Question : 3.1E Akash Ghosh

EER Model Limitations:

1. An EER model finds it difficult to account for data constraints like making sure that a center's rooms only have one session at a time (unique sessions at a particular time per room).

2. Uniqueness criteria such as "the combination of first name, family name, and birth date is unique" would have to be represented in the database design as a unique key according to the EER model. Usually, EER models are not used to clearly visualize such database-specific limitations.

3. Inheritance is not explicitly represented in EER models. Although Trainer is a unique kind of Person in the actual world, EER would classify the two as distinct entities. For instance, instead of declaring that Trainer is a Person as UML would with an inheritance relationship, we would have to create a Trainer table that references Person via a foreign key.

UML Model Limitations:

1.Although UML is primarily concerned with modeling the relationships and structure of objects, it is not helpful in creating indexes, normalization, or other performance-related issues or in optimizing the database for speed. Because of this, it is less appropriate for explicitly defining a database structure.

2. Though many-to-many relationships (such as individuals attending numerous sessions) can be modeled using UML class diagrams, they do not outline how to handle these interactions in a database, such as by employing a junction table. In a relational database, it is more important to specify the structure than to guarantee its actual execution.

Question: 3.3E

EER Model Limitation:

1.nheritance between entities is not expressed in the EER model. For instance, the User entity may include subclasses for Entertainer, Hungry Customer, and Business Owner, but an EER does not depict this inheritance relationship.

2. The complexity of special orders, such as differentiating entertainment orders from ordinary ones or linking them to certain entertainment genres and times, is difficult for the EER model to represent. A simple EER model might not be able to clearly capture this differential since it requires intricate relationships or other characteristics.

UML Model Limitations:

1. The idea that entertainment orders are a unique kind of order with distinct characteristics (like entertainment kind and duration) is not reflected in the UML Class Diagram, even though Orders and Entertainment Orders are shown as distinct classes. Subclassing or a more intricate association structure would be needed to model these subtleties, which could clog the diagram.

2. Many-to-many relationships, such as between **entertainers** and **pizza restaurants**, or between **hungry customers** and **orders**, are often easy to represent with **EER** diagrams using **junction tables**

