

# UML Guide

1. **Interface iCRUD:** the interface class is dependent on the user because the user is a hierarchy class of all user types (admin, patient, doctor, staff), and users are allowed to have CRUD responsibilities.
2. **Users:** they are dependent on audit logs so that they can see actions done throughout the clinic. The user is also a generalization of all user types.
3. **Patients:** they have an association to prescriptions because they receive them from doctors, who they also have an association with as well as a relationship with appointments. Patients are also a composition of medical history because it's entirely reliant on the patient's history at the clinic.
4. **Doctors:** they are an aggregation of prescriptions, because the prescription relies on several functions done by the doctor. Doctors are also a generalization of doctor types. Appointments are dependent on doctors. Staff can help a doctor so they naturally have an association together.
5. **Staff:** can manage appointments, storage and help doctors so they have an association together.
6. **Admin:** descends from users but an admin can view, add and delete users from the system, regardless of types.
7. **DoctorType:** generalizes from doctors due to be specializations of them in the clinic.
8. **Appointments:** they have a dependency on users and doctors and an association with staff who manage them.
9. **MedicalHistory:** can be viewed by doctors so they have an association and are the history of patients.
10. **Medication:** associates with prescriptions, and they have an aggregative relationship with storage because they rely on a lot from it and are all stored there.
11. **Prescription:** relies on medication because it's made up of it and aggregates on doctor's because it relies heavily on several functions from them.
12. **Storage:** is managed by staff and only specified doctors can access specific medicines from the storage. Storage also has a dependency on audit logs since stock levels get recorded there.
13. **AuditLogs:** are dependent from users who want to access records in the clinic and storage when stock levels change.