CSE326: INFORMATION SYSTEM DESIGN SESSIONAL

Deal + Analytics =

Dealytics

EMPOWERING YOU TO MAKE DATA-DRIVEN, PROFITABLE DECISIONS

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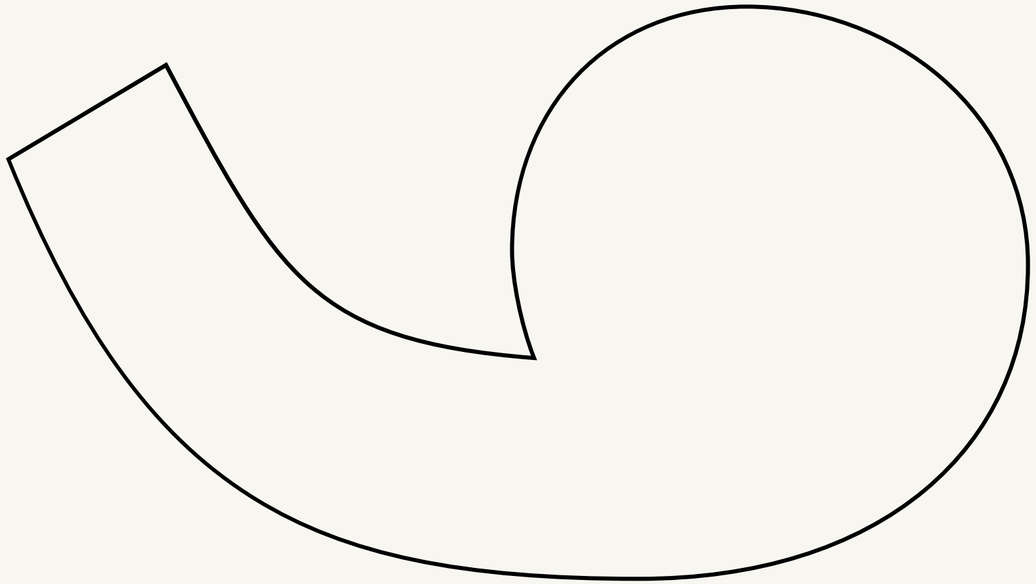

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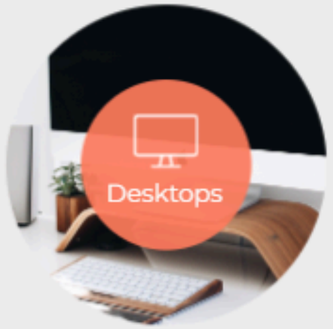
Motivation

- Lack of price transparency across multiple platforms.
- Middlemen increasing costs and reducing producer profits.
- Limited market access for small sellers and service providers.
- Fragmented platforms requiring multiple searches for deals.
- Lack of trust and reliable reputation systems.
- Inadequate demand-supply analytics for sellers.

