System Integration Mini Project 3

Message Brokers and Data Streaming Applications

Assignment

Objectives

This assignment engages you with design and development of microservices-based application that can collect, process, and analyze streaming data in real time.

Task

For fulfilling the task, you need to go into a role of a developer from the company's supply-chain management team.

Supply-Chain Management system is a kind of business software that enables the organisations to automate and administer their interactions with the suppliers and warehouses, among others.

A typical SCM system has variety of business functions, but your team is responsible for avoiding shortage of supplies, overloading the inventories' capacity, and order-fulfilment delays.

In particular, you will be developing and operating channels for collecting, processing, and analyzing streams of data from or about the supplies (such as capturing purchase history, keeping track on resources availability, delivery time and expenses.

Requirements

Your system should be accessible, reliable, and beneficial for both the suppliers and the company employees.

You are expected to implement microservices architecture and event-driven communication between the services over scalable messaging platforms.

The rest of the requirements are subject of your own team's decisions.

Notes

This mini project is graded with 15 study points. Peer reviews of other teams' projects bring additional 5 study points.

You may integrate your solution or parts of it in your exam project.