It’s a maven based scala application. Two objects are developed, Producer and consumer.

For each object, the properties file is used where all the Kafka properties are stored. Thy are available in the resources directory. The flow is as below:

Producer

Consumer

Consumer Properties

Producer Properties

DockerFile and Docker-Compose files are available in the root directory of the folder.

The docker-compose can be built using the below command:

docker-compose up -d

The docker file is provisioning the java env in the container first and then it is moving the jar to /usr/app directory.

Then it will execute the jar with input parameter as Producer and producer will start.

After that, the second build will get triggered and the consumer will start with the input parameter consumer.

The Dockerfile can be started in current directory with command.

docker build .

I have provided just one kafka broker for now but in the real time system, there should be multiple brokers and the replication factor should be more than one to achieve fault tolerance.