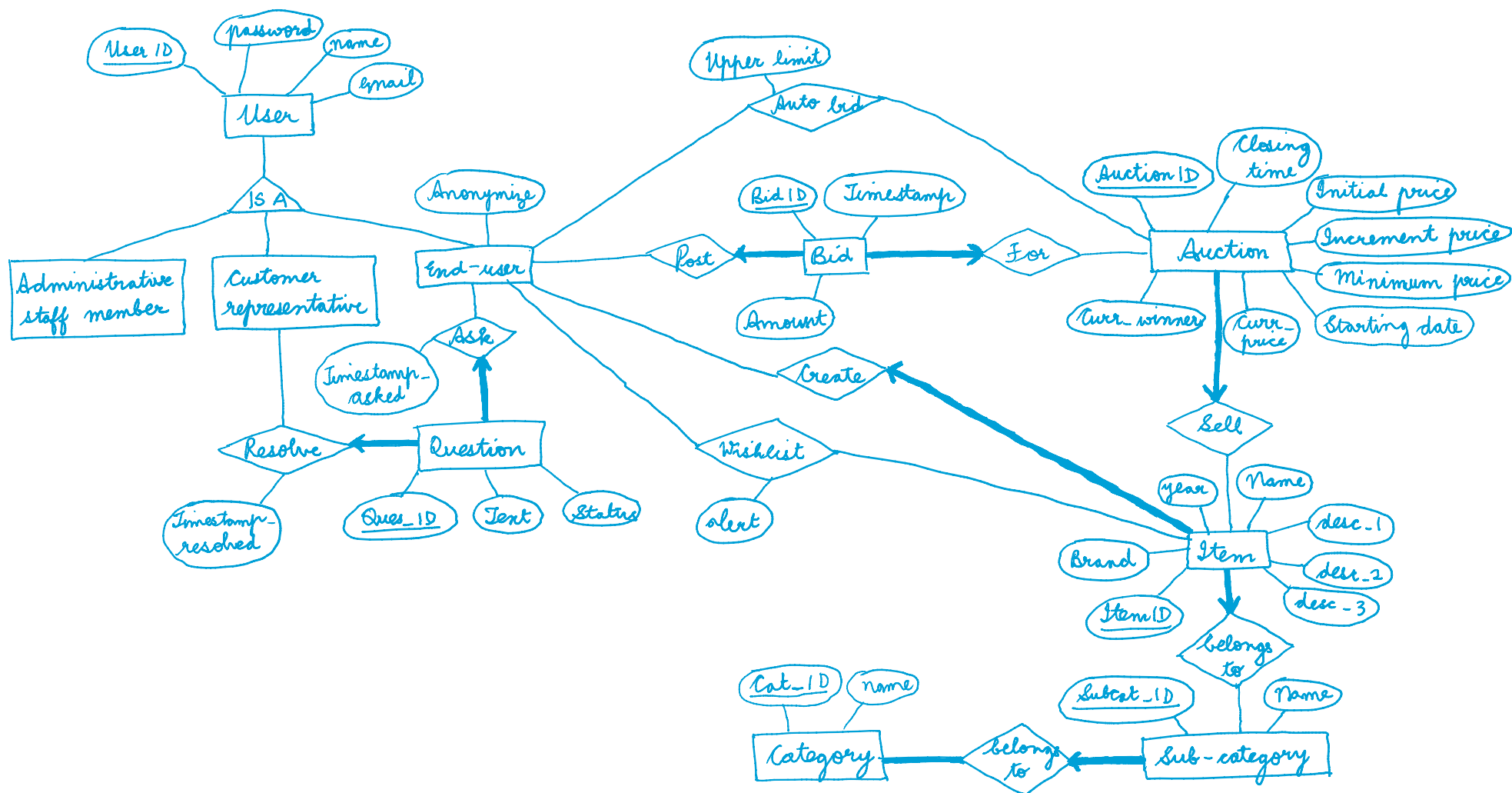


Thursday, March 2, 2023 12:55 PM

Archit Bansal · ah2465

Devarata Oza : do309

Shaleen Garg : ssg128



```

User (user_id : varchar(10),
     password : varchar(20),
     name : varchar(50),
     email : varchar(50),
     primary key (user_id))

Administrative_staff_member (user_id : varchar(10),
                             primary key (user_id),
                             foreign key (user_id) references User (user_id))

Customer_representative (user_id : varchar(10),
                          primary key (user_id),
                          foreign key (user_id) references User (user_id))

--buyers and sellers
End-user (user_id : varchar(10),
          anonymize : bool,    --whether end-user wants to show her actual user_id and email address in auctions
          primary key (user_id),
          foreign key (user_id) references User (user_id))

--customer representatives answers questions asked by end-users
Question (ques_id : int,
          text : varchar(100),
          status : enum('Resolved', 'Pending'),
          timestamp_asked : datetime,
          timestamp_resolved : datetime,
          end-user_login : varchar(10),
          customer_rep_login : varchar(10),
          primary key (ques_id),
          foreign key (end-user_login) references End-user (user_id),
          foreign key (customer_rep_login) references Customer_representative (user_id))

--category of items (e.g., vehicles or clothing or computers ...)
Category (cat_id : varchar(10),
          name : varchar(20),
          primary key (cat_id))

--e.g., truck, motorbike, car for vehicles
Sub-category (cat_id : varchar(10),
              subcat_id : varchar(10),
              name : varchar(20),
              primary key (cat_id, subcat_id),
              foreign key (cat_id) references Category (cat_id))

Item (cat_id : varchar(10),
      subcat_id : varchar(10),
      item_id : varchar(10),
      name : varchar(20),
      brand : varchar(20),
      year : year,    --year of manufacture
      desc_1 : varchar(100),

```

