

# KAFKA Assignment

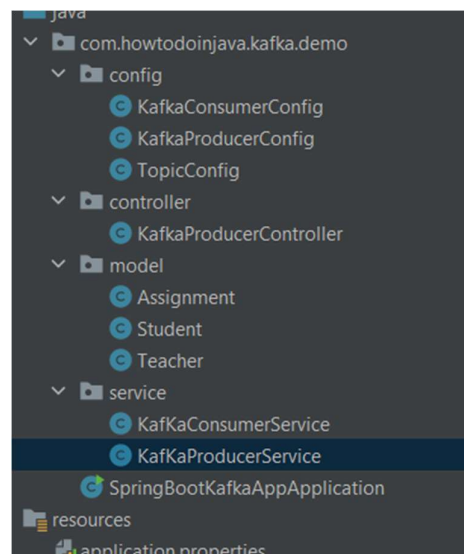
By Raj Vignesh Karunakaran

## 1. Started Kafka Zookeeper and Kafka Server in CMD

```
C:\App\kafka_2.12-2.7.0>zookeeper-server-start.bat config/zookeeper.properties
[2021-01-29 21:51:15,998] INFO Reading configuration from: config/zookeeper.properties (org.apache.zookeeper.server.quorum.QuorumPeerConfig)
[2021-01-29 21:51:16,002] WARN config/zookeeper.properties is relative. Prepend .\ to indicate that you're sure! (org.apache.zookeeper.server.quorum.QuorumPeerConfig)
[2021-01-29 21:51:16,014] INFO clientPortAddress is 0.0.0.0:2181 (org.apache.zookeeper.server.quorum.QuorumPeerConfig)
[2021-01-29 21:51:16,014] INFO secureClientPort is not set (org.apache.zookeeper.server.quorum.QuorumPeerConfig)
[2021-01-29 21:51:16,022] INFO autopurge.snapRetainCount set to 3 (org.apache.zookeeper.server.DataDirCleanupManager)
[2021-01-29 21:51:16,022] INFO autopurge.snapshotInterval set to 0 (org.apache.zookeeper.server.DataDirCleanupManager)

C:\App\kafka_2.12-2.7.0>kafka-server-start.bat config/server.properties
[2021-01-29 21:35:36,760] INFO Registered kafka:type=kafka.Log4jController MBean (kafka.utils.Log4jControllerRegistration$)
[2021-01-29 21:35:37,317] INFO Setting -D jdk.tls.rejectClientInitiatedRenegotiation=true to disable client-initiated TLS renegotiation (org.apache.zookeeper.common.X509Util)
[2021-01-29 21:35:37,384] INFO starting (kafka.server.KafkaServer)
[2021-01-29 21:35:37,385] INFO Connecting to zookeeper on localhost:2181 (kafka.server.KafkaServer)
[2021-01-29 21:35:37,404] INFO [ZooKeeperClient Kafka server] Initializing a new session to localhost:2181. (kafka.zookeeper.ZooKeeperClient)
[2021-01-29 21:35:37,409] INFO Client environment:zookeeper.version=3.5.8-f439ca583e70862c3068a1f2a7d4d068eec33315, built on 05/04/2020 15:53 GMT (org.apache.zookeeper.ZooKeeper)
[2021-01-29 21:35:37,410] INFO Client environment:host.name=LAPTOP-U11ADP50 (org.apache.zookeeper.ZooKeeper)
[2021-01-29 21:35:37,410] INFO Client environment:java.version=11.0.9.1 (org.apache.zookeeper.ZooKeeper)
[2021-01-29 21:35:37,410] INFO Client environment:java.vendor=AdontOpenJDK (org.apache.zookeeper.ZooKeeper)
```

## 2. Created Topic – Student, Teacher, Assignment in Kafka Spring Boot Application and Configured the Kafka Producer and Consumer.



```
22:16:11.607 [org.springframework.kafka.listener.endpoint.container#0-0-C-1] INFO o.s.k.c.c.i.ConsumerCoordinator - [Consumer clientId=consumer-group_id-2, groupId=group_id-2]
22:16:11.607 [org.springframework.kafka.listener.endpoint.container#2-0-C-1] INFO o.s.k.c.c.i.ConsumerCoordinator - [Consumer clientId=consumer-group_id-1, groupId=group_id-1]
22:16:11.607 [org.springframework.kafka.listener.endpoint.container#1-0-C-1] INFO o.s.k.c.c.i.ConsumerCoordinator - [Consumer clientId=consumer-group_id-3, groupId=group_id-3]
22:16:11.608 [org.springframework.kafka.listener.endpoint.container#1-0-C-1] INFO o.s.k.l.KafkaMessageListenerContainer - group_id: partitions assigned: [teacher-log-0]
22:16:11.608 [org.springframework.kafka.listener.endpoint.container#2-0-C-1] INFO o.s.k.l.KafkaMessageListenerContainer - group_id: partitions assigned: [student-log-0]
22:16:11.608 [org.springframework.kafka.listener.endpoint.container#0-0-C-1] INFO o.s.k.l.KafkaMessageListenerContainer - group_id: partitions assigned: [assignment-log-0]
```

