OfferEdge

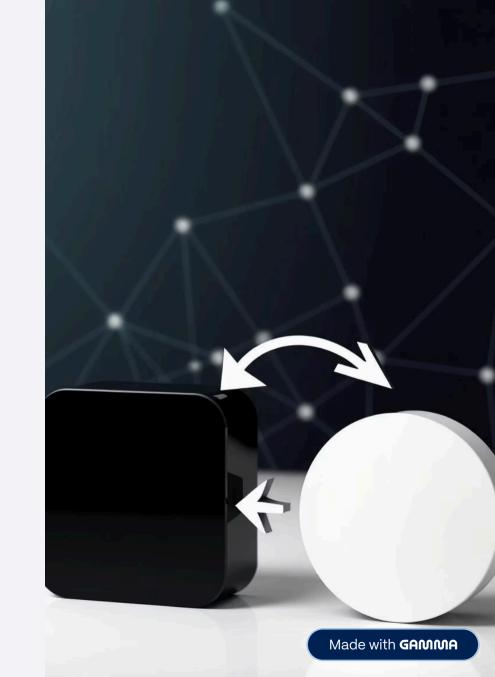
A Buyer-Initiated Reverse Bargaining Platform

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TVE24MCA31

What is OfferEdge?

OfferEdge revolutionizes the traditional marketplace by empowering buyers. Instead of sellers setting prices, buyers initiate the process by posting their specific needs and desired terms. This creates a dynamic, competitive environment where sellers actively bid for the buyer's business, driving efficiency and value.



Addressing Marketplace Limitations

Traditional marketplaces often lead to price opacity and limited buyer influence. Buyers are forced to accept pre-determined prices, leading to a lack of transparency and competitive bidding. This often results in buyers paying more than necessary or settling for less ideal terms.

1

Current Marketplaces

Fixed prices, seller-driven, limited negotiation.

2

OfferEdge's Solution

Buyer-initiated, competitive bidding, real-time negotiation.

Key Modules







User Management

Requirement Posting

Quoting/Bidding







Negotiation

Deal Closure

Feedback and review



Reporting & Moderation

Detailed Module Breakdown



User Management

Manages secure registration, profile creation, and trustbuilding ratings for buyers and sellers.



Quoting/Bidding

Sellers submit competitive, private offers with terms and attachments in response to buyer requirements.



Deal Closure

Finalizes agreements, exchanges contact details, and collects post-deal feedback for trust building.



Reporting & Moderation

Ensures platform integrity through user reporting and admin moderation to prevent fraud.



Requirement Posting

Buyers detail specific needs, price range, and deadlines to attract targeted seller offers.



Negotiation

Facilitates real-time counter-offers and refinement of deal terms with multiple sellers.



Feedback & Review

Give feedback and rating scores



OfferEdge Use Case Diagram

This diagram illustrates the primary actors and their key interactions within the OfferEdge platform, highlighting the buyer-centric flow.

Buyer

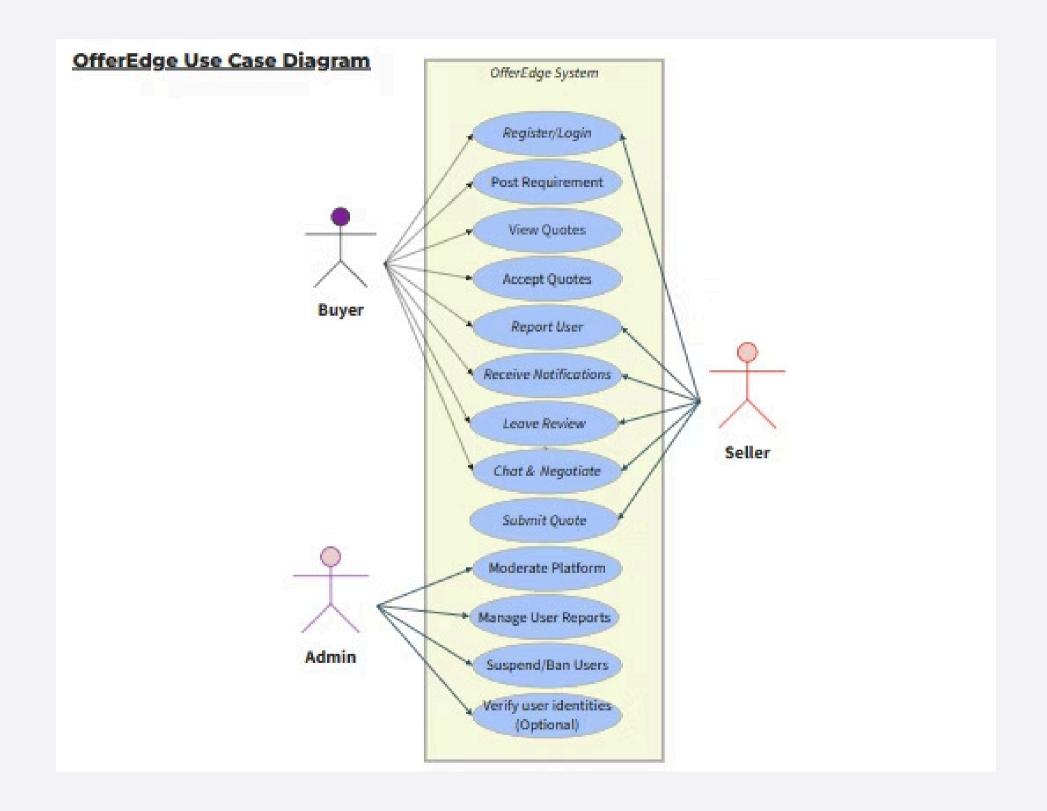
- Post Requirements
- Review Bids
- Negotiate Offers
- Accept Deal

