Enterprise Architecture - Dapperly B2B eCommerce Platform (TOGAF Based)

# 1. Architecture Vision

The Dapperly platform aims to streamline bulk transactions between businesses through a secure, scalable, and user-friendly eCommerce application. The architecture vision aligns with business goals, focusing on modular design, scalable technology stack, and strong user role segregation.

# 2. Business Architecture

Actors & Roles:

* - Buyers: Search and purchase products in bulk
* - Vendors: Manage product listings and inventory
* - Admins: Oversee platform data and compliance

Key Business Processes:

* - User Registration & Authentication
* - Product Management (CRUD, Bulk Upload)
* - Order Placement & Checkout
* - Dummy Payment Processing

# 3. Information Systems Architecture

## 3.1 Data Architecture

Entities and Tables:

* - Users
* - Products
* - Orders
* - Carts
* - Payments

## 3.2 Application Architecture

Frontend: ReactJS + HTML5/CSS with Axios

Backend: C# .NET Core Web API

Security: JWT authentication, HTTPS

Dummy Payment Gateway endpoint: /api/payment/process

# 4. Technology Architecture

Technology Stack:

* - React, HTML5, CSS
* - C#, .NET Core
* - SQL Server
* - JWT, HTTPS

# 5. Opportunities and Solutions

Phased enhancement roadmap with future integration of real payment systems, analytics dashboard, and mobile app support.

# 6. Migration Planning

Phase 1: MVP with core modules and dummy payment

Phase 2: Real payment gateway integration

Phase 3: Role-based dashboards, analytics

# 7. Implementation Governance

Adherence to SOLID principles, CI/CD deployment, and test automation.

# 8. Architecture Change Management

A change board and versioned documentation will handle evolving requirements and performance monitoring.

