Course: 2022/2023

Data Base

Bachelor's in Data Science and Engineering, Dual Bachelor's in Data Science and Engineering and Telecommunication Technologies Engineering.

SUBJECT: Project 1 (Part 1: Design DB)

uc3m
Universidad Carlos III de Madrid

TITLE: Pharmacy

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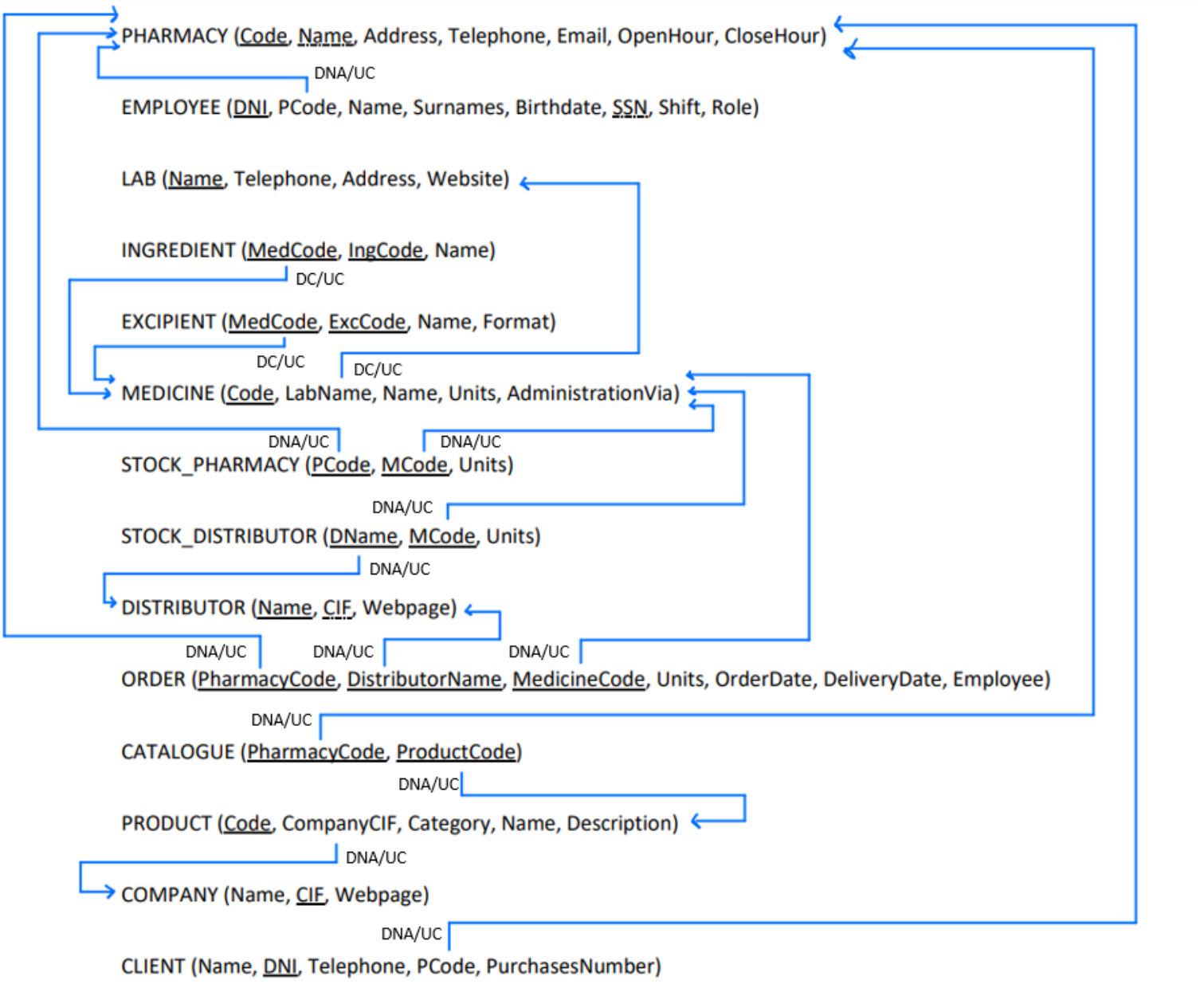
1.- Relational Diagram:



2.- Additional semantic assumptions to the statement:

- Name is an alternate key for a PHARMACY.
- EMPLOYEE is identified by a Code, and SSN as its alternate key.
- EMPLOYEE works for a single PHARMACY.
- Exactly one EMPLOYEE for each pharmacy has the role of Manager.
- Every MEDICINE has a laboratory assigned.
- INGREDIENT is identified by MedCode and IngCode.
- EXCIPIENT is identified by MedCode and ExcCode.
- CIF is an alternate key for a DISTRIBUTOR.
- ORDER is defined by PharmacyCode, DistributorName and MedicineCode.
- Each PHARMACY will register the info about clients with the purpose of giving gifts. The information collected of each client will be: Name, DNI (which identifies the client), phone number and number of purchases.
- COMPANY is identified by the CIF.

3.- Additional semantic assumptions to the schema:

- EMPLOYEE.Role = {Manager, Staff} (New roles can be added)
- EMPLOYEE.Shift = {Morning, Afternoon}
- The shifts will be organized so that there will always be at least one employee in a pharmacy.
- MEDICINE.AdministrationVia = {Oral, Intravenous}
- MEDICINE.Name is the name of the brand or the name of its active ingredient if it is a generic medication.
- EXCIPIENT.Format = {capsule, tablet, pill,cream, spray, syrup}
- When STOCK_PHARMACY.Units < 3 the pharmacy will place an order of said medication from the distributors.
- An ORDER is made of a unique type of medicine.
- Employees will only place orders for medication when the distributor guarantees delivery within a maximum of two days.
- Distributors won’t be removed from the database while orders from said distributor are still pending.
- When an ORDER is placed STOCK_DISTRIBUTOR.Units goes down by respective ORDER.Units
- When an ORDER is delivered STOCK_PHARMACY.Units goes up by respective ORDER.Units
- When a sale is made in the pharmacy STOCK_PHARMACY.Units goes down by the units respective to the sale.
- When a sale is made CLIENT.PurchasesNumber will go up respectively.