CS564 Project Part 1

Group 7
Team members

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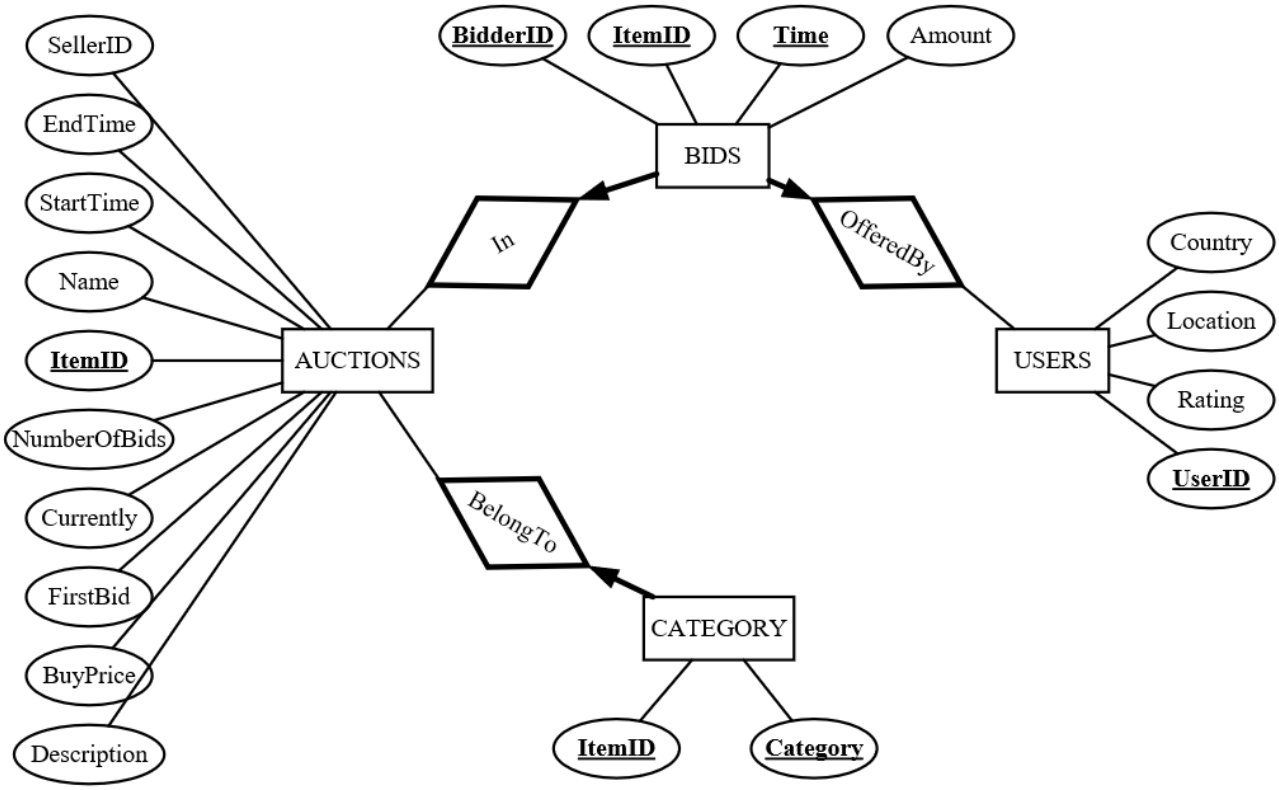
ER diagram



Tables

AUCTIONS									
SellerID	StartTime	EndTime	Name	**ItemID**	NumberOf Bids	Currently	FirstBid	BuyPrice	Description

Table name: AUCTIONS
Attributes: SellerID, StartTime, EndTime, Name, ItemID, NumberOfBids, Currently, FirstBid, BuyPrice, Description
Primary Key: ItemID
Foreign Key: (SellerID) REFERENCES USERS(UserID)

BIDS			
BidderID	**ItemID**	**Time**	Amount

Table name: BIDS
Attributes: BidderID, ItemID, Time, Amount
Primary Key: BidderID, ItemID, Time
Foreign Key: (ItemID) REFERENCES AUCTIONS(ItemID)
Foreign Key: (BidderID) REFERENCES USERS(UserID)

USERS			
UserID	Country	Location	Rating

Table name: USERS
Attributes: UserID, Country, Location, Rating
Primary Key: UserID

CATEGORY	
ItemID	**Category**

Table name: Category
Attributes: ItemID, Category
Primary Key: ItemID, Category
Foreign Key: (ItemID) REFERENCES AUCTIONS(ItemID)

Notes:
In our graph, the relationships, *In, BelongTo, OfferedBy* in the picture inherits the primary key from the related two entities. Thus, the relationships share the same primary key as one of the adjacent entity set. And because all of those relationships are one-many or many-one relationships and we can enforce total participation by defining foreign key, we don't need tables for those relationships.