

1. Relational Schema

```

create table item (
ItemID          INT          NOT NULL UNIQUE,
Name            VARCHAR(255)  NOT NULL,
CategoryNum     INT,
Currently       DOUBLE,
FirstBid        DOUBLE,
NumberBids      INT,
Location        VARCHAR(255),
Country         VARCHAR(255),
Started         DATE ,
Ended           DATE,
Seller          VARCHAR(255) NOT NULL,
Buy_Price       DOUBLE,
Description     VARCHAR(255),
PRIMARY KEY (ItemID),
FOREIGN KEY (Seller) REFERENCES userInfo(UserID)
);

```

```

create table userInfo (
UserID          INT          NOT NULL UNIQUE,
Rating          INT          NOT NULL,
Location        VARCHAR(255) NOT NULL,
Country         VARCHAR(255) NOT NULL,
isSeller        VARCHAR(6),
isBuyer         VARCHAR(6),
PRIMARY KEY (UserID)
);

```

```

create table bidInfo (
ItemID          INT          NOT NULL,
UserID          VARCHAR(225) NOT NULL,
Rating          DOUBLE,
Location        VARCHAR(225),
Country         VARCHAR(225),
CurrTime        DATE NOT NULL,
Amount          DOUBLE,
FOREIGN KEY (ItemID) REFERENCES item(ItemID),
FOREIGN KEY (UserID) REFERENCES userInfo(UserID)
);

```

```

create table catBidInfo(
Categories       VARCHAR(255) NOT NULL,
Amount          DOUBLE       NOT NULL,
ID              VARCHAR(255)  NOT NULL,
FOREIGN KEY (ID) REFERENCES userInfo(UserID)
);

```

2. ER Diagram

