

Relational Schema:

```
CREATE TABLE Items (  
    item_id INTEGER,  
    item_name VARCHAR(100) NOT NULL,  
    currently FLOAT NOT NULL,  
    first_bid FLOAT NOT NULL,  
    number_of_bids INTEGER NOT NULL,  
    starts DATETIME NOT NULL,  
    ends DATETIME NOT NULL,  
    seller_id VARCHAR(100) NOT NULL,  
    buy_price FLOAT,  
    item_description VARCHAR(300),  
    PRIMARY KEY(item_id),  
    FOREIGN KEY(item_id) REFERENCES Categories(item_id),  
    FOREIGN KEY(seller_id) REFERENCES Users(user_id)  
);  
  
CREATE TABLE Categories (  
    item_id INTEGER,  
    item_category VARCHAR(80) NOT NULL,  
    PRIMARY KEY(item_id,item_category)  
);  
  
CREATE TABLE Users (  
    user_id VARCHAR(100),  
    country VARCHAR(30),  
    city_location VARCHAR(40),  
    rating INTEGER NOT NULL,  
    PRIMARY KEY(user_id)  
);  
  
CREATE TABLE Bids (  
    bidder_id VARCHAR(100),  
    item_id INTEGER NOT NULL,  
    bid_time DATETIME NOT NULL,  
    amount FLOAT NOT NULL,  
    PRIMARY KEY(bidder_id,item_id,bid_time),  
    FOREIGN KEY(item_id) REFERENCES Items(item_id),  
    FOREIGN KEY(bidder_id) REFERENCES Users(user_id)  
);
```

ER diagram