Check GitHub For source code.

### 3. Updating Topics with POST request from postman.

#### a. STUDENT TOPIC

POST ▼ http://localhost:9000/kafka/createStudent?studentId=1&studentName=Raj Vignesh&studentStd=12th

Params ● Authorization Headers (7) Body Pre-request Script Tests Settings

|                                     | KEY         | VALUE       | DESCRIPTION |
|-------------------------------------|-------------|-------------|-------------|
| <input checked="" type="checkbox"/> | studentId   | 1           |             |
| <input checked="" type="checkbox"/> | studentName | Raj Vignesh |             |
| <input checked="" type="checkbox"/> | studentStd  | 12th        |             |
|                                     | Key         | Value       | Description |

```
[kafka-producer-network-thread | producer-1] INFO org.apache.kafka.clients.Metadata - [Producer clientId=producer-1] Cluster ID: hQqxc5VJQV6t0L6Un6fzbw
[kafka-producer-network-thread | producer-1] INFO c.h.k.d.service.KafkaProducerService - Student created: Student{StudentId=1, StudentName='Raj Vignesh', StudentStd='12th'} with
[org.springframework.kafka.KafkaListenerEndpointContainer#2-0-C-1] INFO c.h.k.d.service.KafkaConsumerService - Student created -> Student{StudentId=1, StudentName='Raj Vignesh', StudentStd='12th'}
```

#### b. TEACHER TOPIC

POST ▼ http://localhost:9000/kafka/createTeacher?teacherId=1&teacherName=JD&teacherDesg=Asst Prof

Params ● Authorization Headers (7) Body Pre-request Script Tests Settings

|                                     | KEY         | VALUE     | DESCRIPTION |
|-------------------------------------|-------------|-----------|-------------|
| <input checked="" type="checkbox"/> | teacherId   | 1         |             |
| <input checked="" type="checkbox"/> | teacherName | JD        |             |
| <input checked="" type="checkbox"/> | teacherDesg | Asst Prof |             |

```
work-thread | producer-2] INFO org.apache.kafka.clients.Metadata - [Producer clientId=producer-2] Cluster ID: hQqxc5VJQV6t0L6Un6fzbw
work-thread | producer-2] INFO c.h.k.d.service.KafkaProducerService - Teacher created: Teacher{TeacherId=1, TeacherName='JD', TeacherDesg='Asst Prof'} with
rk.kafka.KafkaListenerEndpointContainer#1-0-C-1] INFO c.h.k.d.service.KafkaConsumerService - Teacher created -> Teacher{TeacherId=1, TeacherName='JD', TeacherDesg='Asst Prof'}
```

#### c. Assignment Topic (Rank based on the time of submission)

POST ▼ http://localhost:9000/kafka/createAssignment?studentId=1&studentName=Raj

Params ● Authorization Headers (7) Body Pre-request Script Tests Settings

Query Params

|                                     | KEY         | VALUE | DESCRIPTION |
|-------------------------------------|-------------|-------|-------------|
| <input checked="" type="checkbox"/> | studentId   | 1     |             |
| <input checked="" type="checkbox"/> | studentName | Raj   |             |

```
INFO org.apache.kafka.clients.Metadata - [Producer clientId=producer-3] Cluster ID: hQqxc5VJQV6t0L6Un6fzbw
INFO c.h.k.d.service.KafkaProducerService - Assignment created: Assignment{StudentId=1, StudentName='Raj', SubmissionTime=Fri Jan 29 22:31:31 IST 2021} with
pointContainer#0-0-C-1] INFO c.h.k.d.service.KafkaConsumerService - Assignment created -> Assignment{StudentId=1, StudentName='Raj', SubmissionTime=Fri Jan 29 22:31:31 IST 2021}
```