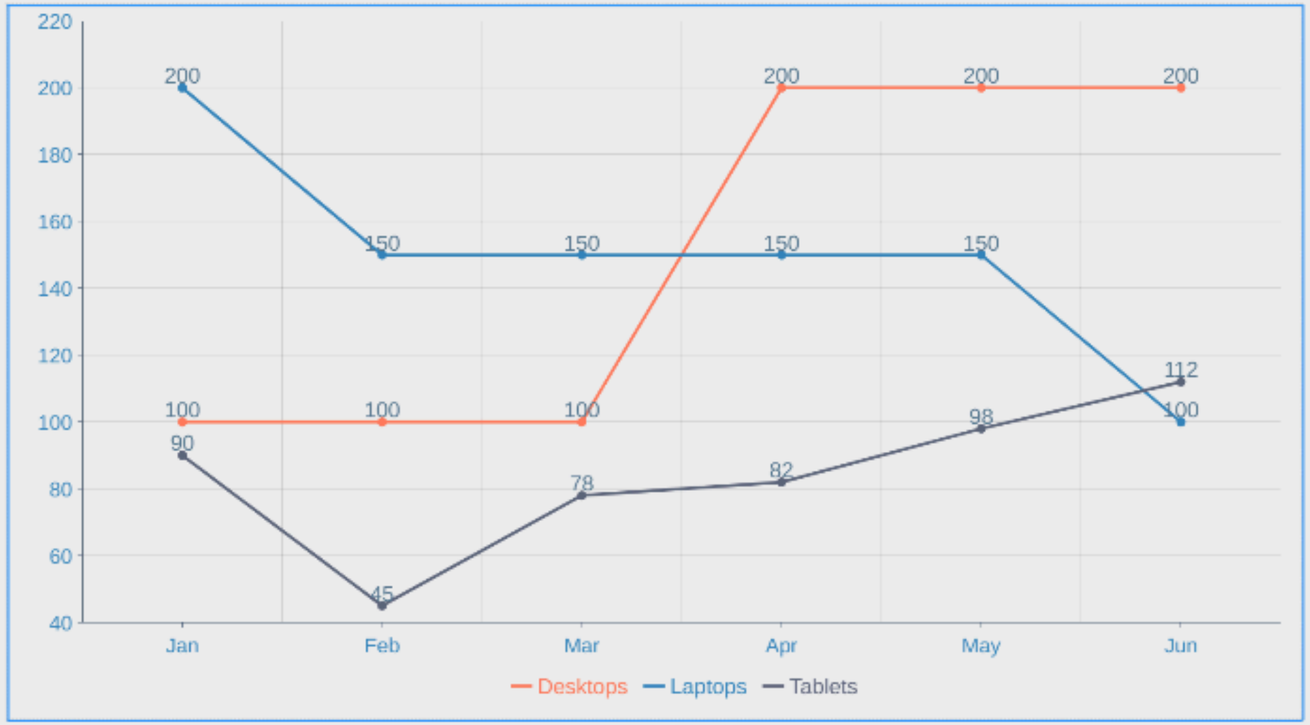
- High barriers to entry for service providers.
- Lack of negotiation and deal personalization options.
- Inefficient location-based commerce for offline purchases.
- Lack of real-time communication between buyers and sellers.
- Inconsistent delivery of deal notifications and promotions.