Seller

- Browse Requirements
- Submit Quotes
- Negotiate Terms
- Confirm Deal

Admin

- Manage Users
- Monitor Activity



Data Flow Overview

Level o

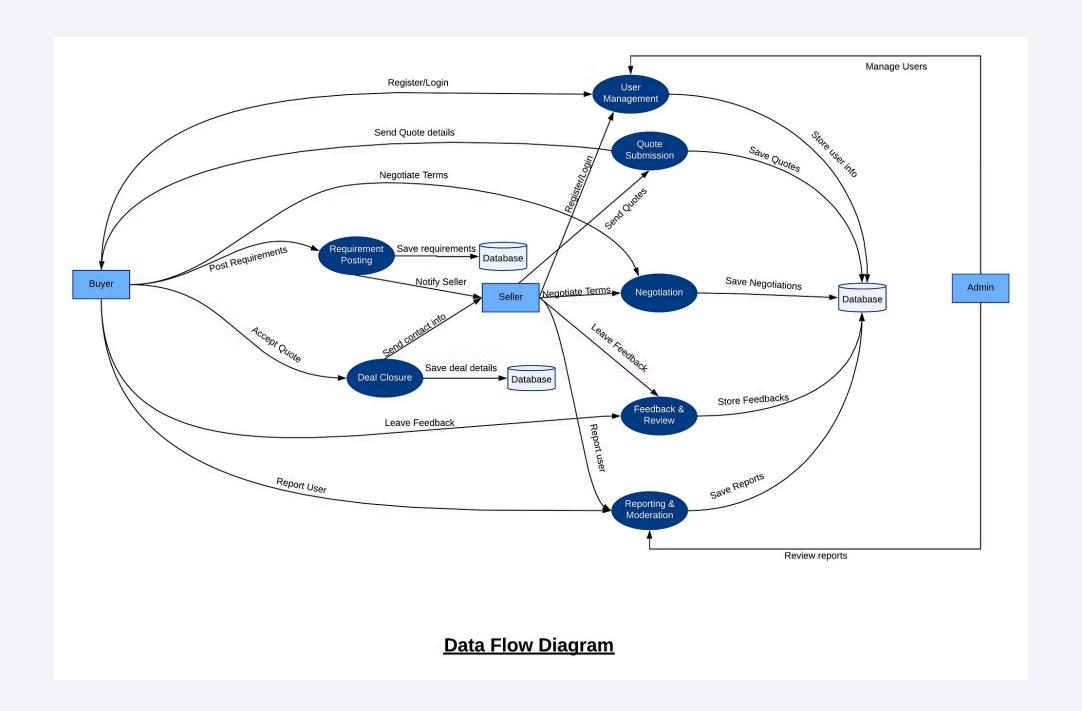
The OfferEdge system serves as the central hub, facilitating all interactions between buyers, sellers, admins.

OfferEdge



Level 1: Core Process Flow

- Buyer **posts** requirement to OfferEdge.
- OfferEdge **notifies** relevant sellers.
- Sellers submit quotes to OfferEdge.
- OfferEdge presents quotes to buyer.
- Buyer & Seller negotiate via OfferEdge.
- Buyer accepts or rejects the offer.



NoSQL Database Design

Leveraging a NoSQL database ensures flexibility, scalability, and high performance for handling diverse data structures.

