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Group 30

Project 3

Trigger Explanations

Q1. Any room in the hospital cannot offer more than three services

This was accomplished by having an AFTER trigger on INSERT or UPDATE on the RoomService table, which runs once per each statement.

Q2. The insurance payment should be calculated automatically as 70% of the total payment. If the total payment changes then the insurance amount should also change.

This was accomplished with a BEFORE trigger on INSERT or UPDATE on the Admission table, which runs once per each row.

Q3. Ensure that regular employees (with rank 0) must have their supervisors as division managers (with rank 1). Also each regular employee must have a supervisor at all times.

This was accomplished with a BEFORE trigger on INSERT or UPDATE on the Employee table, which runs once per each row.

Q4. Similarly, division managers (with rank 1) must have their supervisors as general managers (with rank 2). Division managers must have supervisors at all times.

This was accomplished the same was a part 3, with a BEFORE INSERT or UPDATE trigger on the Employee table that runs once per row.

Q5. When a patient is admitted to ICU room on date D, the futureVisitDate should be automatically set to 3 months after that date, i.e., D + 3 months. The futureVisitDate may be manually changed later, but when the ICU admission happens, the date should be set to default as mentioned above.

This was accomplished with a BEOFRE trigger on INSERT on the StayIn table, which runs once for each row.

Q6. If an equipment of type ‘MRI’, then the purchase year must be not null and after 2005.

This was accomplished with a BEFORE trigger on INSERT or UPDATE on the Equipment table, which runs once for each row.

Q7. When a patient is admitted to the hospital, i.e., a new record is inserted into the Admission table; the system should print out the names of the doctors who previously examined this patient (if any).

This was all done in the same BEFORE INSERT or UPDATE trigger on Admission for each row as number two. However, because this code is only to be run when a new row is inserted, all relevant code is inside a “IF inserting THEN” block, effectively making it only run on INSERT.