The Big Idea Behind **Dealytics**

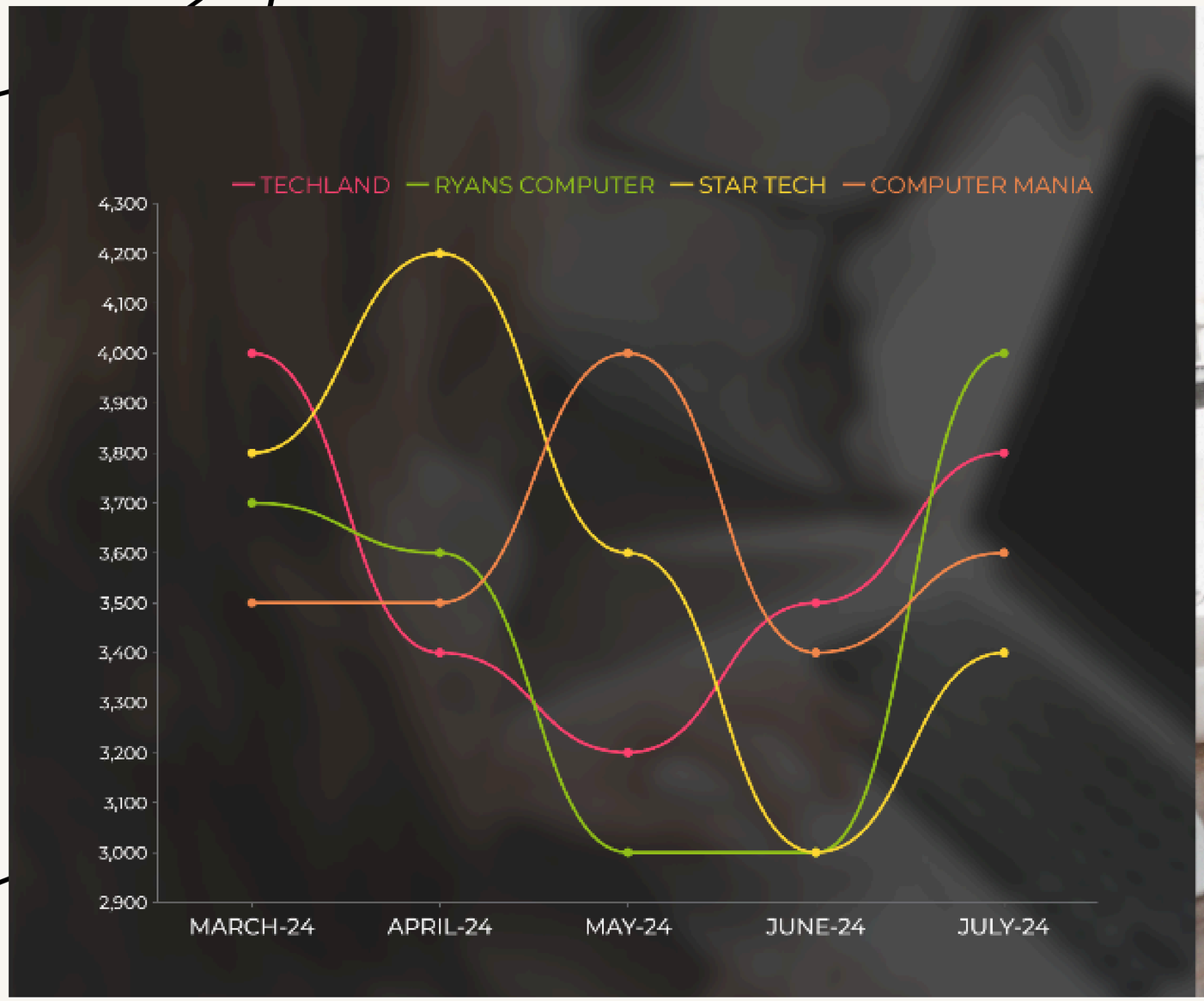
The big idea behind **Dealytics** is to create a unified platform that bridges the gap between buyers and sellers by offering advanced analytics, price transparency, and personalized deal discovery. By aggregating products and services across both online and offline markets in Bangladesh, Dealytics empowers consumers to find the best deals based on real-time data, while helping sellers optimize supply and meet demand efficiently. The platform also reduces reliance on intermediaries, fostering a direct connection between producers and consumers, and incorporates trust-building features like negotiation, reviews, and reputation systems to ensure fairness and transparency in every transaction.



USER INTEREST OF APPLE PRODUCTS

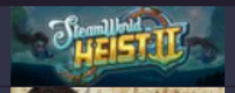
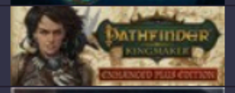
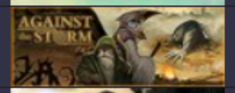
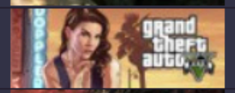
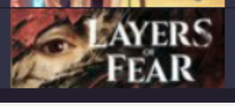


BY MONTH

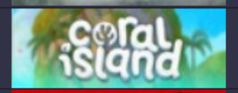
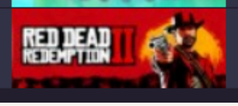


