Assignment 9

Course- CS 548
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In this assignment, we will add use message oriented middleware to notify additional parts of the enterprise when new treatments are added, as a simple example of an event-driven architecture.

- We have two departments, Billing and Research which maintains their own databases. Billing Records contains the data of all the treatment billings whereas Research Records contains the data about the new drug treatments that are added to the database using curl commands. The Provider Service class contains is responsible for sending the message to these departments when the treatment is added.
- The message is published on the channel and the billing and research which are subscribed to this channel gets the message and adds the data to database if necessary.
- For any treatment added, billing record will be put into the billing record database.
- If the treatment is Drug Treatment Type, then the data will be put into the research database. This is possible because the research departments contain a listener class which only puts the data into the database if the message is of Drug Treatment Type.
- em.flush is called before the treatment dto object is passed to the message object class. This would help in to synchronize the billing table and to force the treatment dto object to generate a primary key before the object is passed.
- JMS Treatment Pool Name- jms/TreatmentPool
- JMS Resource Name- jmsTreatment
- For curl commands, two commands are executed, first one is adding a drug treatment for a patient and second command adds a surgery type treatment. When drug treatment is added, the data is added into both billing record and research databases. When the surgery treatment is added, it is only added into billing record database. Since research message listener class is not listening to the treatments other than drug treatment types, surgery treatment is not added into research databases.

In this submission zip archive-
In the root folder, there is README.pdf, Project folder, ClinicApp.ear and video file that demonstrates the testing.