



We think the CREATE TABLE syntax is the best medium to demonstrate our schema. Our design for tables, attributes, primary and foreign keys are clearly shown below:

```
CREATE TABLE Items (  
itemID INT UNIQUE NOT NULL,  
name CHAR(255) NOT NULL,  
currently DOUBLE,  
first_bid DOUBLE,  
bid_count INT NOT NULL,  
buy_price DOUBLE,  
sellerID CHAR(255) NOT NULL,  
ends Datetime NOT NULL,  
started Datetime NOT NULL,  
description CHAR(255),  
PRIMARY KEY (itemID),  
FOREIGN KEY (sellerID) REFERENCES Users (userID)  
);
```

```
CREATE TABLE Categories (  
itemID INT NOT NULL,  
category CHAR(255) NOT NULL,  
PRIMARY KEY (itemID, category),  
FOREIGN KEY (itemID) REFERENCES Items (itemID)  
);
```

```
CREATE TABLE Users (  
userID CHAR(255) UNIQUE NOT NULL,  
country CHAR(255),  
location CHAR(255),  
rating INT NOT NULL,  
PRIMARY KEY (userID)  
);
```

```
CREATE TABLE Bids (  
bidderID CHAR(255) NOT NULL,  
itemID INT NOT NULL,  
time Datetime NOT NULL,  
amount DOUBLE NOT NULL,  
FOREIGN KEY (bidderID) REFERENCES Users (userID),  
FOREIGN KEY (itemID) REFERENCES Items (itemID)  
);
```