**Application: E Commerce Application**

1. **Introduction**

* **Purpose:** Define the goals and scope of this DDD documentation for the e-commerce application

**Goals:**

**Scope:**

* **Domain Overview:**

Briefly describe the e-commerce domain, including core business functionalities / tasks  
(ex: product catalog, ordering, customer management, product management, shipment)

* **Context:** Explain the boundaries of the particular model specific to the sub-domains

1. **Strategic Design**
2. **Bounded Contexts**

* Define the core bounded contexts within the e-commerce application

**Product Service:**

Summary/Functionalities

**Sales:**

Summary/Functionalities

**Inventory:**

Summary/Functionalities

**Shipping:**

Summary/Functionalities

**Customer Management:**

Summary/Functionalities

* For each identified bounded context
  + Describe the specific responsibility and boundaries
  + Define the Ubiquitous Language used for the context
  + Idenitfy the key domain concepts

1. **Context Map**

* Diagrammatic representation for Context and its relationships
* Specify the relationships (C-S, Conformist, Shared Kernel)
* Document the interactions and data flow between contexts

Ex: Sales Context (D) depends on the Product Catalog (U) for product information

1. **Sub-Domains**

* Identify the core, supporting and generic subdomains within the e-commerce domains
* Prioritize the development efforts and determine the appropriate strategies

1. **Tactical Design**
2. **Product Service**

* **Entities**
  + **Product**
  + **Category**
* **Value Objects**
  + **Price**
  + **Quantity**
  + **Measurements**
* **Aggregates**
  + **Product (with category as child, price, quantity)**
* **Domain Services**
  + **ProductSearchService**
  + **ProductCategorizationService**
* **Domain Events** 
  + **ProductAdded**
  + **ProductPriceChanged**
  + **ProductOutofStock**
* **Repositories**
  + **ProductRepository**
* **Factories**
  + **ProductFactory**
* **Application services**
  + **ProductManagementService( createProduct(), updateProduct(), getProductDetails())**

1. **Sales**
2. **Inventory**
3. **Shipping**
4. **Customer Management**
5. **Implementation Considerations**

**Technology choices**

Discuss technologies and frameworks that align with the DD design (ORM, messaging)

**Architectural Patterns**

Describe patterns (CQRS, SAGA, CircuitBreaker, Event Sourcing)

**Testing Strategy**

Outline the testing strategies: Unit, integration, slice, repository, web and method testing, security testing, actuator testing

1. **Glossary**

Define all the terminologies we used in Ubiquitous Language across the bounded contexts

**Example Code Snippets (illustrative**