمال فلاح جمعة
\$2327.10

Database

In the FurniFlow project, we use PostgreSQL as the primary database to store and manage all application data. PostgreSQL is a relational SQL database designed for data integrity, scalability, and high performance, making it an excellent fit for a multi-role e-commerce and retail operations platform with complex order, delivery, and payment workflows.

Why PostgreSQL?

- **Data Integrity:** PostgreSQL enforces relational constraints through foreign keys, unique constraints, and typed columns. This is ideal for FurniFlow, where orders reference users and products, delivery jobs reference orders and drivers, and installment schedules reference approved installment requests with strict lifecycle rules.
- **High Scalability:** PostgreSQL supports indexing, connection pooling, and efficient joins, handling concurrent users across the storefront, admin panels, warehouse workflows, and delivery operations.
- **Query Performance:** Strategic indexes and SQLAlchemy ORM queries ensure responsive performance for catalog browsing, order management, delivery tracking, and recommendation computations.
- **Relational Modeling:** SQLAlchemy relationships model one-to-many associations across 30 tables, supporting normalized catalog, cart, order, warehouse, delivery, installment, ticket, and recommendation data.

Database Schema Design

Users Table:

- Comprehensive user profiles with role-based access (customer, seller, warehouse_staff, warehouse_manager, operations_manager, driver, cashier, support_agent, support_manager, admin)
- Driver profiles linked to delivery jobs, live GPS locations, and earnings records
- Seller and admin catalog permissions with Stripe customer payment processing (not marketplace payouts)
- Shipping and delivery address data with geocoded coordinates stored in order and delivery job records

Orders Table:

- Complete order lifecycle tracking from created through delivered with sale_channel (online/pos)

- Order items with product snapshots including quantity, unit price, and line totals
- Shipping address and payment method metadata stored in order records
- Status tracking across preparing, packed, ready_for_pickup, assigned, picked_up, delivering, and delivered stages

InstallmentRequests Table:

- Installment requests with identity document uploads and admin review workflow
- Installment schedules with due dates, amounts, and payment status
- Installment payments linked to Stripe payment confirmations
- Automatic delivery job creation upon installment approval

Categories and Promotions Tables:

- Product categories with multilingual names and descriptions (English, Arabic, French)
- Promotions with cart-level discount rules and filter configurations
- Active/inactive status management for promotions and product discounts

Ratings and Reviews Tables:

- Product ratings (1–5 stars) with per-user uniqueness constraints
- Product comments with sentiment analysis and moderation workflow
- Customer feedback with rating and sentiment classification

Payment Records:

- Stripe Payment Intent references with order and installment payment tracking
- Payment status updates upon successful confirmation endpoint calls
- Payment status and history tracking

Database Optimizations

- **Indexing Strategy:** Optimized indexes on user roles, order status, foreign keys, and recommendation event timestamps
- **Connection Pooling:** SQLAlchemy connection management for concurrent API requests
- **Query Optimization:** Aggregate queries for admin dashboards and seller analytics
- **Data Validation:** Pydantic schemas and SQLAlchemy model constraints ensuring consistency

Discussion

The development of FurniFlow aimed to provide a comprehensive furniture e-commerce and retail operations platform that supports multi-role user management, end-to-end order fulfillment, AI-powered product discovery, installment financing, and secure payment processing. This section discusses how the system met its objectives, the effectiveness of implemented features, challenges faced during development, and the rationale behind key design and technology choices.

Achievement of Objectives:

Through the integration of features such as multi-role user management, order lifecycle tracking, AI shopping assistant, hybrid recommendations, warehouse fulfillment, delivery job management, and Stripe payment integration, FurniFlow successfully delivers a unified retail experience. The system enables customers to browse products, manage cart and wishlist, complete checkout, apply for installments, and track deliveries—all within web and mobile environments. Each role (customer, seller, warehouse staff, warehouse manager, operations manager, driver, cashier, support staff, and admin) experiences a tailored interface designed for its operational responsibilities.

Feature Effectiveness:

One of the most significant features is the AI-powered shopping assistant, which provides intelligent product discovery through Google Gemini with intent detection, catalog search, and offline fallback. The hybrid recommendation engine—combining behavioral interaction events, TF-IDF content similarity, and co-purchase analysis—delivers personalized product suggestions through realtime and batch endpoints. Product reviews and customer feedback include TextBlob sentiment analysis, supporting moderation workflows for support managers.

