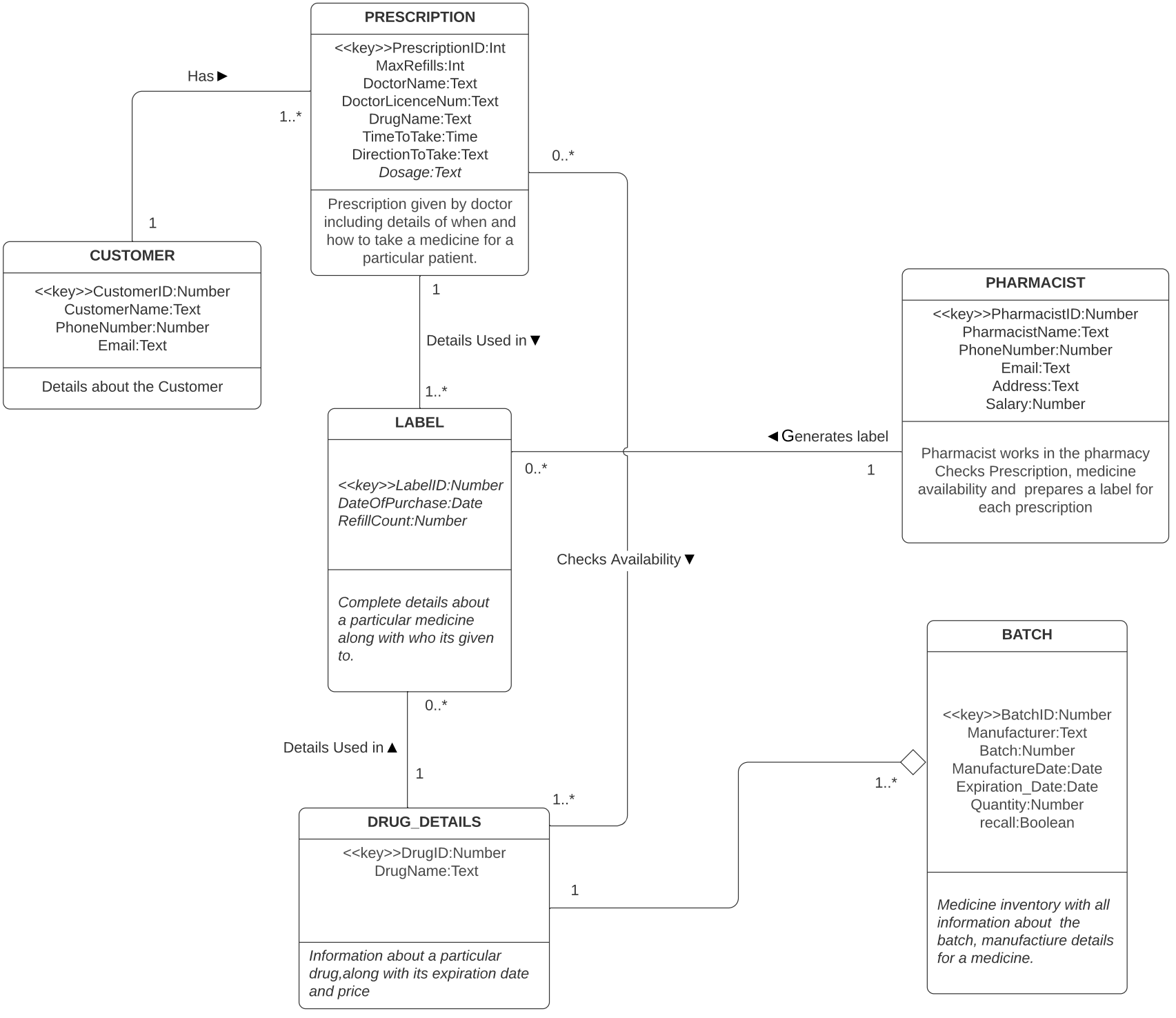
Pharmacy Managment UML Diagram



General Assumption:

The UML diagram is a model for the Pharmacy, hence no database is maintained for details about the diagnosis, tests conducted in my diagram. The information about doctor name and a doctor license are maintained as attributed in the prescription

Assumptions about each entity and its associations:

1)Customer -

- Customer entity stores details of the Patient. No other customer can take medicine on behalf of a patient.
- Its assumed that a patient has phone number, email to reach out to them if needed.
- Customer has one or more prescription, it's assumed that the customer must have a prescription to be able to purchase any drugs.

2)Prescription

- Has Prescription ID which is unique and helps in identifying the patient details, Doctor name, Doctor license, Drugs prescribed(can be more than 1), Maximum refills of a drug(unique for each drug), time and directions to use, and the dosage of the drug.
- A prescription is given to only one customer.
- Information from the prescription is used to create one or more labels.
- Prescription is used to check if the drugs mentioned in the prescription are available.
- It checks if one or more medicines in the prescription are available

2) Pharmacist-

- Assumed that a pharmacist has phone number, email and address details maintained. Even salary of each pharmacist is maintained.
- A pharmacist can generate zero or more labels.
- A label is generated by only one pharmacist.

3)Drug details-

- Stores the drug details (e.g. Crocin, DrugID-002)
- A drug can be part of one or more batches, (Crocin can be part of batch01 and batch02). Information about a drug is used for creating a label.
- Details of a drug can be used in zero or more labels, but a label can have information of only one drug.
- A drug from the pharmacy stock may or may not be in the prescription which contains details of the prescribed drug

5)Batch Details

- Stores details about batch of each drug, manufacturer details along with the manufacture and expiration date and also the quantity available for each batch is maintained.
  E.g. Batch01 by manufacturer XYZ has 30 Crocin tablets.
- Recall information is maintained to ensure the medicine is removed or not provided to patients if recalled.
- A single batch can have only one drug. (Batch01 by manufacturer XYZ has only 30 Crocin tablets. It cannot have two different drugs.

6)Label

- Contains information about the date of purchase, Label ID and refill count
- Refill count is used to keep track so that medicine is not provided more than the number of maximum refills mentioned in the prescription.
- Captures information from the prescription and medicine details.
- A label can be created for only one prescription and one medicine.