Entity set Items:

item_id PRIMARY KEY

name

currently buy_price first bid

number_of_bids seller_id FOREIGN KEY

started ends

description

Entity set Bids:

FOREIGN KEY item_id bidder_id FOREIGN KEY

time amount

PRIMARY KEY (bidder_id, time)

Entity set AuctionUser:

user_id PRIMARY KEY

rating location country

Entity set Category:

item_id FOREIGN KEY

category_name

PRIMARY KEY (item_id, category_name)