Q7.

In order to exchange information between Application 1 and Application 2, we can use the Publisher-Subscriber model to exchange information indirectly between applications using a Broker. In this model, Application 2 is the Publisher that publishes status information to the Broker using a queue, and Application 1 is the Subscriber that can de-queue this status information from the Broker to get updates on Application 2 and issue the update to the UI. Also, to maintain synchronization, the Broker should be locked by either Application when it needs to access the queue.