```

desc_2 : varchar(100),
desc_3 : varchar(100),
created_by : varchar(10),    --seller who added the item listing
primary key (cat_id, subcat_id, item_id),
foreign key (cat_id, subcat_id) references Sub-category (cat_id, subcat_id),
foreign key (created_by) references End-user (user_id))

```

```

Auction (auction_id : int,
        cat_id : varchar(10),
        subcat_id : varchar(10),
        item_id : varchar(10),
        starting_time : datetime,
        closing_time : datetime,
        initial_price : int,
        increment_price : int,
        minimum price : int,    --(secret) the seller is not willing to give up the item for less
        curr_winner : varchar(10),
        curr_price : int,
        primary key (auction_id),
        foreign key (cat_id, subcat_id, item_id) references Item (cat_id, subcat_id, item_id),
        foreign key (curr_winner) references End-user (user_id))

```

```

Bid (bid_id : int,
    user_id : varchar(10),
    auction_id : int,
    timestamp : datetime,
    amount : int,
    primary key (bid_id),
    foreign key (user_id) references End-user (user_id),
    foreign key (auction_id) references Auction (auction_id))

```

--automatically put a bid for a user, every time someone bids higher than her

```

Auto_bid (user_id : varchar(10),
        auction_id : int,
        upper_limit : int,    --(secret) maximum amount an end-user is willing to pay
        primary key (user_id, auction_id),
        foreign key (user_id) references End-user (user_id),
        foreign key (auction_id) references Auction (auction_id))

```

--items which an end-user is interested in buying

```

Wishlist (user_id : varchar(10),
        cat_id : varchar(10),
        subcat_id : varchar(10),
        item_id : varchar(10),
        alert : enum('Sent', 'Not sent'),    --alert to be sent when item shows up for auction
        primary key (user_id, cat_id, subcat_id, item_id),
        foreign key (user_id) references End-user (user_id),
        foreign key (cat_id, subcat_id, item_id) references Item (cat_id, subcat_id, item_id))

```