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Message Queue\_Guideline

NashTech Software Development

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* **Learning Source**:

|  |  |
| --- | --- |
| **Source** | **Content** |
| **Slide** | HNVN\_TR\_02241\_MessageQueue\_Presentation.pptx |
| **Link** | * <https://dzone.com/articles/the-developers-guide-to-collections-queues> * <https://dzone.com/articles/comparing-publish-subscribe-messaging-and-message> * <https://dzone.com/articles/you-probably-dont-need> * <https://dzone.com/articles/java-message-system-introduction>   ***Notes: Please read and focus on these point:***   * *When we use Message Queue* * *Can we migrate from Request - Response System to Message Queue system?* * *Pros/Con of Message Queue* * *Message Queue in MicroService, How?* |

* **Learning Schedule:**

|  |  |  |
| --- | --- | --- |
| **Session** | **Duration** | **Date** |
| Workshop | 2.5hrs | 11 Jul |
| Assignment | 10 days | 11- 23 Jul |
| Review Assignment | 2hrs | 26 Jul |

* **Assignment:**
* Assignment would require training team and trainees to prepare and perform

1. *Use RabbitMQ, Solve this problem: "EU has approved* ***General Data Protection Regulation*** *(GDPR). It mean all systems align GDPR must be implement many features. One of them is: provide the delete function to delete all datas relate to one user. Imagine, we have one applicate store user data on files, database, cloud storage and user data is very large, user cannot wait until system is completed. We must use message queue with 3 services with function delete files, delete databases, delete cloud storages. The problem is: the system monitor report that some time our service is hang up and must be restart, but we must to execute the delete request whatever."*
2. *Out of scope: implementation of delete function is already has, all libraries connect to database, files, cloud storage is already have*

*In scope: demo just simulate request of user by send the message with the text "delete data A". All services must be print out "received and delete data A". If we send two request, we must print out 2 message for each services whatever service is available at the time or not, it mean when we restart service, message must be print out.*

*If some services stopped forever, we want to know what message didn’t delivery.*

* **Functional Requirement:**

For easier to grade examination. Please hard code some items below:

Message for send out: “delete data [%s]” — %s will input from command line

Message print out : “received and delete data [%s]”

Steps to do examination:

* + 1. Start docker: <https://docs.docker.com/samples/library/rabbitmq/>
    2. Config port: 5672 (hard code for easier to grade)
    3. Write producer to send out message “delete data [%s]”.
    4. Write 3 consumers to received and print out message “received and delete data [%s]”
    5. Producers and consumers are packaged in “jar” format and must run from command line
    6. Write one service to list out all messages cannot delivered. (jar package)