Collection	Attributes (Key Features)
Users	_id,role,name,email,phone,passwordHash,ratings,createdAt
Requirements	_id, buyerId, title, description, quantity, expectedPriceRange, deadline, createdAt
Quotes	_id, reqld , sellerId, price, deliveryTimeline, notes,attachments, createdAt
Messages	_id,chatId,senderId,receiverId,message,attachments,Date
Deals	_id, reqld , buyerld , sellerld , Quoteid, createdAt
Reports	_id,reportedBy,reportedUser,dealId,reason,createdAt
Feedback	_id,dealId,fromUserId,toUserId,rating,review,createdAt

Users		Requirements		Quotes		Messages	
_id	string	_id <i>O</i>	string	_id <i>0</i>	string	_id Ø	string
role	string	buyerld	string	reqld	string	chatld	string
name	string	title	string	sellerId	string	senderld	string
email	string	description	string	price	float	receiverId	string
phone	string	quantity	int	deliveryTimeline	int	message	string
passwordHash	string	expectedPriceRange	string	notes	string	attachments	string
ratings	float	deadline	datetime	attachments	string	date	datetime
createdAt	datetime	createdAt	datetime	createdAt	datetime		

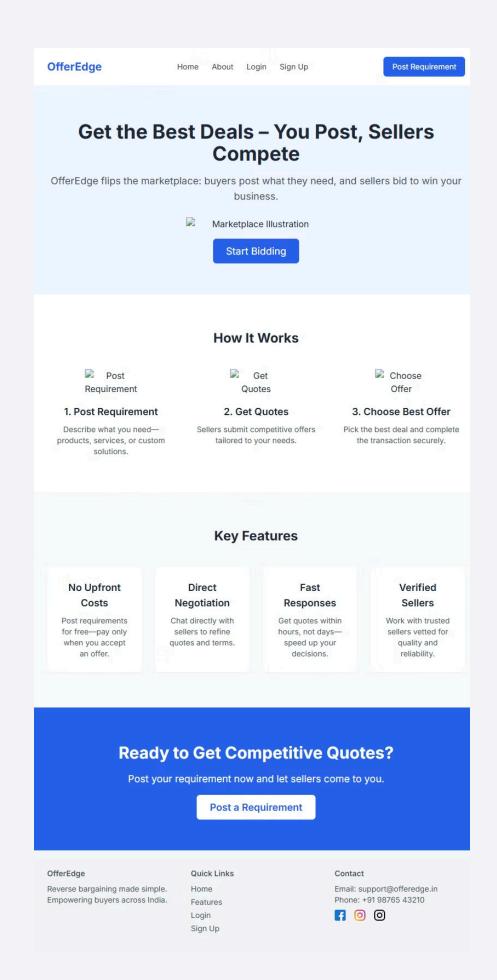
Deals		Feedback		Reports	
_id Ø	string	_id Ø	string	_id Ø	string
reqld	string	dealld	string	reportedBy	string
buyerld	string	fromUserId	string	reportedUser	string
sellerld	string	toUserId	string	dealld	string
quoteld	string	rating	float	reason	string
createdAt	datetime	review	string	createdAt	datetime
		createdAt	datetime		

