

<<interface>> StockQuantity

- + add(StockQuantity): StockQuantity
- + addByProduct(StockQuantity): StockQuantity
- + isAccountingType(AccountingTypeEnum): boolean
- + inCartons(): int
- + inDispensingUnits(): int
- + inDoses(): int
- + inPackSize(): int

Recommended to be Immutable. add method enforces similar Product and accounting types, addByProduct method only enforces similar Product. "in" methods are helper methods, and show that accounting for stock is always in whole numbers. AccountingTypeEnum ByLot, ByExpiration

Would love to remove AccountingTypeEnum Need actual storage of lot/batch and expiration date

SkeletonStockEvent		
 Knows date occurred Knows date processed Knows quantity and of a type/unit Knows for who (1+) Knows who did it Knows why Knows doc number and other misc details Knows what's required and what's not Builds event with required details 	 StockProcessor Facility Product StockQuantity StockCardEntry 	

- Processes StockEvents to create corresponding accounting entries. e.g. on stock cards or even budgets for freight cost
 Knows processing rules (e.g. where transfers can occur, who can adjust stock, if budgets are
 - StockEventStockCardFacility

StockQuantity	
 Knows Product Knows StockAccountingType Knows a quantity Able to describe itself in other units based on Product information Supports basic math operations with other compatible quantities Knows if quantity is positive or negative - a positive or negative adjustment 	 Product StockAccountingType

• Is Immutable

effected)

StockCard	
 Knows for Product Knows for Facility Knows StockCardEntry(s) that it's composed of Knows the StockAccountingType that all StockCardEntry(s) will be Knows on hand quantity and historical quantities Knows available quantity and historical quantities Can create new StockCardEntry 	 StockCardEntry StockQuantity Facility Product

StockEventType

 Knows universe of event types that stock processor can process - e.g. credit or debit, transfer, balance adjustment

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 Knows universe of types of stock accounts. e.g. my account is just quantities, or my account is quantities of a certain expiration date, or quantities of a certain lot/batch. 	

StockCardEntry	
 Knows the StockEvent it was created as a result of Knows the StockCard it belongs to Knows its StockQuantity Is Immutable 	StockCardStockEvent