**CONCEPTUAL SCHEMA**

Entities and Attributes

1,Online\_Shopping:

Attributes:

|  |  |  |
| --- | --- | --- |
| Online\_ShoppingID | Online\_Shopping\_name | Online\_Shopping\_Description |

2,Customers:

Attributes:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| CustomerID | FirstName | LastName | Email | Address | PhoneNumber | BankAccountID |

3,Sellers:

Attributes:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| SellerID | SellerName | SellerContact | SellerAddress | SellerBankAccountID |

4,BankAccount:

Attributes:

|  |  |  |  |
| --- | --- | --- | --- |
| BankAccountID | BankName | AccountNumber | AccountHolderName |

5,Product:

Attributes:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ProductID | SellerID | ProductName | Description | Price | BrokerID | GovernmentID |

6,Payment:

Attributes:

|  |  |  |  |
| --- | --- | --- | --- |
| PaymentID | PaymentAmount | PaymentMethod | BankAccountID |

7,Orders:

Attributes:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| OrderID | OrderStatus | CustomerID | SellerID | PaymentID |

8,Order\_Detail:

Attributes:

|  |  |  |  |
| --- | --- | --- | --- |
| OrderID | OrderDate | Quantity | TotalPrice |

Cart:

Attributes:

|  |  |  |  |
| --- | --- | --- | --- |
| CartID | CustomerID | ProductID | Quantity |

Broker:

Attributes:

|  |  |  |
| --- | --- | --- |
| BrokerID | BrokerName | BrokerContact |

Broker\_Details:

Attributes:

|  |  |
| --- | --- |
| Price | BrokerCommissionRate |

Government:

Attributes:

|  |  |  |
| --- | --- | --- |
| GovernmentID | GovernmentName | RegulationDetails |

Government\_Details:

Attributes:

|  |  |
| --- | --- |
| Product\_Price | TaxRate |

Inventory:

Attributes:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| InventoryID | SellerID | ProductID | QuantityInStock | WarehouseLocation | InventoryDate |

**Relationships:**

Customer → BankAccount:

A customer is associated with a bank account through BankAccountID.

Seller → BankAccount:

A seller is associated with a bank account through SellerBankAccountID.

Product → Seller:

A seller is associated with one or more products (One-to-Many relationship).

Order → Customer:

A customer places one or more orders (One-to-Many relationship).

Order → Seller:

An order is associated with a seller (Many-to-One relationship).

Order → Payment:

An order is linked to a payment (Many-to-One relationship).

Order\_Detail → Orders:

Each order has multiple details like order date, quantity, and total price.

Cart → Customer:

A customer has one or more products in their cart (One-to-Many relationship).

Cart → Product:

Products are added to the cart, with associated quantities.

Product → Broker:

A product can have an associated broker that handles the sale (Many-to-One relationship).

Seller → Broker:

A seller may use a broker for handling transactions.

Product → Government:

A product is regulated by the government through government policies or taxes.

Inventory → Seller:

A seller maintains inventory of products.

Inventory → Product:

Inventory is associated with products, tracking quantity and stock information.