

1.Relational Schema

```

CREATE TABLE Item (
  ItemID          INT          NOT NULL UNIQUE,
  Description      VARCHAR(255) NOT NULL,
  Started         DATE         NOT NULL,
  Ended          DATE         NOT NULL,
  Currently       Double       NOT NULL,
  Buy_Price       Double       NOT NULL,
  First_Bid       Double       NOT NULL,
  Number_of_Bids  INT          NOT NULL,
  PRIMARY KEY (ItemID)
);

CREATE TABLE Category (
  CategoryID      INT          NOT NULL UNIQUE,
  Name           VARCHAR(255)  NOT NULL,
  PRIMARY KEY (CategoryID)
);

CREATE TABLE ItemCategory (
  ItemID          INT          NOT NULL UNIQUE,
  CategoryID      INT          NOT NULL UNIQUE,
  PRIMARY KEY (ItemID, CategoryID),
  FOREIGN KEY (ItemID) REFERENCES Item (ItemID),
  FOREIGN KEY (CategoryID) REFERENCES Category (CategoryID)
);

CREATE TABLE Bid (
  BidID          INT          NOT NULL UNIQUE,
  Time           DATE         NOT NULL,
  Amount         DOUBLE       NOT NULL,
  PRIMARY KEY (BidID),
  FOREIGN KEY BidID REFERENCES Item (ItemID),
  FOREIGN KEY BidID REFERENCES User (UserID),
);

CREATE TABLE User (
  UserID         INT          NOT NULL UNIQUE,
  Rating         INT          NOT NULL,
  Location       VARCHAR(255) NOT NULL,
  Country       VARCHAR(255) NOT NULL,
  PRIMARY KEY (UserID),
  FOREIGN KEY UserID REFERENCES Item (ItemID),
  FOREIGN KEY UserID REFERENCES Bid (BidID),
);

```

2. ER Diagram (Simple Version)

