

Graduation Project Proposal Form

1. Project Information

- Project Title: SnapBuy
- Course/Track: .NET Fullstack Development
- Team Members:
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2. Project Overview

- **Objective:** To develop a full-featured multi-vendor e-commerce platform that allows multiple sellers to list products, and customers to browse, purchase, and review products, with secure authentication, role-based access, and comprehensive order management.
- **Scope of Work:** The system will include authentication & authorization, product management, browsing and filtering, shopping cart and checkout, order management, reviews & ratings, and an admin panel. Non-functional requirements such as security, performance, usability, and deployment will also be addressed.
- **Expected Outcomes:** A responsive, secure, and scalable multi-vendor e-commerce application deployed on Azure or other cloud servers, with role-specific dashboards and complete e-commerce workflows.

3. Problem Statement

- **From the customer perspective, key potential problems include:**
 1. Search and Filters: Search results can be inaccurate, and filters may not always help users quickly find the right product.
 2. Reviews: Presence of fake or unhelpful reviews.
 3. Order Tracking: Difficulty in tracking shipments or understanding order status.
 4. Recommendation: Amazon's recommendations are sometimes generic or not aligned with user interests.
 5. order tracking :Some users find it difficult to track shipments or understand order status.
 6. Customer Support :Amazon's support can sometimes be slow or complicated.
 7. User Interface :Amazon's UI is crowded with too many elements.

8. Incomplete product specifications: Amazon doesn't always display full product details, making it harder for customers to understand the product.
9. Lack of product comparison feature: Amazon doesn't provide a simple way for customers to compare products side by side, which can affect purchasing decisions.

Biggest Seller Problems on Amazon

1. High commissions: Amazon takes a large percentage of sellers' profits (Referral fees + Fulfillment fees), reducing their profit margins.
2. Unfair competition: Amazon itself or large sellers may copy a product and sell it at a lower price.
3. Limited store control: Amazon's seller store page is very limited — sellers can't customize the design or highlight their brand.
4. Delays in payouts: Amazon sometimes delays transferring profits to sellers, especially for new sales or disputes.
5. Difficulty communicating with customers: Amazon doesn't provide sellers with enough customer information (email, phone) except for shipping purposes.
6. Negative review impact: A single negative review can greatly impact sales, and it's hard to remove even if unfair.
7. High shipping costs: Sellers must either use Fulfilled by Amazon (FBA) with high shipping fees or ship themselves and lose Prime eligibility.

4. Proposed Solution

Key solution features for customers:

1. Use an AI-powered search engine that understands user intent and corrects typos.
Add advanced multi-select filtering + the ability to save favorite filters.
2. Fake review detection system using Natural Language Processing (NLP).
Sort reviews by quality and usefulness instead of only by date.
Add "Was this review helpful?" voting
3. Limited Store Customization: Inability to design or brand their store effectively.
Instant notifications on web and mobile when the order status changes
4. AI chatbot that answers common questions and attempts to solve issues instantly.
Instant video or voice support for certain cases.
5. Visual tracking with a map and real-time estimated delivery time.
Instant notifications on web and mobile when the order status changes.

6. AI chatbot that answers common questions and attempts to solve issues instantly.
Instant video or voice support for certain cases.
7. Clean, simple UI design focused on easy navigation.
8. Require sellers to provide complete and detailed product specifications, displayed in a clear and standardized format for all listings.
9. Implement a product comparison tool that allows customers to select multiple products and view their specifications side by side

Key solution features for sellers:

1. Lower and more transparent commission rates, or fixed monthly subscription plans instead of high percentages.
2. Product Protection Tag for unique products and prevention of counterfeit or cheap copies appearing alongside the original product.
3. Dedicated customizable stores (images, colors, logos, videos) and the ability to create landing pages for featured products.
4. Faster payouts (weekly or daily) and an instant e-wallet system within the platform.
5. Secure in-platform communication tools between buyers and sellers, plus the ability to send offers or coupons to past customers.
6. Review verification system to ensure the reviewer purchased the product, and the ability to reply to negative reviews with responses shown alongside them.
7. Partnerships with local shipping companies for discounted rates, and flexible shipping options showing cost and delivery time

- **System Architecture:** The architecture will follow a layered design with presentation, business logic, and data access layers. The backend will be built using ASP.NET Core Web API with Entity Framework for ORM, and the frontend will use a responsive design. Data will be stored in SQL Server.

5. Resources Needed

- **Hardware/Software:** Visual Studio, SQL Server, Azure subscription, GitHub repository.

6. Approval

- **Instructor/Advisor:**
- **Signature:**