2. Literature Review

2.1 Feedback & Evaluation

The success of the TechXpress project will be assessed based on several key factors, including the clarity of objectives, technical implementation, and adherence to software engineering principles. Feedback from the lecturer and peers will be crucial in refining the project.

Areas of evaluation may include:

- Project Objectives & Scope: Are the goals clearly defined and achievable within the given timeframe?
- Technical Implementation: How well are the core functionalities implemented using ASP.NET Core, Entity Framework, and design patterns like NTier Architecture and Unit of Work?
- User Experience & UI Design: Is the platform user-friendly and visually appealing?
- Performance & Security: Are best practices followed for optimization and secure payment integration (Stripe)?
- Scalability & Maintainability: Can the system handle future expansion and modifications effectively?

2.2 Suggested Improvements

Based on standard software development best practices, the following enhancements could improve the project:

- UI/UX Enhancements: Consider integrating modern front-end frameworks like React or Vue.js for a more dynamic user experience.
- Advanced Search & Filtering: Implement Elasticsearch or similar tools to enhance product discovery.
- AI-Driven Recommendations: Introduce machine learning algorithms to suggest products based on user behavior.
- Automated Testing: Expand test coverage using unit tests (xUnit), integration tests, and Selenium for UI testing.
- Scalability Enhancements: Implement microservices architecture to separate key functionalities for better scalability and maintainability.

2.3 Final Grading Criteria

To ensure a fair and comprehensive evaluation, the project will be graded based on the following criteria:

Category	Weight (%)	Evaluation Criteria
Documentation	20%	Clarity and completeness of project proposal, technical documentation, and risk assessment.
Implementation	40%	Functionality of core features, proper use of ASP.NET Core, Entity Framework, and design patterns.
Testing	20%	Effectiveness of unit and integration tests, debugging, and performance testing.
Presentation	20%	Quality of the project demonstration, ability to answer questions, innovation, and creativity.