PRICE HISTORY OF LOGITEC G402

New deals SEE ALL ▸

27m ago		SteamWorld Heist II	-47%	~$14.59
31m ago		Pathfinder: Kingmaker - Enhanced P...	-95%	~$1.34
43m ago		Stellaris	-74%	$8.50
43m ago		High On Life	-90%	~$3.87
1h ago		Back to the Dawn	-37%	~$11.94
1h ago		Cities: Skylines	-78%	~$6.73
2h ago		Against the Storm	-60%	~$12.80
2h ago		S.T.A.L.K.E.R.: Clear Sky	-87%	$1.38
2h ago		Grand Theft Auto V: Premium Edition	-75%	$9.99
4h ago		Layers of Fear 2023	-50%	~$14.01

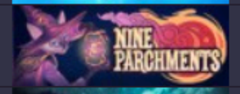
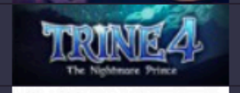
Best deals SEE ALL ▸

HOT		The Crew 2	-98%	$0.99
HOT		Stranded Deep	-70%	$5.99
HOT		Sniper Ghost Warrior Contracts	-100%	Free
HOT		Football Manager 2024	-100%	Free
HOT		A Space for the Unbound	-65%	~$7.04
HOT		Stranded: Alien Dawn	-94%	~$1.62
HOT		No Man's Sky	-69%	~$16.66
HOT		Hogwarts Legacy	-75%	~$15.43
HOT		Coral Island	-79%	~$5.32
HOT		Red Dead Redemption 2	-71%	~$15.59

Historical lows SEE ALL ▸

1h ago		Back to the Dawn	-37%	~$11.94
5h ago		Lords of the Fallen 2023	-65%	$21.98
7h ago		Do Not Feed the Monkeys 2099	-85%	~$2.59
7h ago		A Space for the Unbound	-65%	~$7.04
8h ago		ATOM RPG: Post-apocalyptic indie g...	-70%	$4.49
9h ago		GreedFall - Gold Edition	-89%	~$4.56
12h ago		Street Fighter 30th Anniversary Col...	-90%	~$2.45
12h ago		Gatekeeper	-52%	~$6.08
12h ago		Frozenheim	-88%	~$1.91
12h ago		Alisa	-77%	~$3.48

Ending Soon SEE ALL ▸

in 10h		Cobalt Core	-25%	$14.99
in 10h		Sker Ritual	-25%	$18.74
in 10h		THE KING OF FIGHTERS XV	-80%	$11.99
in 10h		Monsters Domain	-70%	$5.99
in 10h		Game Dev Tycoon	-65%	$3.49
in 1d		Trine 3: The Artifacts of Power	-88%	$2.63
in 1d		Nine Parchments	-88%	$2.39
in 1d		Trine 4: The Nightmare Prince	-88%	$3.59
in 1d		Sniper Ghost Warrior Contracts	-100%	Free
in 1d		Football Manager 2024	-100%	Free

Features

1. **Find the Best Deals**: Instantly compare prices from multiple shops to save money.
2. **Track Price Changes**: Stay updated on price drops and discounts in real-time.
3. **Negotiate Directly**: Chat with sellers to negotiate better prices and terms.
4. **Trusted Sellers**: Buy from reputable sellers with verified reviews and ratings.
5. **Personalized Recommendations**: Get tailored suggestions based on your shopping habits.
6. **Shop Smarter, Not Harder**: Access all deals in one place, both online and offline.
7. **Plan Your Purchase**: Know the travel cost and time for offline shopping before you go.
8. **Stay Informed**: Receive alerts for upcoming promotions and exclusive deals.
9. **Maximize Your Savings**: Predict future discounts and buy at the right time.
10. **Support Local Sellers**: Connect directly with producers, reducing middleman costs.

Features

Buyer
- Find the best deals across markets.
- Track prices and predict discounts.
- Subscribe to products and get notified of the best deals.
- Use negotiation tools for better pricing.
- Rely on a reputation system for informed decisions.

Seller
- Access data-driven insights on demand and stock management.
- Optimize inventory and reduce intermediaries.
- Interact directly with buyers via negotiation tools.
- Build trust through a reputation system.

