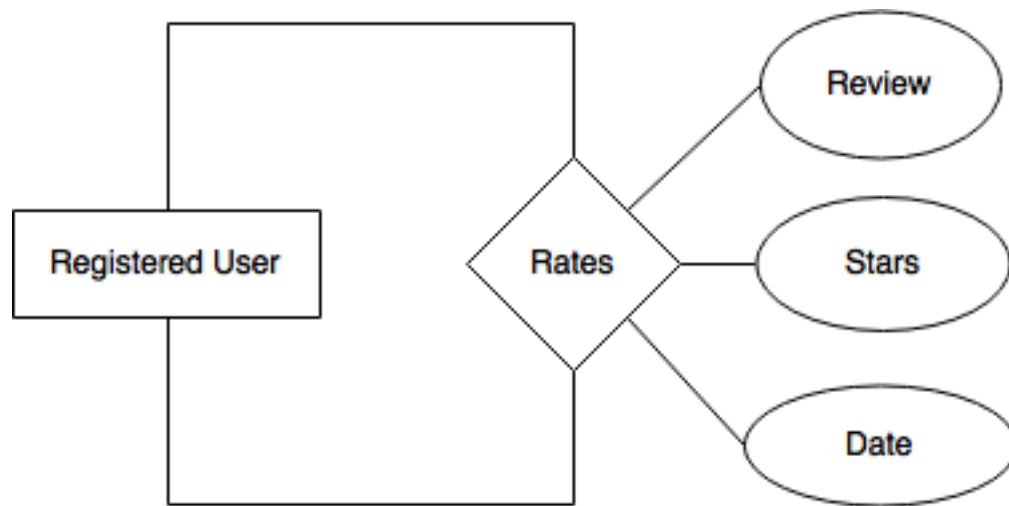
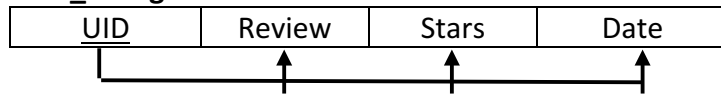


Ratings:



We decided to create the table `User_ratings` for this unary relationship. There are three attributes we created for this table: `Stars`, `Date`, and `Review`. We made sure the primary key was the `UID` (user ID). We made `Stars` and `Date` NOT NULL because for every review, we wanted everyone to give a specific number of stars for the user and as well as an actual date of review. The `Review` would be written and because of that we made it the `TEXT` data type because it could be very long. Having looked at sites such as Amazon and EBay, we found that some reviews didn't have any text and just a star rating. We decided to also adopt this idea, and that is why our `Review`'s are nullable.

User_rating:

