This is a "Has-A" Bid Relationship Auction An Auction - bidder: String - itemForSale: String Has-A - currentHighBid: Bid - bidAmount: int Bid - allBids: List<Bid> + ctor(bidder: String, bidAmount: int) + ctor(itemForSale: String) + getBidder(): String + getBidAmount(): String + getItemForSale(): String + getHighBid(): Bid + getAllBids(): List<Bid> + placeBid(offeredBid: Bid): boolean

Auction

- itemForSale: String

currentHighBid: intcurrentHighBidder: String

- allBids: List<Integer> - allBidders: List<String>

+ ctor(itemForSale: String)

+ getItemForSale(): String

+ getHighBid(): int + getHighBidder(): String + getAllBids(): List<Integer> + getAllBidders(): List<String>

+ placeBid(bid: int, bidder: String): boolean

What if we tried to manage the auction without a Bid class?

We would have to manage both the list of bid amounts (bids) and who placed them (the bidder)

> It would get unmaintainable very quickly