Subsystems

01 User Management Subsystem

02 Product & Service Aggregation Subsystem

03 Deal Analytics Subsystem

04 Negotiation Subsystem

05 Transaction Management Subsystem

06 Review & Rating Subsystem

07 Location & Logistics Subsystem

08 Recommendation Engine Subsystem

09 Admin & Moderation Subsystem

10 Security & Compliance Subsystem

11 Logging & Monitoring Subsystem

12 Notification & Communication Subsystem

User Management

01 User Registration

02 User Login

03 Profile Management

04 Change Password

05 User Logout

Product and Service Aggregation

01 Search

02 Filter

03 View Details

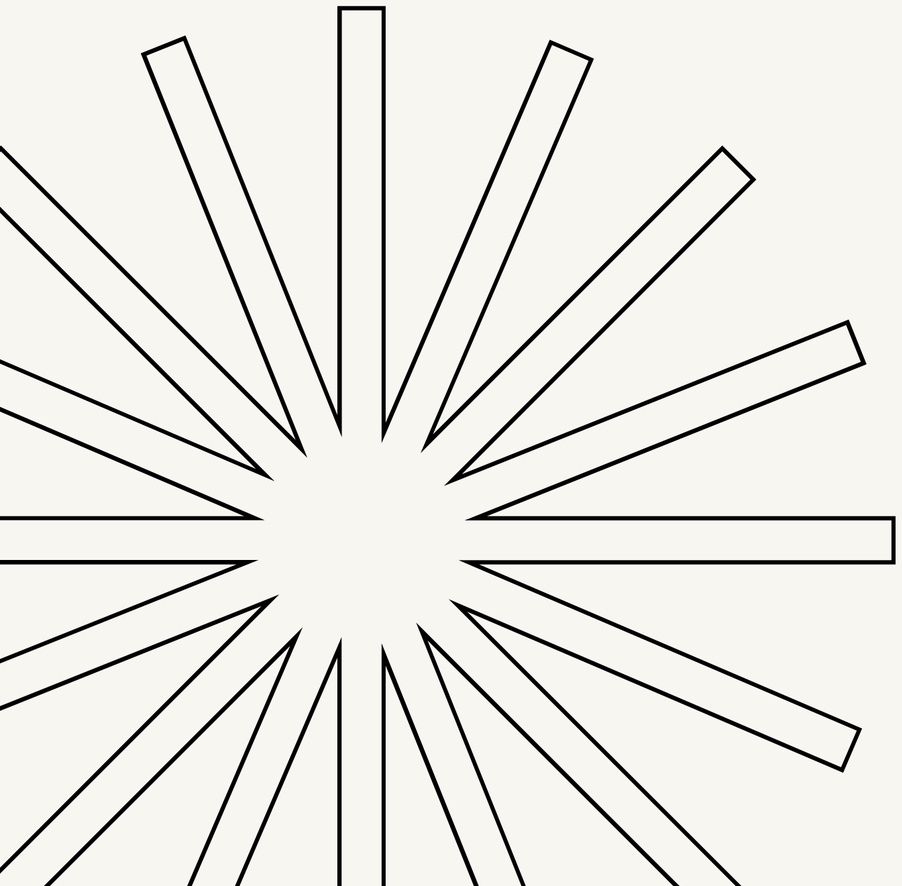
04 Add/Update listing

05 Delete

06 Aggregate with external API

07 Locate offline shops

Deal analytics



01 View analytics

02 Predict

03 Compare deals

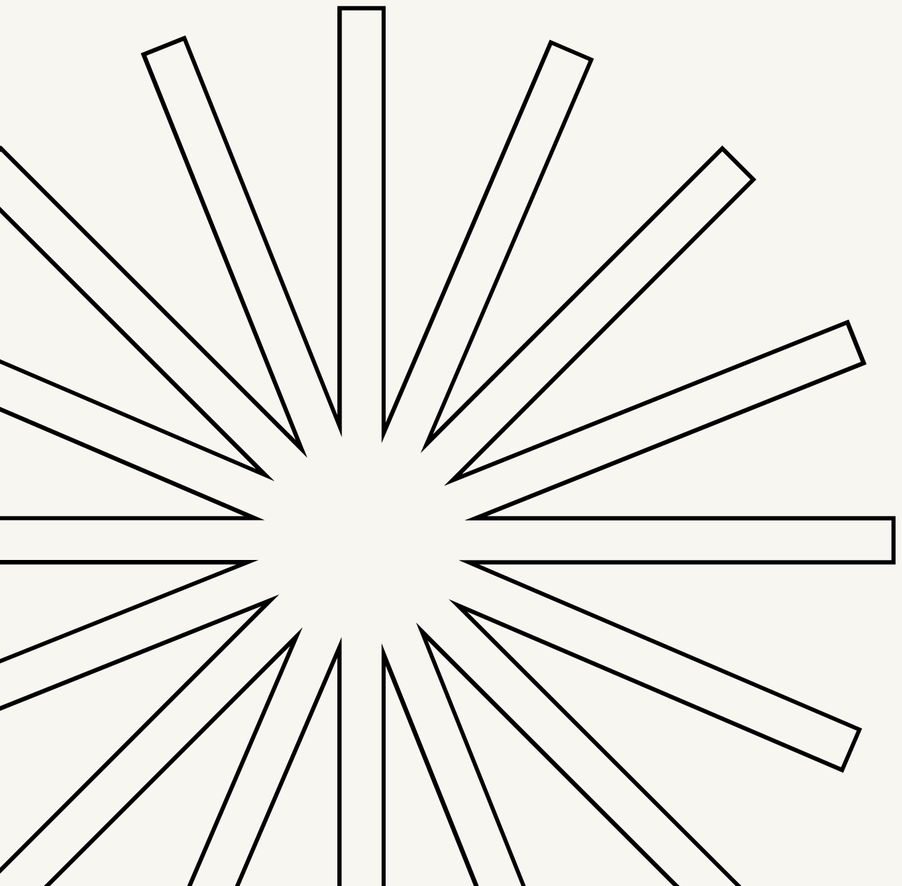
04 Forecast inventory demand

05 Analyze market behavior

06 Deal quality scoring

07 Alert for price drops

Negotiation



01 Initiate Negotiation

02 Send/Counter Offer

03 Real-time Chat

04 Accept Offer and Finalize Deal

05 Review Negotiation History

06 Set Negotiation Preferences

07 Rate the Negotiation Experience

Review & **Rating**

01 Submit a Review

02 Rate a Product or Service

03 View Reviews and Ratings

04 Respond to a Review

05 Flag Inappropriate Reviews

06 Calculate Reputation Score

07 Generate Review Analytics

Location & **Logistics**

01 Locate Nearby Sellers

02 Calculate Delivery Costs

03 Find Best Travel Route

04 Track Delivery Status

05 Recommend Pickup Locations

06 Optimize Supply Chain for Sellers

07 Predict Delivery Delays

Recommendation **Engine**

01 Provide Personalized Product Recommendations

02 Generate Product Recommendations for New Users

03 Cross-Sell and Upsell Based on Current Selections

04 Recommend Based on Market Trends and Popularity

05 Recommend Sellers Based on Price, Quality & Location

06 Recommend Products Based on Wish List

07 Provide Recommendations Based on User Feedback

Admin & **Moderation**

01 Manage User Accounts
02 Review and Moderate User-Generated Content
03 Monitor Platform Analytics
04 Suspend or Ban Users
05 Manage Platform Policies
06 Resolve Disputes Between Buyers and Sellers
07 Manage Seller Listings
08 Audit and Log Platform Activity

