## Components

**Shopping Page**: Display Product, Image and Princing.

**Cart Management**: Manages the creation, modification and deletion of carts.

**Sales Tax Calculation**: Sales tax calculations based o nteh customer’s location and the items in the cart

**Payment Information Collection**: Collection Payment information from the customer.

**Transaction Processing**: Status of the purchase order, paid? Shipped, update the inventory

**Inventory Management**: Manages the restocking of inventory.

**Customer Management**: Handles customer information, including Profiles and order history.

**Customer authentication**: authenticates customers and manages sessions.

## Assumptions

Customer must sign in to use the shopping cart

Authentication is in place

A set a rules was implemented to restock inventory.

Customer management includes features such as profile management, order history, addresses, payment methods.

Bounded Contexts and Baking Stores  
**Sales and Inventory Management**: Manages product information, inventory levels and sales transactions (SQL);

Utilizes a SQL database for structured data storage, ensuring data consistency and supporting complex queries for product management and inventory tracking.

**Checkout and Payment**: Handles Cart management, sales tax calculation, payment processing, and transaction completion (NoSQL)

Uses a NoSQL database for its flexibility in handling unstructured data, allowing for fast retrieval and modification of cart-related information during the checkout process.

**Customer Management and Authentication**: Manages customer authentication, profiles, and order history. (NoSQL Database). Utilizes a NoSQL database for its ability to handle dynamic and unstructured customer data efficiently. Additionally, it supports fast authentication and profile retrieval.