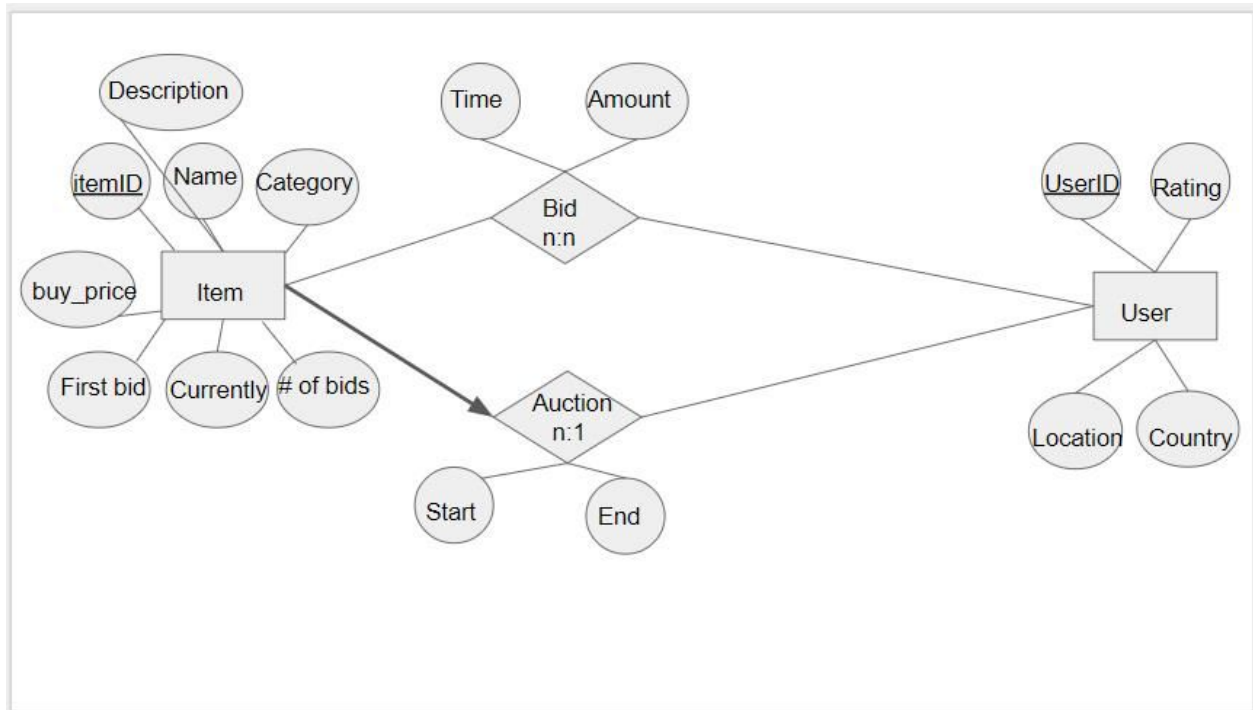


# CS564 Programming Project #1

ER modeling & Schema Design

## ER Diagram



### Notation:

Primary key: underlying attribute

Participation constraint: thick line

Key constraint: one direction arrow from n to 1

## Schema

ItemAuction (ItemID: int,  
Name: text,  
Currently: real,  
Buy\_Price: real,  
First\_Bid: real,  
Number\_of\_Bids: int,  
Description: text,  
Started: text,  
Ends: text,  
UserID: text,  
Primary Key (ItemID),  
Foreign Key (UserID) References User)

Item\_cat (ItemID: int,  
Category: text,  
Foreign Key (ItemID) References ItemAuction)

User( UserID: text,  
Rating: int,  
Location: text,  
Country: text,  
Primary Key (UserID))

Bids( ItemID: int,  
UserID: text,  
Time: text,  
Amount: real,  
Foreign Key (ItemID) References ItemAuction,  
Foreign Key (UserID) References User)

Primary Key : itemID( from ItemAuction), userID( from User)

Foreign Key :

The foreign key userID in ItemAuction is referenced from the primary key userID in User.

The foreign key userID in Bids is referenced from the primary key userID in User.

The foreign key itemID in Bids is referenced from the primary key itemID in ItemAuction.

The foreign key itemID in Item\_cat is referenced from the primary key itemID in ItemAuction.