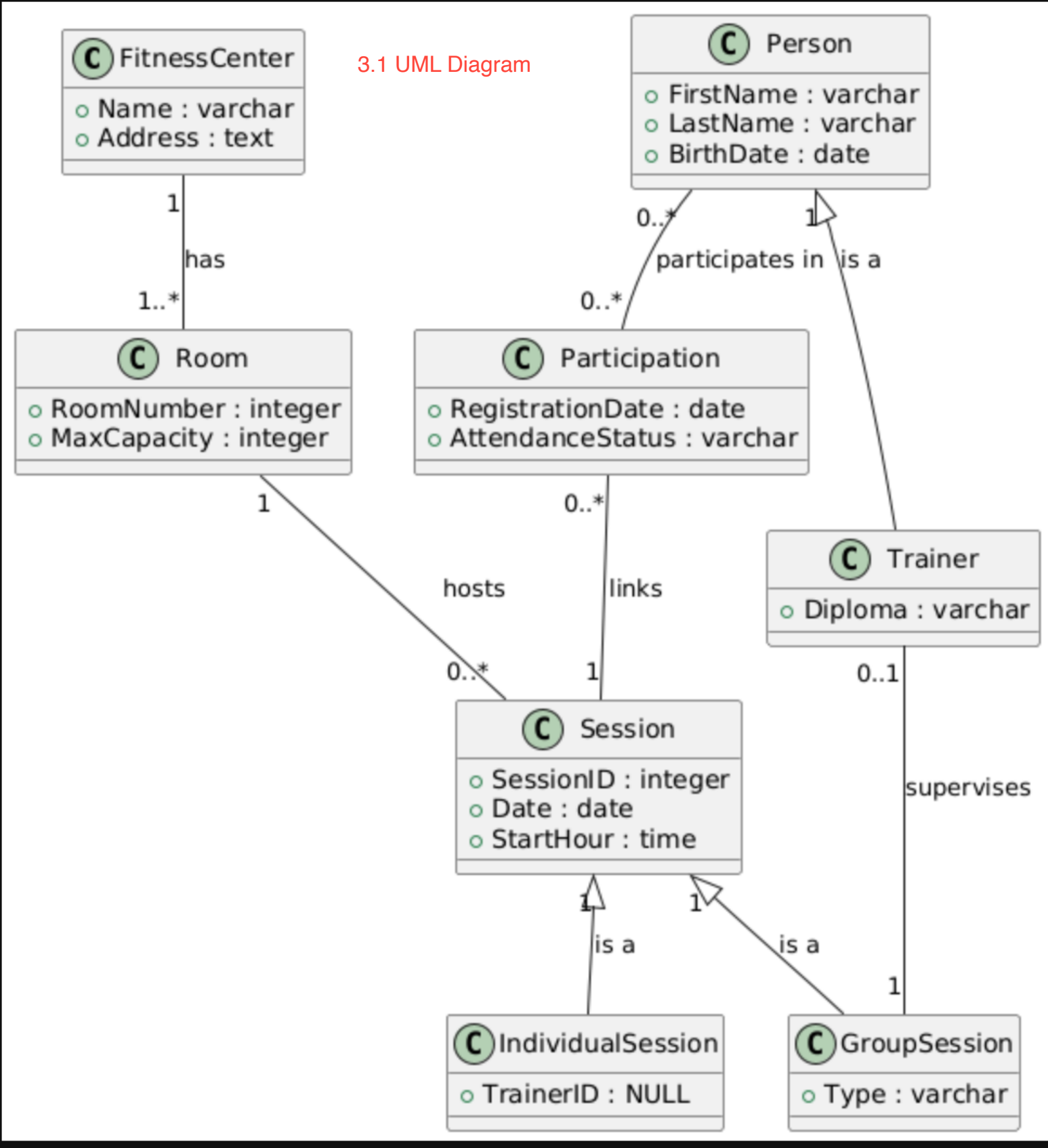
Question :4

2) How would your design change if each drug must be sold at a fixed price by all pharmacies?

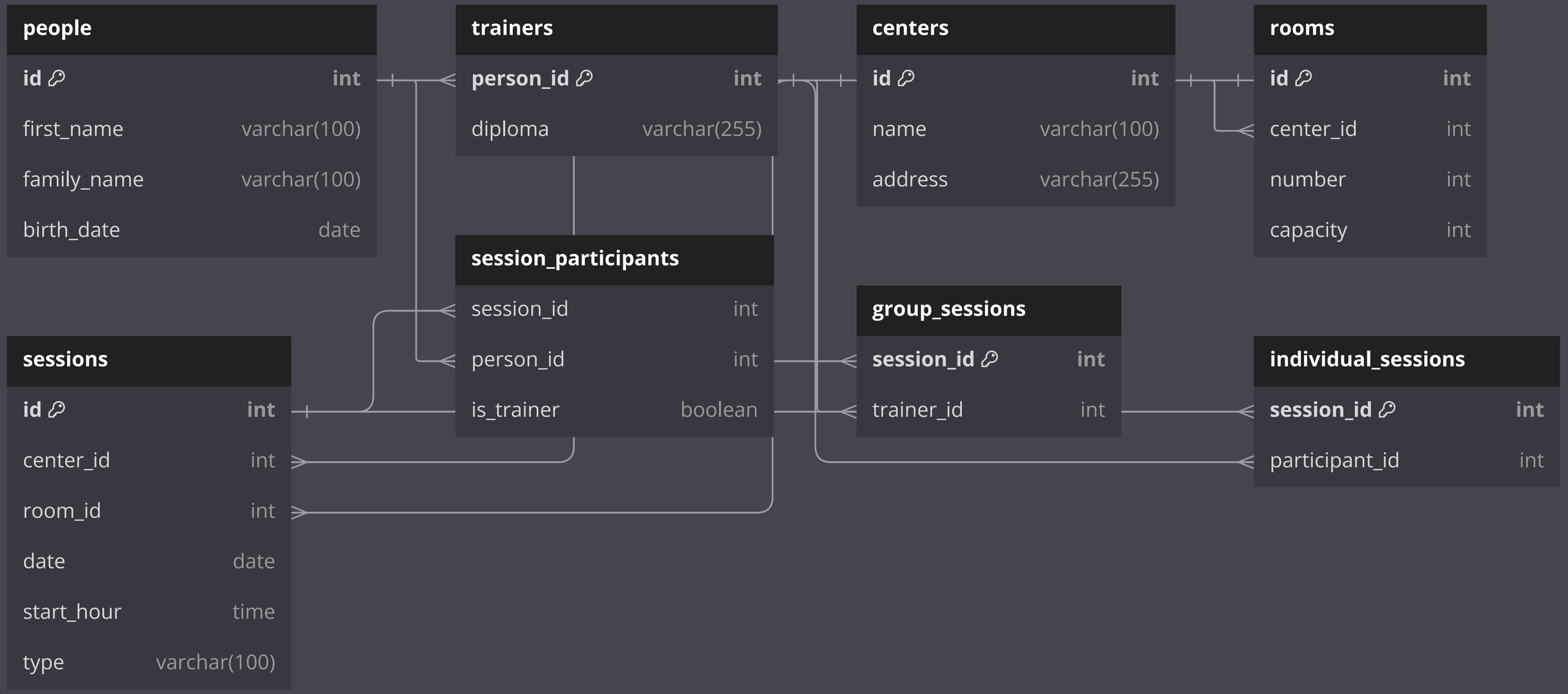
There is no longer a need to keep record of each drug's pricing in the pharmacy-drug connection because the prices are set consistently across all pharmacies. In the Pharmacy-Drug relationship, the Price attribute would be removed.

