

# MSDS442

## Project – Phase 2

### Submission:

Submit your Project-Phase 2 as a SINGLE ZIP file on Canvas by the due date.

Your submitted ZIP file must have the name:

Project\_Phase\_2\_Your\_LastName.zip

### Deliverables:

Your ZIP file for the exercise submission must include the following:

- All source code that you wrote, compiled and built on your personal computer.
- Panopto video recording of a live run of your code on your personal development computer.

## Requirements specification:

Use **Kafka** and **Java** to implement the following requirements based on the requirements specification and architecture document for the OnMart Superstore real-time data streaming application that you reviewed in Phase 1:

1. Use Kafka to build the Mock Data Producer.
2. Generate real-time transactions at a rate of 10 transactions/second
3. Real-time transactions must be generated randomly; random products from different departments for customer deliveries in different zip codes.
4. Delivery zip codes picked randomly from the pool of zip codes for the logistic and supplychain network
5. Warehouse and distribution center responsible for purchase delivery
6. Random ratings for products purchased.
7. Random number of returned purchases.
8. Random number of delayed deliveries
9. Random number of friends for customers
10. Write the real-time generated transactions into the PurchasesLog.csv file