SupplyChain Class Diagram

Supplier

+ int Id
+ string Code
+ string Name
+ string ContactPerson
+ string Email
+ string Phone
+ string Address
+ bool IsActive

Category

+ int Id
+ string Name
+ string Description

1

0..n

Product

+ int Id
+ string SKU
+ string Name
+ int CategoryId
+ decimal UnitPrice
+ int MinStockLevel
+ bool IsActive

+ string BarCode
+ decimal Weight
+ string Unit

Warehouse

+ int Id
+ string Code
+ string Name
+ string Address
+ bool IsActive

1

0..n

PurchaseOrder

+ int Id
+ string Number
+ int SupplierId
+ POStatus Status
+ DateTime OrderDate
+ DateTime? ExpectedDelivery

+ string RequestedBy
+ string ApprovedBy
+ DateTime? ApprovedAt

1   1   1   1   1

0..n   0..n   0..n   0..n   0..n   0..n

1

0..n

PurchaseOrderLine

+ int Id
+ int PurchaseOrderId
+ int ProductId
+ int Quantity
+ decimal UnitPrice

+ decimal LineTotal

StockLevel

+ int ProductId
+ int WarehouseId
+ int AvailableQuantity
+ int ReservedQuantity
+ int IncomingQuantity

+ int FreeQuantity

StockMovement

+ int Id
+ int ProductId
+ int WarehouseId
+ MovementType Type
+ int Quantity
+ decimal UnitPrice
+ string Reference
+ DateTime CreatedAt
+ string CreatedBy
+ string Note

<<enumeration>>
POStatus

Draft
Approved
Sent
Received
Closed

<<enumeration>>
MovementType

In
Out
Transfer
Adjustment