Security & Compliance

01 User Authentication and Authorization

02 Multi-Factor Authentication (MFA)

03 Data Encryption

04 Security Incident Detection and Response

05 User Data Privacy Compliance

06 Audit Logging and Monitoring

07 User Consent and Agreement Tracking

08 Access Control and Role Management

09 Compliance Reporting

10 User Activity and Behavior Monitoring

Logging & **Monitoring**

01 Event Logging
02 System Performance Monitoring
03 Error and Exception Tracking
04 Security Event Logging
05 User Activity Monitoring
06 Alert and Notification Management
07 Audit Log Management
08 Log Archiving and Maintenance

Nofication & Communication

01 Push Notification Management

02 Email Notification System

03 In-App Messaging

04 SMS Notification System

05 System Alerts for Admin

06 User Notification Preferences

07 Negotiation Message Alerts

08 Deal Expiration Notifications

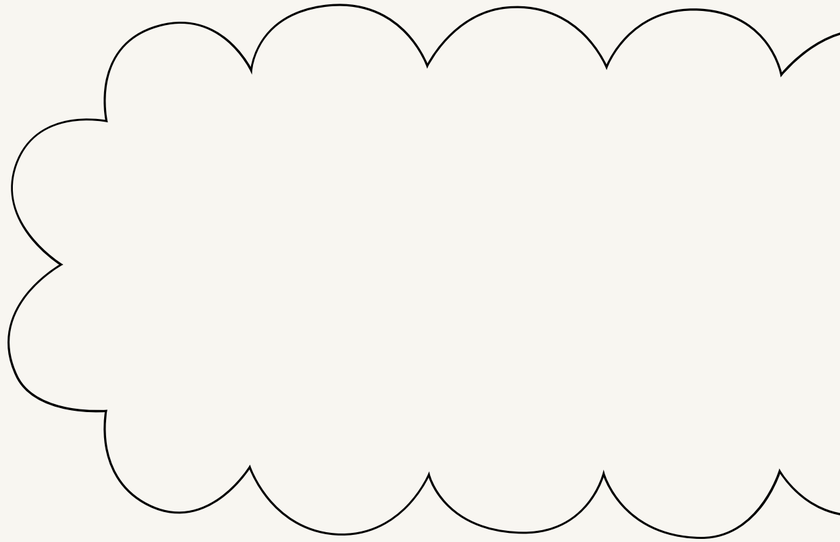
09 Feedback and Support Notifications

Impact

- Aggregating and analyzing real-time prices across multiple platforms.
- Reducing middlemen by connecting producers directly to consumers.
- Providing a platform for small sellers and service providers to reach larger audiences.
- Consolidating all relevant deals from various platforms into one interface.
- Incorporating a robust review and rating system for transparency and trust.
- Offering demand prediction tools and inventory analytics for sellers.

- Giving service providers a platform with lower fees and higher visibility.
- Implementing a built-in negotiation system for personalized deals.
- Integrating location and logistics features for offline shopping convenience.
- Providing real-time chat and messaging for faster transactions.
- Offering real-time notifications for price drops, deals, and promotions.

About Us



2005031 Soumik Bhattacharjee
2005033 Somik Dasgupta
2005041 Md Imtiaz Kabir
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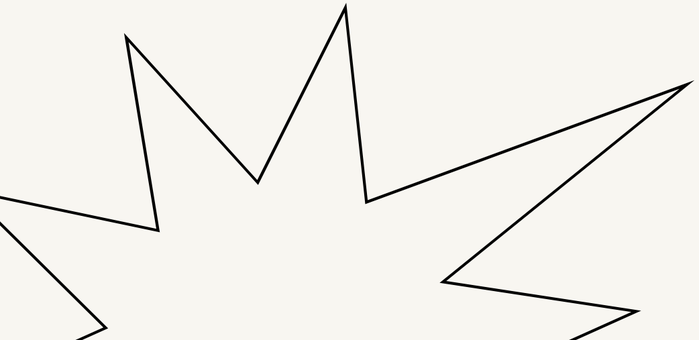

Thank you