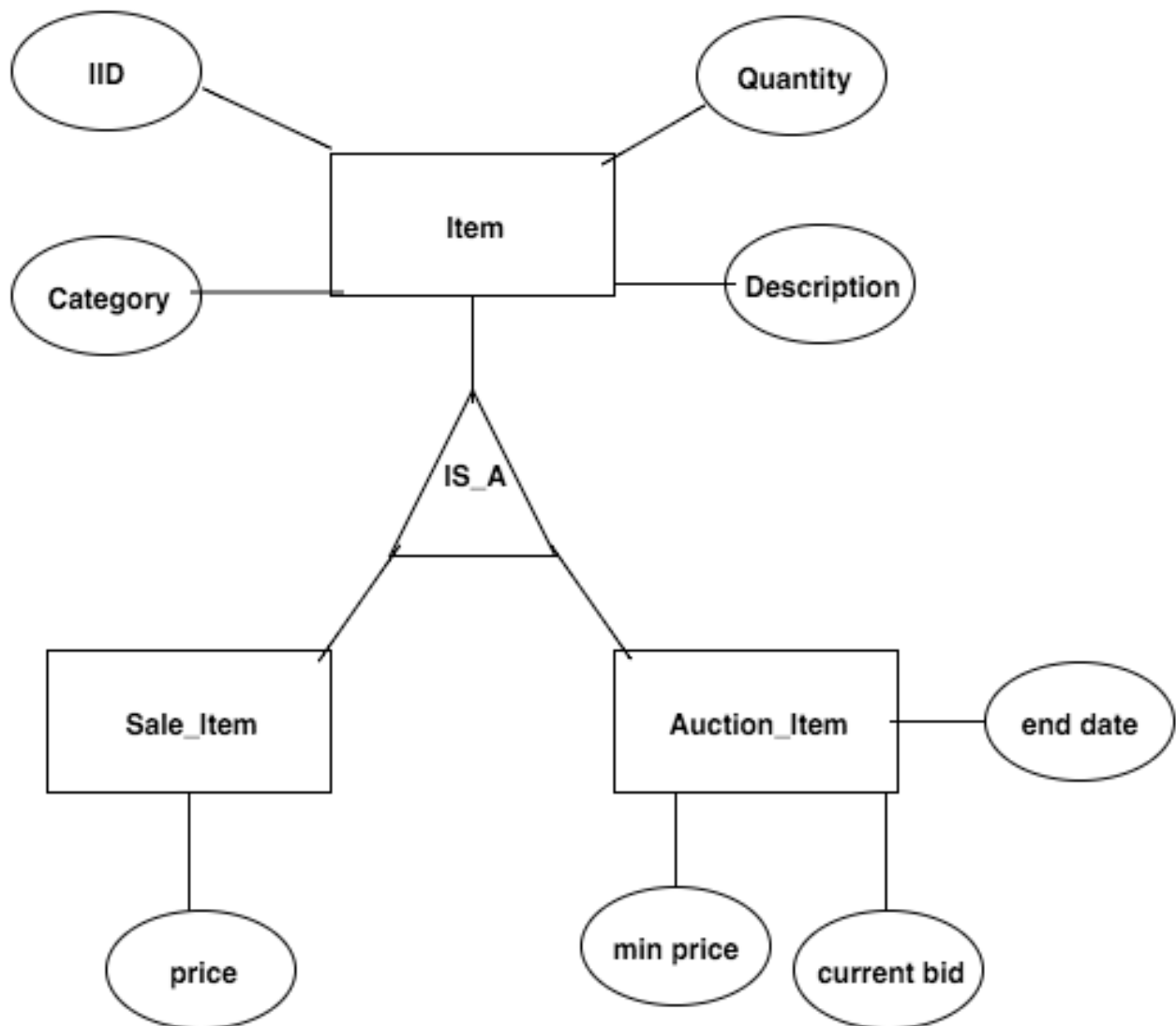


```
CREATE TABLE User_ratings  
(  
    Review TEXT,  
    Stars INT NOT NULL,  
    Date DATE NOT NULL,  
    PRIMARY KEY (UID),  
);
```

Sale Item:

We created 3 separate tables for this ISA relationship: Items, Sale_Items, and Auction_Items.

We made a lot of the fields NOT NULL because we wanted exact numbers and values for items, prices, and times. The whole auctioning process is very dependent on the time and prices because they can change all the time.



Items:

<u>IID</u>	Quantity	Category	Description
------------	----------	----------	-------------

The diagram shows a horizontal line with three upward-pointing arrows. The first arrow points to the 'Quantity' column of the 'Items' table. The second arrow points to the 'current bid' column of the 'Auction_Items' table. The third arrow points to the 'end date' column of the 'Auction_Items' table.

Sale_Items:

<u>IID</u>	price
------------	-------

The diagram shows a horizontal line with one upward-pointing arrow pointing to the 'price' column of the 'Sale_Items' table.

Auctio_Items:

<u>IID</u>	min_price	current bid	end date
------------	-----------	----------------	----------

The diagram shows a horizontal line with three upward-pointing arrows. The first arrow points to the 'min_price' column of the 'Auctio_Items' table. The second arrow points to the 'current bid' column of the 'Auctio_Items' table. The third arrow points to the 'end date' column of the 'Auctio_Items' table.

```
CREATE TABLE Items
```

```
(
```

```
    IID CHAR(40) NOT NULL,
```

```
    Quantity INT NOT NULL,
```

```
    Category TEXT,
```

```
    Description TEXT,
```

```
    PRIMARY KEY (IID),
```

```
);
```

```
CREATE TABLE Sale_Items
```

```
(
```

```
    IID CHAR(40) NOT NULL,
```

```
    Price FLOAT NOT NULL,
```

```
    PRIMARY KEY (IID),
```

```
    FOREIGN KEY (IID) REFERENCES Items (IID),
```

```
);
```

```
CREATE TABLE Auction_Items
```

```
(
```

```
    IID CHAR(40) NOT NULL,
```

```
    End_Date DATE NOT NULL,
```

```
    Min_Price FLOAT NOT NULL,
```

```
    Current_Bid FLOAT,
```

```
    PRIMARY KEY (IID),
```

```
    FOREIGN KEY (IID) REFERENCES Items (IID).
```

```
);
```