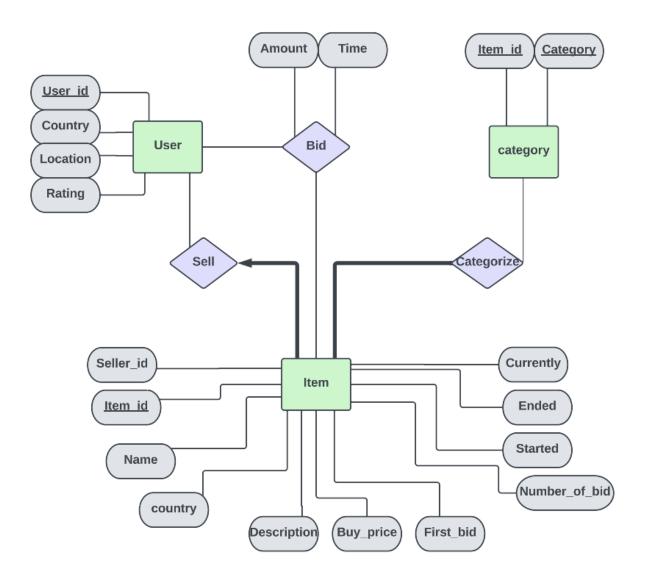
ER Diagram



Relational Model

*<u>Underline</u> means primary key.

CREATE TABLE Category(

```
Item (Item_id, Name, Buy_price, Currently, First_bid, Number_of_Bid, Country, Started, Ended, Seller_id, Description)

User (User_id, Rating, Location, Country)

Bid (Item_id, Bidder_id, Time, Amount)

Categorization (Item_id, Category)
```

Relational Schema

```
Item_id INT,
Category CHAR(256),
PRIMARY KEY (Item_id, Category_name)
FOREIGN KEY (Item id) REFERENCES Item
);
CREATE TABLE Item (
Item_id INT PRIMARY KEY,
Name CHAR(256),
Currently FLOAT,
Buy_price FLOAT,
First bid FLOAT,
Number_of_Bid INT,
Started DATETIME,
Ended DATETIME,
Description CHAR(1000),
Seller_id CHAR(256),
FOREIGN KEY (Seller_id) REFERENCES User
);
```

```
CREATE TABLE Bid (
Item_id INT,
Bidder_id CHAR(256),
Time DATETIME,
Amount FLOAT,
PRIMARY KEY(Item_id, Bidder_id, Amount),
FOREIGN KEY (Item_id) REFERENCES Item,
FOREIGN KEY (Bidder_id) REFERENCES User
);

CREATE TABLE User (
User_id CHAR(256) PRIMARY KEY,
Rating INT,
Location CHAR(256),
Country CHAR(256),
);
```