Another major feature is the comprehensive order management and fulfillment pipeline, where customers browse a multilingual furniture catalog, manage shopping carts with promotion discounts, and track orders through warehouse packing and delivery stages. Sellers mark orders as preparing; warehouse staff verify and pack items; warehouse managers approve ready-for-pickup status; operations managers assign drivers; and drivers complete pickup and delivery with photo proof and GPS tracking. The in-store POS terminal enables cashiers to process walk-in sales with immediate stock decrement and daily sales reporting.

Furthermore, integrating Stripe Payment Intents for secure payment processing ensured a

trustworthy payment system for online checkout and installment schedule payments, with server-side amount validation and PCI-compliant card handling through Stripe Elements.

Project Impact:

FurniFlow stands out by offering a holistic solution tailored to furniture retail and e-commerce operations. Unlike simple catalog websites, the platform unifies online shopping, warehouse fulfillment, delivery coordination, in-store POS sales, installment financing, and customer support in one secure, role-based environment. Users can shop, pay, track deliveries, communicate with support agents via ticket chat, receive AI-assisted product recommendations, and manage comprehensive profiles across web and mobile clients. The three-tier architecture (React/Expo clients, FastAPI backend, PostgreSQL database) ensures consistent data and functionality across all implementations.

Conclusions and Recommendations

In this section, we present a summary of the project outcomes along with suggestions for future enhancements.

Summary

In summary, the FurniFlow platform successfully delivers an integrated furniture e-commerce and retail operations environment tailored to modern market needs. By combining multi-role user management, catalog and inventory control, warehouse fulfillment, delivery job management, AI-powered shopping assistance, hybrid recommendations, installment financing, POS sales, and secure Stripe payment processing, the system addresses multiple retail and logistics challenges in a unified solution. The use of PostgreSQL, FastAPI, React, Expo React Native, and Google Gemini ensured scalability, responsiveness, and real-time interactivity across web and mobile platforms. JWT authentication, role-based access control, WebSocket chat for tickets and deliveries, and comprehensive error handling further enhanced user trust and security. Through overcoming technical and user-experience challenges, FurniFlow demonstrates its value as a scalable and future-ready retail platform.

Future Works

To further improve the platform and expand its capabilities, the following future enhancements are proposed:

- **Push Notifications:** Real-time mobile notifications for order updates, delivery status changes, and promotional offers using Firebase Cloud Messaging or Expo Notifications.

- **Advanced Route Optimization:** Integrate turn-by-turn navigation and estimated delivery time calculations for driver workflows.
- **Enhanced AI Assistant:** Expand Gemini integration with order-aware context, purchase history summaries, and voice input support.
- **Extended Localization:** Add currency auto-detection and region-specific shipping rules beyond the current USD/JOD/ILS support.
- **Advanced Analytics Dashboard:** Implement comprehensive business intelligence with seller performance metrics, customer behavior analysis, and revenue optimization insights.
- **Persistent AI Chat History:** Store AI assistant conversations in PostgreSQL for continuity across sessions and analytics.
- **Loyalty Program:** Points-based reward system with discounts, special offers, and tier-based benefits for frequent customers.
- **Advanced Search:** Implement full-text search with Elasticsearch or PostgreSQL full-text indexing across multilingual product catalogs.

References

1. FastAPI: FastAPI Project. (n.d.). FastAPI Documentation. Retrieved from: <https://fastapi.tiangolo.com/>
2. Uvicorn: Encode OSS Ltd. (n.d.). Uvicorn – ASGI server. Retrieved from: <https://www.uvicorn.org/>
3. PostgreSQL: PostgreSQL Global Development Group. (n.d.). PostgreSQL Documentation. Retrieved from: <https://www.postgresql.org/docs/>
4. ReactJS: Meta Platforms, Inc. (2024). React – A JavaScript library for building user interfaces. Retrieved from <https://reactjs.org>
5. React Native: Meta Platforms, Inc. (2024). React Native – Build native apps using React. Retrieved from <https://reactnative.dev>
6. SQLAlchemy: SQLAlchemy authors. (n.d.). SQLAlchemy Documentation. Retrieved from: <https://docs.sqlalchemy.org/>
7. Stripe: Stripe, Inc. (n.d.). Stripe Documentation – Payment Integration Guide. Retrieved from: <https://stripe.com/docs>
8. Google Generative AI: Google. (n.d.). Gemini API Documentation. Retrieved from: <https://ai.google.dev/docs>

9. Google Generative AI: Google. (n.d.). Gemini API Documentation. Retrieved from:
<https://ai.google.dev/docs>
10. Expo: Expo. (n.d.). Expo Documentation. Retrieved from: <https://docs.expo.dev/>