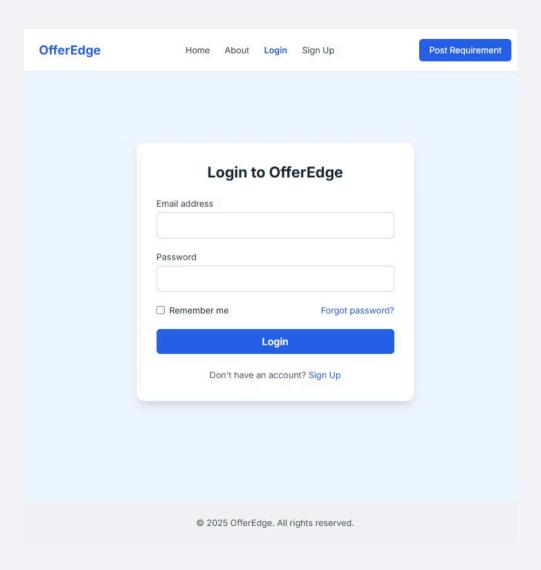
References

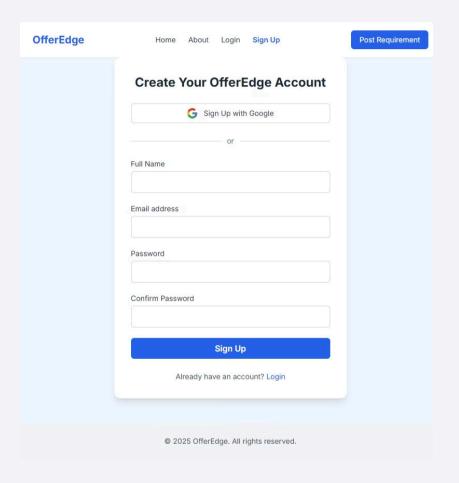
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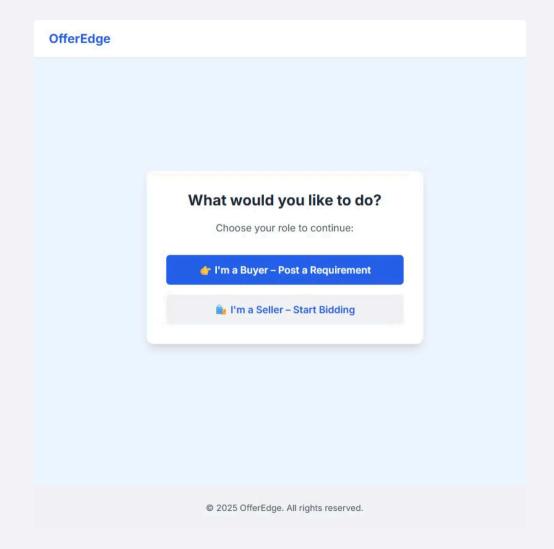
Smart Reselling: Leveraging MERN Stack and AI for Intelligent Bidding in E-Commerce Swarnim Shekhar, Shrihari Chaurasiya, Prof. Deepa Mishra MIT-ADT University, Pune, India www.ijarsct.co.in

User Interface for the Minimum Viable Product

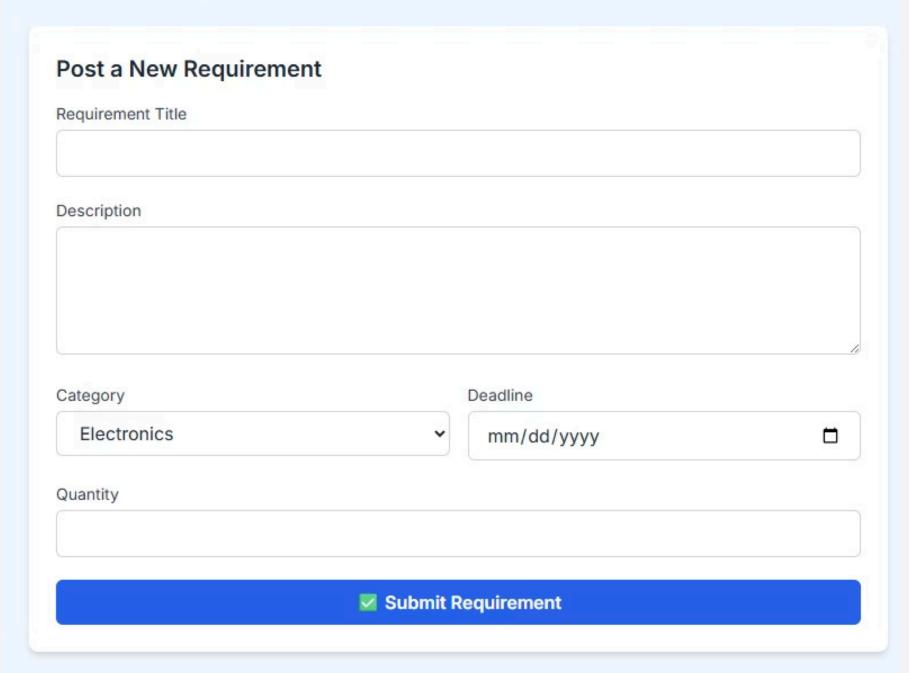








Welcome, Buyer 🤏



Previous Deals

Requirement: Custom T-Shirts

Seller: PrintifyPro | Quote: ₹22,000 | Delivery: 10 days

Status: Accepted

Requirement: Custom Plastic Bottles

Seller: Qwerty | Quote: ₹5,000 | Delivery: 3 days

Status: Accepted

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Welcome, Seller 🤏

Delivery Time (days)
mit Bid
וכ

Requirement: AC Repair		
Category: Home Services		
Quantity: 1		
Deadline: 2025-08-13		
Your Quote (₹)	Delivery Time (days)	

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Thank You!

