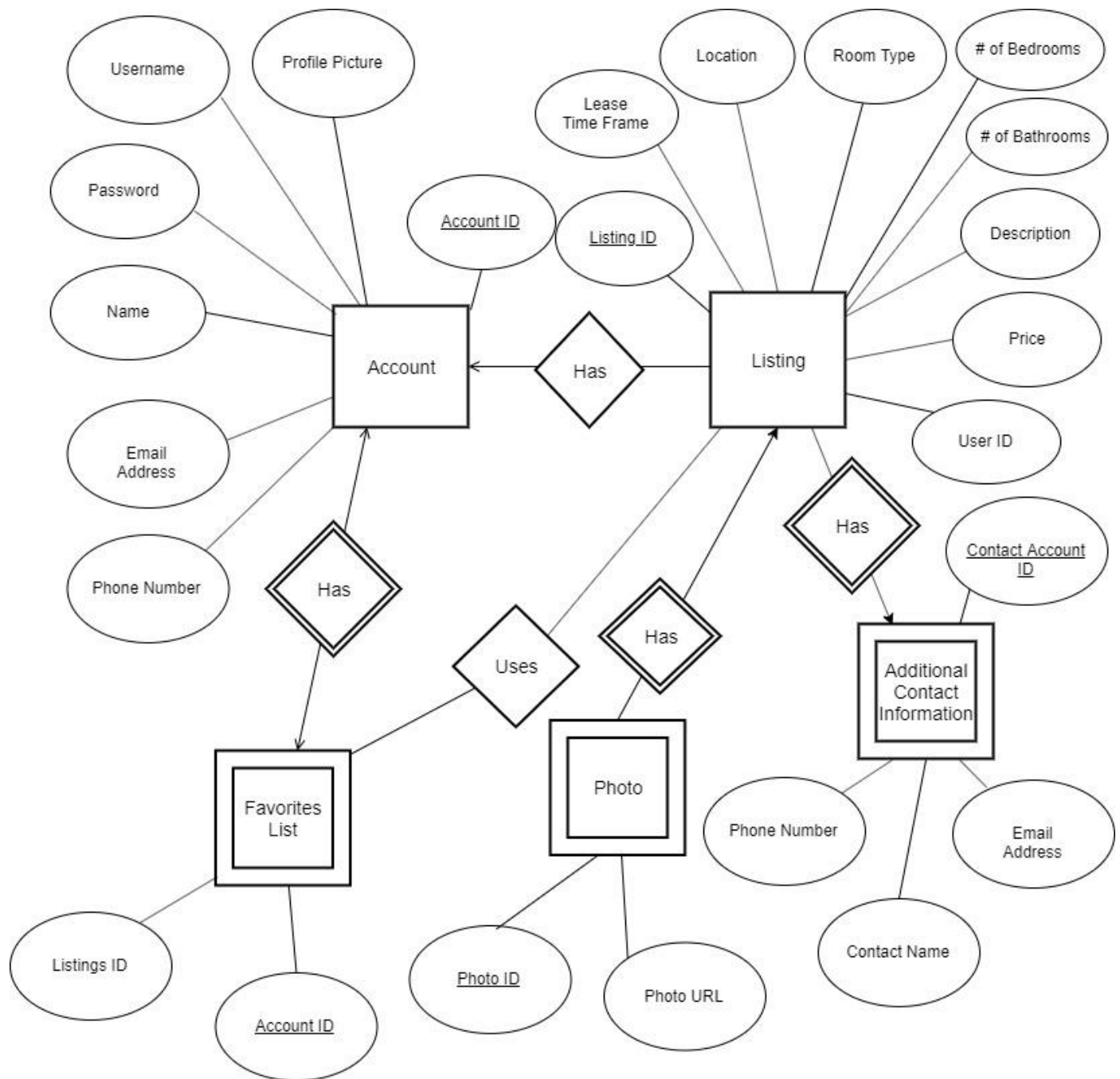Project Data Model and DB Design

Team 35

Yusuf Amer

Christina Nguyen

Arman Sandher

E/R Diagram:

Entity Sets and Relationships Explanation:

Entity Set
- The Account entity set will be used for each user, whether a leaser or a renter. A unique Account ID will be used as the primary key for this entity set.
- The Listing entity set will be used for each post by a leaser for renters to be able to scroll through and search for a good fit. Every post will have its own Listing ID, which may be reused when a posting opens up again after a lease ends.
- The Favorites List entity set will be used as a weak entity set for each strong Account entity set, where a user prioritizes favorite listings posted. The level of priority in the Favorites List will be used with each user's unique Account ID, to be used as the primary key.
- The Photo entity set will be used for both the Listing entity set and the Account entity set, because each of those entity sets will need to provide pictures to help in identification. Each photo uploaded will have a unique Photo ID used as its primary key.
- The Contact Information entity set will be used as a weak entity set for each strong Listing entity set, where a leaser can choose to add several other people to contact for inquiries or more information about the Listing posted.

Relationship
- Each Listing has an Account that created it, and every Account will have 0 or more Listings created by it.
- Each Favorites List belongs to an Account, and every account will have 0 or 1 Favorites List to prioritize posts.
- Every Favorites List consists of 1 or more Listings, and every Listing can be on 0 or more Favorites Lists.
- Each Listing has 0 or more Photos, and each Photo exists on 1 Listing.
- Each Listing can have 0 or more additional Contact Information, and each piece of Contact information belongs to 1 or more Listings.

Sample Tables:

Search4House

search4houses database successfully opened.

List of Accounts: "Accounts":

accID	username	password	fullName	profilePicURL	email	phoneNum
1	Bob	password	Bob	Billy	hi@gmai.com	408
2	Yusuf	Arman	Yusuf Arman	/yusufarman	ya@gmail.com	499-499-4999

List of all Listings: "Listings":

listingID	userID	location	roomType	price	leaseTimeframe	roomNum	bathroomNum	description	photosID
1	1	San Jose	House	10	21	1	1	null	11
2	1	Palo Alto	Shared Room	2	11	1	1	null	10
3	1	Santa Monica	Private Room	5	12	1	2	null	11

List of all Photos: "Photos":

photoID	photoURL	listingID
1	hekkk	1

List of all Favorite Lists: "Favorites":

listID	listingID	accID
1	11	1
2	13	1

List of all Addition Contacts: "AdditionalContacts":

contactAccID	phoneNum	email	name	listingID
1	408	hi@gmail.com	Bob	1