Final Evaluation Topic 2 (Weighs 70% of the topic)

First exercise. (75% of control)

We want to design a database to store and manage information about a marriage agency. Starting from the E/R diagram (At the end of the exercise), you must make the corresponding relational diagram.

The agency has a list of the agency's clients, people who are looking or have looked for a partner through appointments arranged by the agency. Of the people we only have an identifier, name, surname, location and tastes (these last two are missing from the diagram, but must be entered).

If a registered client is not currently looking for a partner (because they are not a client, because they currently have a partner, because they are stressed from so many dates, etc.) this situation must be monitored.

The agency has several employees throughout the country. For everyone currently working, you have an identifier, name and surname. It is interesting to know which ones administrative and which ones are mediators or matchmakers. Of the administrative ones, we have their discharge date and studies. The mediators have a level of 1 to 5 depending on the number of successful appointments in which they have mediated.

For all scheduled appointments, there must be a record of the date of the appointment, the mediator who arranged it, and the people who are attending the appointment . If after a first date, you meet several times, that is not recorded.

It cannot happen that two same people have more than one scheduled appointment. Even if a lot of time passes, a mediator could never make an appointment between two people who have already met for a long time (let them settle between them, who already know each other).

The agency wants to know how many appointments have led to marriages since this represents management quality for the agency and raises the level of mediators who arrange a greater number of appointments that lead to marriages. Only marriages originating from agency appointments are registered and their dates are available.

A person can have dates with several people (not at the same time. Several marriages can be registered for the same person because they have divorced and have returned to the agency to look for a partner (rare but possible).

Entity relationship diagram
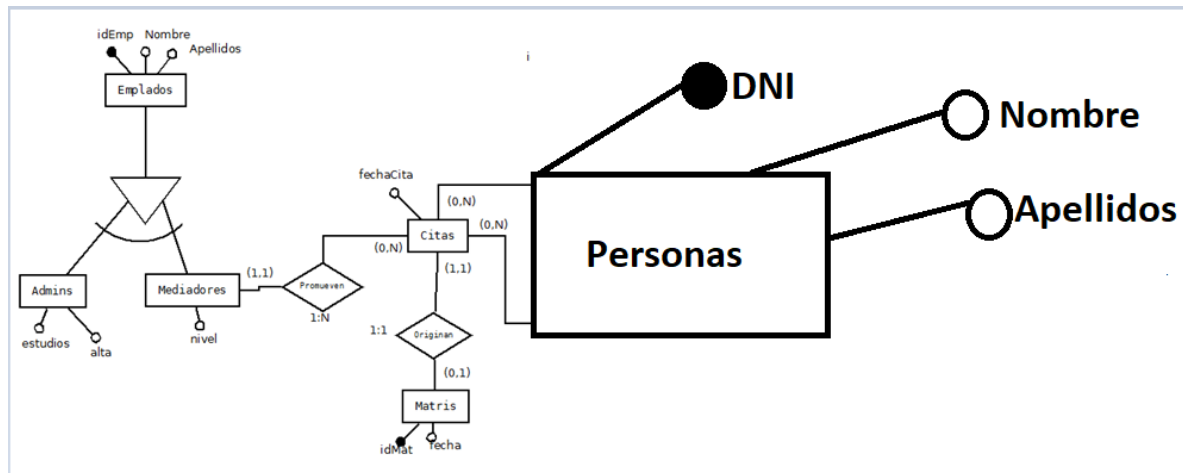
Aitor's Answer
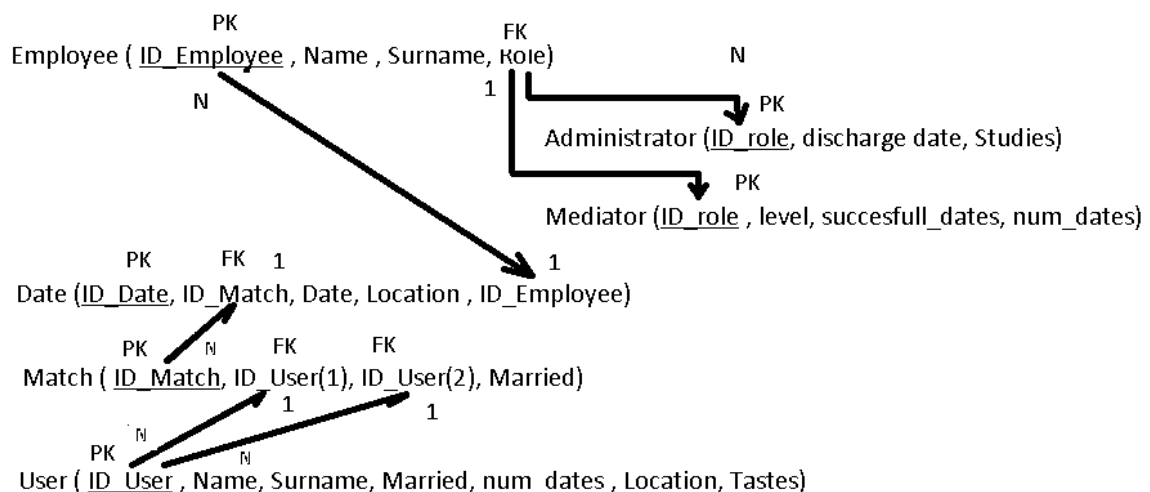
2nd Exercise (25% of the control)

The following table is not in 1NF.

Create a relational graph in which the resulting tables are in 3rd FN.

pet_id	pet_name	Species	Age	Owner	Date	Treatment
246	ROVER	DOG	12	SAM COOK	1/13/2002 3/27/2002 4/2/2002	Rabies vaccination Routine exam Worm test
298	SPOT	DOG	2	TERRY KIM	1/21/2002 3/10/2002	Tetanus vaccination Worm test
341	MORRIS	CAT	4	SAM COOK	1/23/2001 1/23/2002	Rabies vaccination Rabies vaccination
519	TWEEDY	BIRD	2	TERRY KIM	4/30/2002 4/30/2002	Annual check up eye cleaning

Aitor's Answer

==Yellow== been the Primary Key

ID_ap	Date	ID_pet	ID_Treat
1	1/23/2001	341	1
2	1/13/2002	246	1
3	1/21/2002	298	4
4	1/23/2002	341	1
5	03/10/2002	298	3
6	3/27/2002	246	2
7	04/02/2002	246	3
8	4/30/2002	519	5
9	4/30/2002	519	6

ID_treat	Treatment
1	Rabies vaccination
2	Routine exam
3	Worm test
4	Tetanus vaccination
5	Annual check up
6	eye cleaning

ID_Pet	ID_Species	Pet_Name	Age	Owner
246	1	ROVER	12	SAM COOK
298	1	SPOT	2	TERRY KIM
341	2	MORRIS	4	SAM COOK
519	3	TWEEDY	2	TERRY KIM

ID_species	Name
1	Dog
2	Cat
3	Bird