

User
+id: Long
+username: String
+mainPortfolio: Portfolio
+offerDerivativeTo(User, Derivative, Dollars)
+acceptOffer(String)
+declineOffer(String)

Portfolio
+id: Long
+cash: Dollars
+owner: User
+loan: Dollars
+buyStock(String, Dollars): Unit
+buyStock(String, Shares): Unit
+buyStock(String, Shares, Dollars, Price): Unit
+sellStock(String, Dollars): Unit
+sellStock(String, Shares): Unit
+sellStock(String, Shares, Dollars, Price): Unit
+sellAll(String): Unit
+acceptOffer(String): Unit
+declineOffer(String): Unit
+findOffer(String): DerivativeOffer
+castBid(AuctionOffer, Dollars): Unit
+liquidate(): Dollars
+changeLoan(Dollars): Dollars

StockAsset
+id: Long
+ticker: String
+shares: Shares
+portfolio: Portfolio