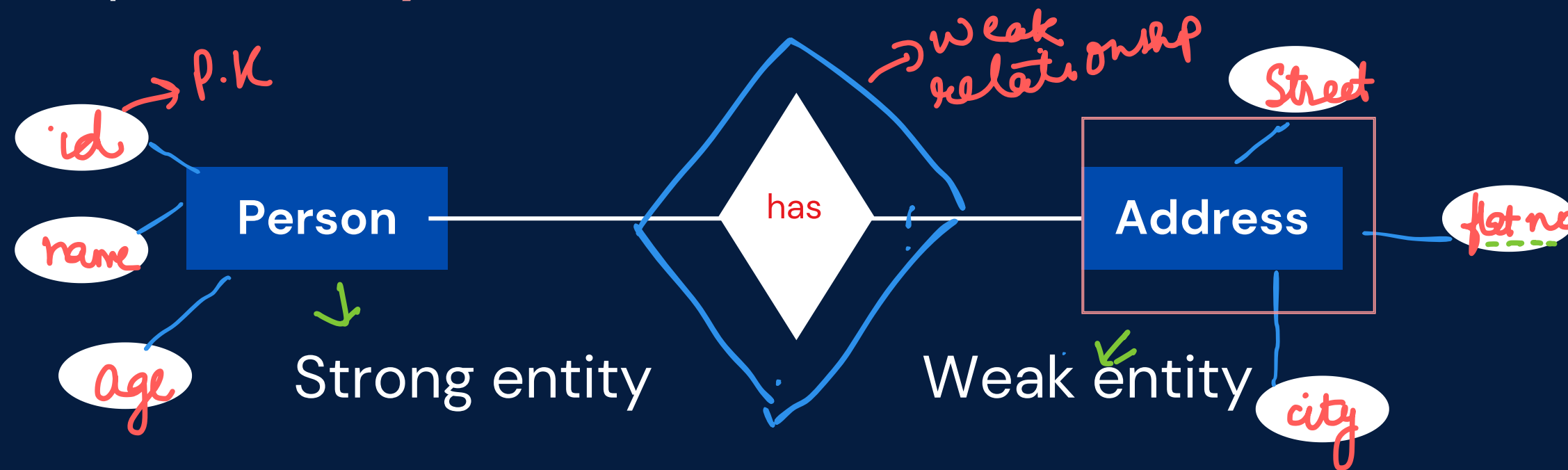


CONVERT AN ER MODEL TO RELATIONAL MODEL

Converting an Entity–Relationship (ER) model to a relational model involves several steps:

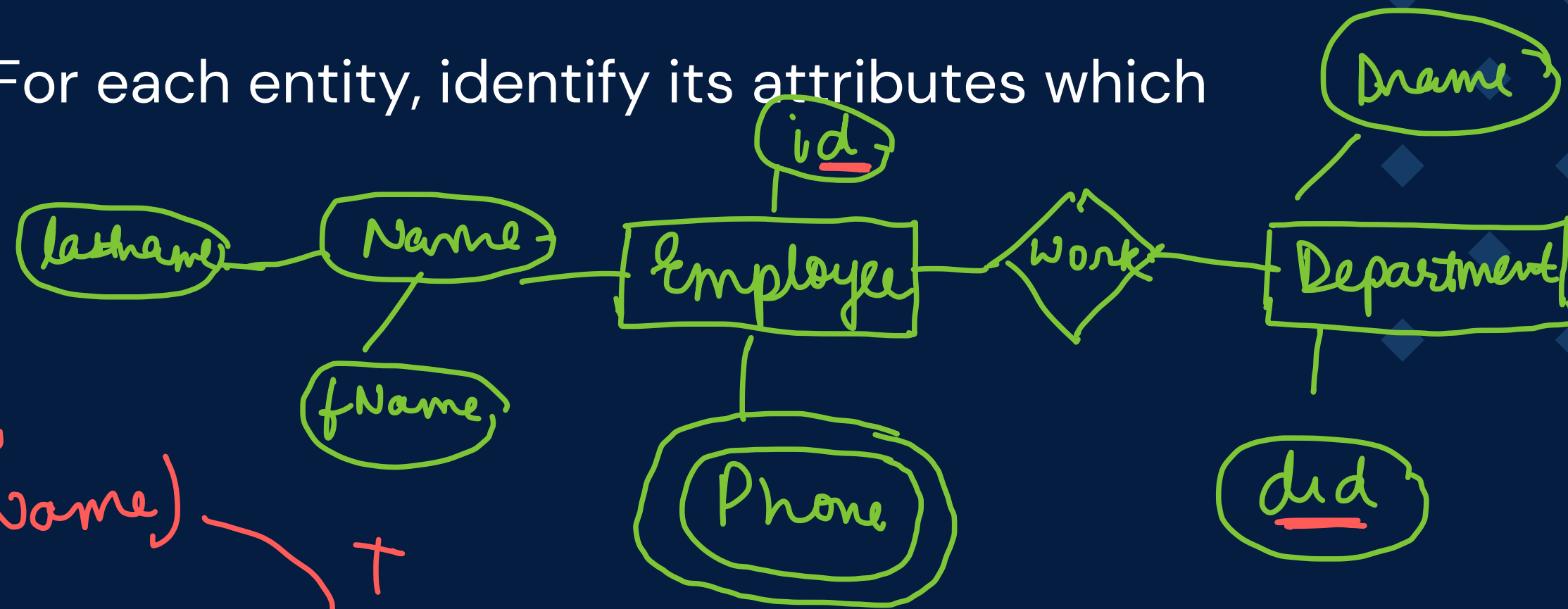
Step 1: **Identify the entities** – List down all the entities like strong and weak.



1. Person (id, name , age) → id (p.k)
2. Address (id , flatno, street, city) → id+flatno (p.k) , id (f.k)

CONVERT AN ER MODEL TO RELATIONAL MODEL

Step 2: **Identify the attributes** – For each entity, identify its attributes which becomes a column in the table.



Multivalued attribute

1. Employee \rightarrow (id(P.K), {fname, lastname})

Composite attribute

1. Employee \rightarrow (id(P.K), PhoneNew)
new table

CONVERT AN ER MODEL TO RELATIONAL MODEL

Step 3: **Key selection** – Choose the primary key for each table, for some it can be in form of composite key (Weak entity)

Step 4: **If entities have relationship break it down and then reduce the tables if possible.**

1. 1-1 Relationship : 2 tables , P.K can lie on any side
2. 1-Many Relationship : 2 tables , P.K can lie on many side
3. Many -1 relationship : 2 tables , P.K can lie on many side
4. Many-Many relationship : 3 tables , P.K lie in the relation table having pk from both the table acting as fk

CONVERT AN ER MODEL TO RELATIONAL MODEL

Step 3: Key selection – Choose the primary key for each table, for some it can be in form of composite key (Weak entity)

