Entity-Relationship Diagram

Items entity attributes:
- ItemID (key)
- Name
- Currently
- First_Bid
- Number_of_Bids
- Started
- Ends
- Description
- Seller
- Buy_Price

Categories entity attributes:
- ItemID (key)
- CategoryName (key)

Bids entity attributes:
- BidID (key)
- ItemID
- Bidder
- Time
- Amount

Users entity attributes:
- UserID (key)
- Rating
- Country
- Location

Relationships:
- categorize (Categories → Items)
- bid (Items → Bids)
- purchase (Users → Items)
- sell (Users → Items)

ItemID	PK	VARCHAR(256)
Name		VARCHAR(256)
Currently		MONEY
Buy_Price		MONEY
First_Bid		MONEY
Number_of_Bids		INT
Started		DateTime
Ends		DateTime
Seller	FK	VARCHAR(256)
Description		VARCHAR(256)

Items(ItemID VARCHAR(256), Name VARCHAR(256), Currently MONEY, Buy_Price MONEY, First_Bid MONEY, Number_of_Bids INT, Started DateTime, Ends DateTime, Seller VARCHAR(256), Description VARCHAR(256), Primary Key (ItemID), Foreign Key (Seller) references Users (UserID));

UserID	PK	INT
Rating		INT
Country		VARCHAR(256)
Location		VARCHAR(256)

Users(UserID VARCHAR(256), Rating INT, Country VARCHAR(256), Location VARCHAR(256),Primary Key (UserID));

BidID	PK	INT
ItemID	FK	INT
Bidder	FK	VARCHAR(256)
Time		DateTime
Amount		Money

Bids(BidID INT, ItemID INT, Bidder VARCHAR(256), Time DateTime, Amount MONEY, Primary key (BidID), Foreign key (Bidder) references Users (UserID), Foreign key (ItemID) references Items (ItemID));

ItemID	part of PK, is a FK	INT
CategoryName	part of PK	VARCHAR(256)

Categories(ItemID INT, CategoryName VARCHAR(256), Primary key (ItemID, CategoryName), Foreign key (ItemID) references Items (ItemID));