Table Items:
- Primary Key: ItemID
- Foreign Key: SellerID references Sellers
- Attributes: ItemID, Name, Currently, Buy_Price, First_Bid, Number_of_Bids, Started, Ends, SellerID, Description

Table Users:
- Primary Key: UserID
- Attributes: UserID, Rating, Location, Country

Table Sellers (IS A USER):
- Primary Key: SellerID
- Foreign Key: SellerID references Users
- Attributes: SellerID,

Table Bidders (IS A USER):
- Primary Key: BidderID
- Foreign Key: BidderID references Users
- Foreign Key: ItemID references Items
- Attributes: BidderID

Table Bids
- Primary Key: BidderID, ItemID, Amount
- Foreign Key: BidderID references Bidders
- Foreign Key: ItemID references Items
- Attributes: BidderID, ItemID, Time, Amount

Table Categories:
- Primary Key: ItemID, Category
- Foreign Key: ItemID references Items
- Attributes: ItemID, Category

Relations:
- Item and Bidder have a many to many relationship as a bidder can bid on many items, and an item can have many bidders. Bidder has total participation since they must bid to be a bidder. Item partial participation because every item might not have a bid or bidder
- Each Bid has exactly one Bidder who is responsible for it. Bid to Bidder is one-to-many. A Bidder can have many Bids. Bidder and Bids have total participation in this relationship.
- Each Bid has exactly one Item which it is linked to. One Item can have many Bids. Bids has total participation but Item does not. Bid is a weak entity, since it can only be identified by its attributes along with the BidderID.
- Item and Category have a many-to-many relationship as an Item can be part of many Categories, and a Category can have many items in it. Item has total participation and

category has total participation. Categories is a weak entity, since it requires a ItemID to uniquely identify it.

- An item can be sold by exactly one seller, and a seller must be selling at least one item. Seller and Item have total participation in this relationship. Item to Seller has a one to many relationship.
- A Bidder IS A User and a Seller IS A User. Bidders and Sellers have total participation in this relationship with User. Did not include bold lines or arrows and treated ISA relationship modularly since the lecture slides did not identify them.