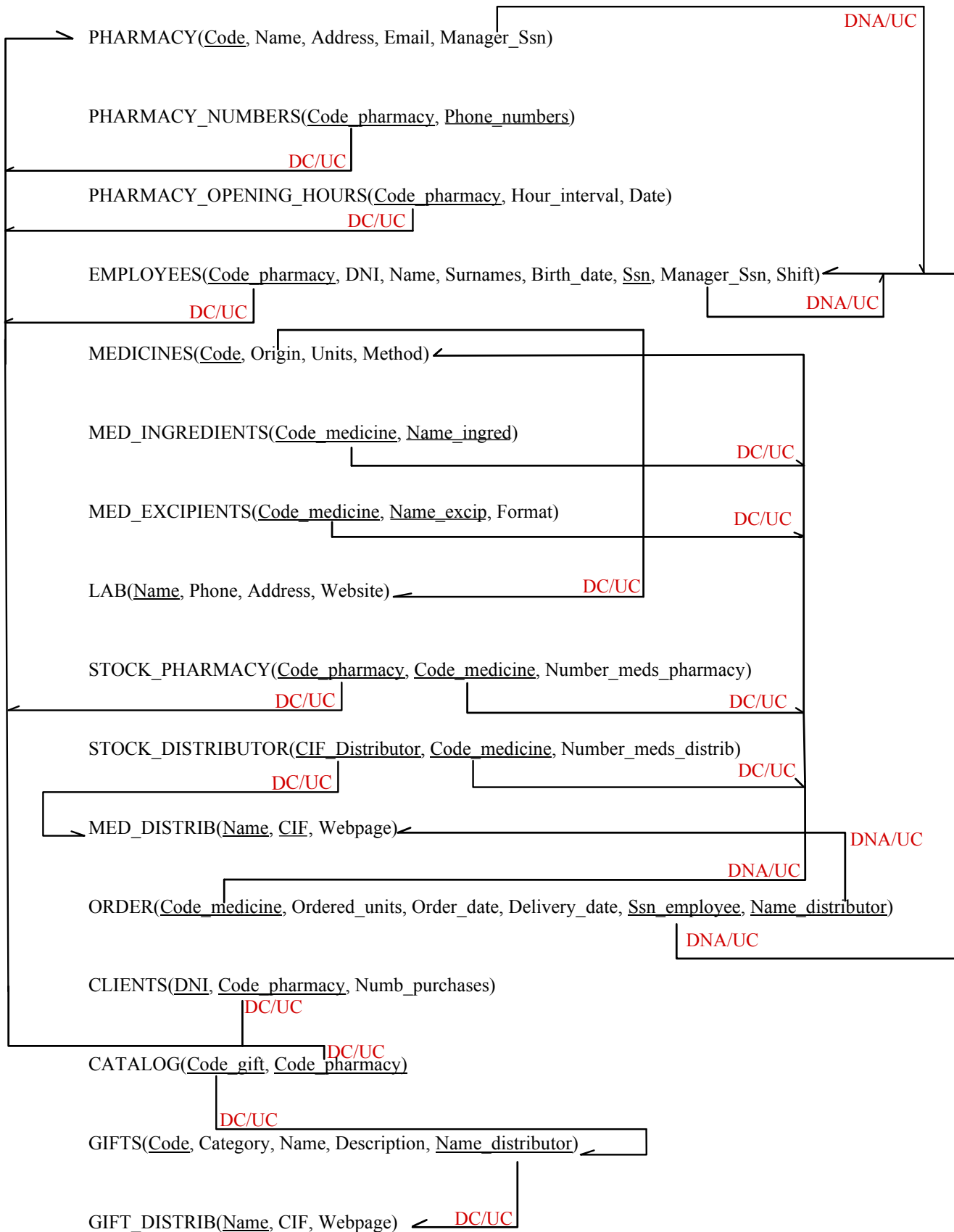


1. RELATIONAL DIAGRAM



2. ASSUMPTIONS

a) ADDITIONAL SEMANTIC ASSUMPTIONS TO THE STATEMENT.

PHARMACY:

- It is assumed that none of the pharmacies share the same name.
- It is assumed that a pharmacy has only one manager.

PHARMACY_NUMBERS:

- It is assumed that a pharmacy may have more than one phone number.

PHARMACY_OPENING_HOURS:

- The key Hour_interval was created to control the shifts that will be needed to properly match the opening hours of the pharmacy. For example, if the hour interval is 09:00 – 13:00, then it will be known that at least one person with the morning shift is needed. Moreover, if the hour interval is 09:00 – 20:00, at least two persons will be needed: one with the morning shift, and another one with the afternoon shift.
- The key Date in the relation PHARMACY_OPENING_HOURS was included because holidays were considered.
- It is assumed that every shift will be covered by an available employee so that the pharmacy opening hours are covered.

EMPLOYEES:

- It is assumed that one person works uniquely in one pharmacy.

MEDICINES:

- When a medicine is sold under the name of its active ingredient, it is called a generic medication.

LAB:

- When a laboratory is removed from the database, all the medications it provides are also to be removed.

STOCK_PHARMACY:

- When there are less than 3 units left of medication, the pharmacy must order more of said medication from the distributor.

STOCK_DISTRIBUTOR:

- Once the pharmacy receives the order, the number of ordered units will be subtracted from the STOCK_DISTRIBUTOR.Number_meds_distributor. Similarly, the number of medicines from the pharmacy's stock will increase by the ordered units.

MED_DISTRIB:

- Distributors cannot be removed from the database while orders from said distributor are pending.

ORDER:

- Employees may only place orders for medication when the distributor can deliver them within a maximum of two days.
- It is assumed that only managers can place orders.

CLIENTS

- Each client may decide to register or not. In case the decision of registering is taken, it is assumed that each pharmacy has a minimum number of purchases (determined by each pharmacy) so that the client may receive a gift. This is controlled by adding +1 to CLIENTS.Numb_purchases each time a client buys something in that specific pharmacy.
- Additionally, clients may be registered in more than one pharmacy. This implies that they may accumulate 'points' in different pharmacies, and therefore, receive gifts from these.

b) ADDITIONAL SEMANTIC ASSUMPTIONS TO THE SCHEMA.

- EMPLOYEES.Shift = {Morning, Afternoon}.
- MEDICINES.Origin = {Lab, Company, Active ingredient}.
- MEDICINES.Method = {Oral, Intravenous}.
- MED_EXCIPIENTS.Format = {Capsule, Tablet, Pill, Cream, Spray, Syrup}.