



Arab Academy for Science, Technology & Maritime Transport
College of Computing and Information Technology

Course: Database Systems / IS273

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Sheet: ERD design assignment

Date of submission: Saturday 10/4/2021

Below information gathered by system analyst for chains of pharmacies, to start implementing system you are required to design Entity Relationship Diagram (ERD) **Rough ERD** and **final ERD**:

Notes:

1. This assignment is an **individual assignment**.
2. Any two duplicate assignments will be graded **ZERO** (don't copy from internet or another student)
3. Your answer **should be clear** (any unclear answers will be ungraded)
4. Any assignment submitted after deadline **will not be graded**

Submit your solution in a PDF format on Moodle (using an online ERD tool or handwritten)

- Patients are identified by an SSN, and their names, addresses, and ages must be recorded.
- Doctors are identified by an SSN. For each doctor, the name, specialty, and years of experience must be recorded.
- Each pharmaceutical company is identified by name and has a phone number.
- For each drug, the trade name and formula must be recorded. Each drug is sold by a given pharmaceutical company, and the trade name identifies a drug uniquely from among the products of that company. If a pharmaceutical company is deleted, you need not keep track of its products any longer.
- Each pharmacy has a name, address, and phone number.
- Every patient has a primary physician. Every doctor has at least one patient.
- Each pharmacy sells several drugs and has a price for each. A drug could be sold at several pharmacies, and the price could vary from one pharmacy to another.
- Doctors prescribe drugs for patients. A doctor could prescribe one or more drugs for several patients, and a patient could obtain prescriptions from several doctors. Each prescription has a date and a quantity associated with it. You can assume that if a doctor prescribes the same drug for the same patient more than once, only the last such prescription needs to be stored.
- Pharmaceutical companies have long-term contracts with pharmacies. A pharmaceutical company can contract with several pharmacies, and a pharmacy can contract with several pharmaceutical companies. For each contract, you have to store a start date, an end date, and the text of the contract.
- Pharmacies appoint a supervisor for each contract. There must always be a supervisor for each contract, but the contract supervisor can change over the lifetime of the contract.