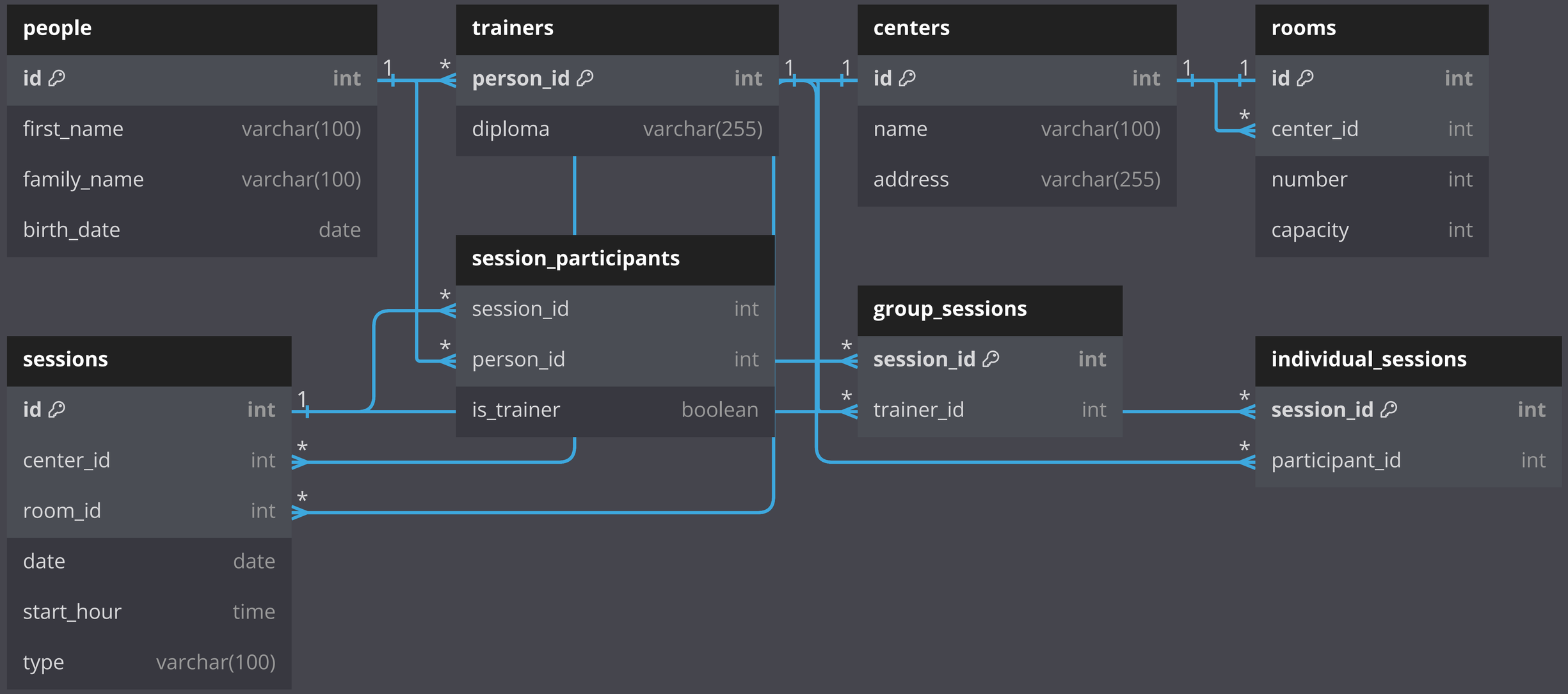
Instead of assigning a price to every Pharmacy-medicine combination, the medicine's price would be stored by the drug entity itself. In this manner, the price of each drug will be set and consistent for all pharmacies.

