10/10

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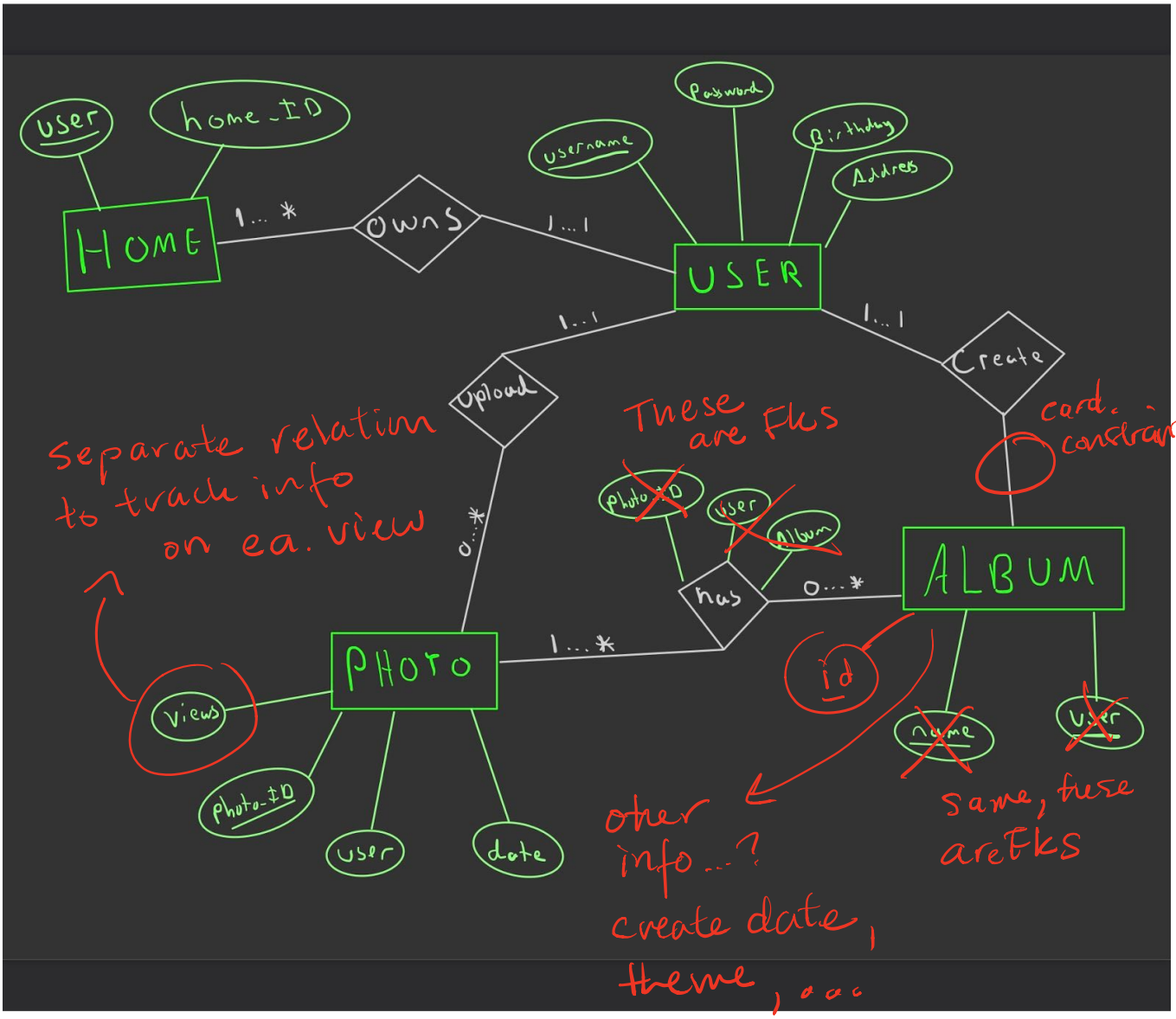
CPSC 321
Project 3

1. Diagram:



2. Cardinality Breakdowns:

   User 1..1 (owns) 1..* Home

   i. A user must have at least one home in the system to create and add his family members to. They can also have multiple homes (properties) which would involve other people. A home must belong to one user and only one user.

User 1..1 (upload) 0..* Photo

ii. A user can upload no photos or many photos but a photo, when uploaded, must belong to one and only one user.

User 1..1 (create) 0..* Album

iii. A user can have zero or many albums. Every album, when created, must belong to one and only one user.

Photo 1..* (has) 0..* Album

iv. A photo doesn't have to belong to an album or it can belong to multiple different albums. An album must consist of at least one photo but then can have many.

We learned a good amount about our project by working on this ER diagram. And it was cool to see how quickly the ER diagram came to us after only practicing it a few times on the past homeworks. In particular we learned that we would need to include multiple entity IDs in order to create primary keys as well as that our diagram might need another table for showing which photos are in which albums.

3. Additional Constraints:

We think our ER diagram did a good job of finding all the constraints in the database. We did wonder about the correct way to constrain the photo/album relationship because we were wondering about the possibility of creating an empty album. We settled on 1..* thinking that every album would initially be created with an initial photo.