

## CS3431 Project

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### Part 2 Triggers:

The trigger called `mustComment` checks to see if a patient is admitted to the ICU. If they are, the doctor MUST leave a comment, otherwise the application throws an error. The trigger checks before an insert into the `Examine` table, and runs for each row since we need access to the `:new` variable.

The trigger `updateInsurancePayment` updates the `insurancePayment` in `Admission` table anytime the `totalPayment` changes. It is calculated as 65% of the `totalPayment`. It is run before an insert or update on `Admission`, and runs for each row.

The trigger `employeeSupervisors` checks to see that every regular employee (rank 0) has a supervisor with rank 1, every division manager (rank 1) has a supervisor of rank 2, and every general manager (rank 2) does not have a supervisor. It runs before any insert or update on `Employee` and runs for each row.

The trigger `emergencyFutureVisit` automatically sets the `futureVisit` date in `Admission` to 2 months in the future anytime someone is admitted to the emergency room. It runs after an insert to `StayIn` for each row.

The trigger `equipmentTypeYear` makes sure that any CT-scanner or ultrasound machine was purchased after 2006. This happens before an insert or update on `Equipment` for each row.

The trigger `leaveHospital` logs information about the patient after the `leaveDate` in `Admission` is updated. Its granularity is for each row.

### Assumptions

One assumption we make, especially for the last trigger, is that each `Admission` can only have one `Examination` (one `Doctor`). Anytime a `Patient` needs to see a different `Doctor` or be seen in a different `Room` in the "same" `Admission`, a new `Admission` must be created. This trigger and some of the Java code will not work as expected unless this assumption holds.