Github: https://github.com/yuanzhe-jasper/CS6650/tree/main/hw3

Overall: My design for assignment3 include a new servlet(FeedbackServlet), RabbitMQ for message queuing and a consumer service for database operations. The database is MySQL from AWS.

Process: The servlet works as a producer to send messages to RabbitMQ. The rabbitMQ then queues the message and the message will be consumed by consumer service. The database operations will be finished after retrieving the data from message.

Structure:

(a) New Servlet(FeedbackServlet)

　　　Function:

　　　　　　1. Make post request for reactions(Likes or Dislikes).

　　　　　　2.Retrieve albumId and reaction from request and transform the data into json string and sends it to RabbitMQ

(b) RabbitMQ

　　　Function:

　　　　　　1.Keep messages in the queue and send the messages to consumer for processing

(c) Consumer Service**:**

　　　Function:

　　　　　　1.Create multiple consumer threads to deal with messages from RabbitMQ.

　　　　　　2.Process each message and save data in database

Screenshots:

　　　　　Screenshots are stored in repo.