

User(UserID, Rating, Location, Country)

Bids(Amount, Time, User_UserID, Item_ItemID)

Item(ItemID, Name, FirstBid, Currently, Description, NumberofBids, Started, Ended, User_UserID)

Category(CategoryName, Item_ItemID)

Description:

Our relational model includes four tables: User, Bids, Item, and Category.

User: This table stores information of all users. UserID is the primary key. Other attributes include Rating, Location, and Country.

Bids: This table stores information of all bids made on items. It has two foreign keys, ItemID from *Item* and UserID from *User*. Its primary key includes Time, UserID from *User*, and ItemID from *Item*.

Item: This table stores information of all items. It has one foreign key, UserID from *User*. Its primary key is ItemID. Other attributes include Name, FirstBid, Currently, Description, NumberofBids, Started, and Ended.

Category: This table is really a table for the relationship *Belongs To*. *Belongs To* is a multiple-to-multiple relationship, so it should include keys from *Item* and *Category*. *Category* only has one attribute, CategoryName, which is also its primary key, so we have simplified the schema by combining *Category* and *Belongs To* to form a single table. This table includes two attributes, ItemID from *Item* and CategoryName. ItemID is a foreign key, and these two attributes together form the primary key of the table.