3.1 UML Diagram

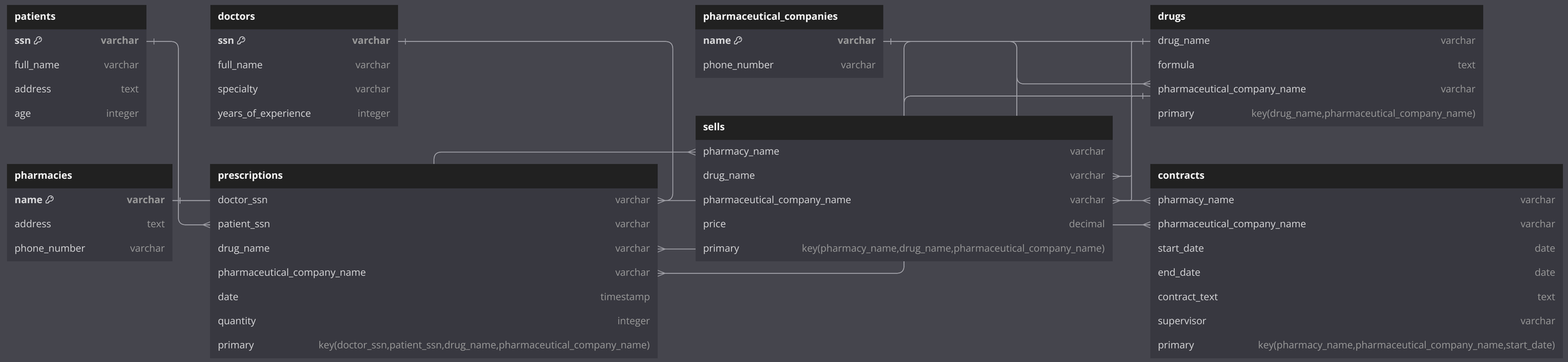


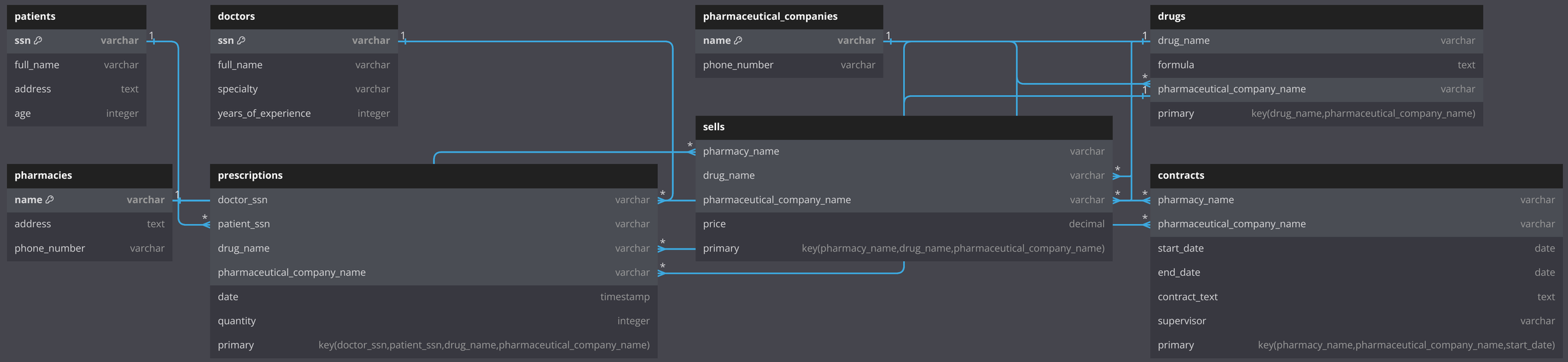
3.1E EER MODEL





Assignment 4 EER model





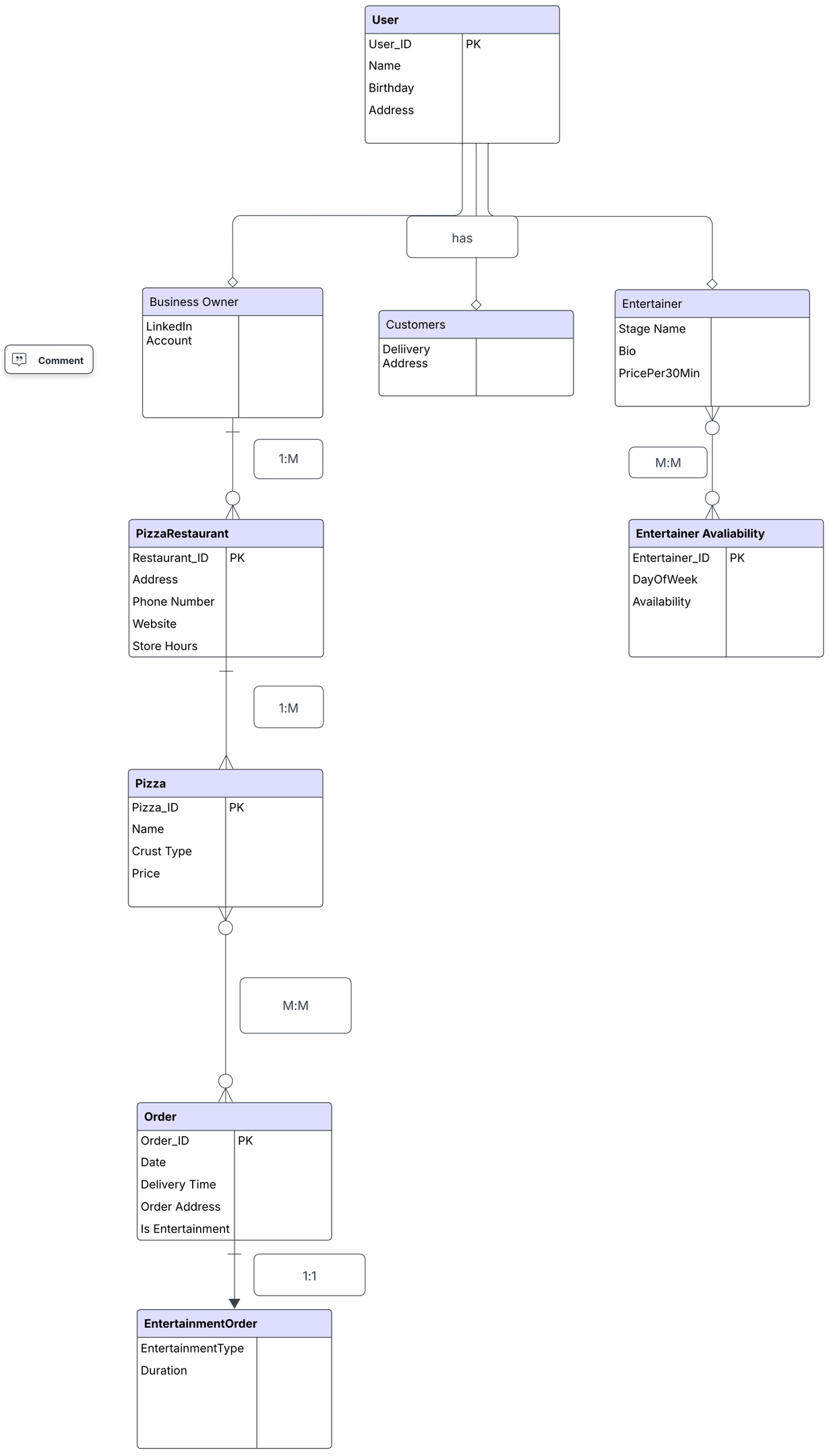
3.3E EER Model

Entity relationship diagrams

Entity-relationship diagrams (ERD) are essential to modeling databases. Learn about ER diagram symbols and notation here.

Lucidchart basics

Comment



3.3 E UML diagram