Requirements for the drug dispensing tool:

I. Patients are identified by SSN, and their names, addresses, and ages.

ii. Doctors are identified by an SSN, for each doctor, the name, specialty, and years.

of experience must be recorded.

iii. Each pharmaceutical company is identified by name and has a phone number.

iv. For each drug, the trade name and formula must be reordered. 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.

v. Each pharmacy has a name, address, and phone number.

vi. Every patient has a primary physician. Every doctor has at least one patient.

vii. 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.

viii. 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.

ix. Pharmaceutical companies have long-term contracts with pharmacies. A

pharmaceutical company can contract with several pharmaceutical companies.

For each contract, you must store a start date, and end date, and the text of the

contract.

x. Pharmacies appoint a supervisor for each contract. There must always a supervisor

for each contract

Other requirements:

1. Each prescription must be tracked and stored, including the date it was filled, the quantity dispensed, and the pharmacy that filled it.

2. The tool should keep track of any adverse reactions or side effects experienced by patients while taking a particular drug. This information can be reported by doctors, pharmacists, or patients themselves.

3. The tool should provide alerts to pharmacists and doctors when a patient is prescribed a drug that may interact negatively with another drug they are taking.

4. The tool should provide a mechanism for doctors and pharmacists to communicate with each other about a patient's prescriptions and medical history.

5. The tool should be able to generate reports on drug sales, inventory, and usage by pharmacy, doctor, and patient.

6. The tool should provide a mechanism for patients to view their prescription history, request refills, and communicate with their doctor and pharmacy.

7. The tool should comply with all relevant privacy and security regulations, including HIPAA and GDPR.

8. The tool should be easy to use and intuitive for doctors, pharmacists, and patients of all skill levels.

9. The tool should be accessible from multiple devices and platforms, including desktop computers, smartphones, and tablets.

10. Patients should be able to book a physical consultation or an online consultation with a doctor

11.Patients can choose a pharmacy based on their location.

12. The tool should have a mechanism to flag and prevent prescription abuse or fraud, such as if a patient tries to obtain multiple prescriptions for the same drug from different doctors or pharmacies.

13. The tool should provide information on drug interactions and potential side effects to doctors and pharmacists.

14. The tool should be able to integrate with electronic health records (EHRs) and other healthcare systems to provide a complete picture of a patient's medical history.

15. The tool should have built-in safeguards to prevent errors, such as flagging potential drug dosage errors or medication allergies.

16. The tool should allow for automatic medication reminders for patients, such as when to take medication and how much to take.

17. The tool should have a mechanism for tracking inventory and expiration dates of drugs to prevent dispensing of expired or unusable medications.

18. The tool should have a reporting mechanism for adverse events related to medication use, such as medication errors, adverse drug reactions, or medication-related injuries.

19.Supervisors are identified by SSN, names, addresses and associated pharmacy.