**Kafka Windows Installation**

1. Download Kafka

Link 1: <https://www.apache.org/dyn/closer.cgi?path=/kafka/3.3.1/kafka_2.13-3.3.1.tgz>

1. Rename folder into “Kafka” and move into C drive
2. Go to Config and Change the server directory to C:/Kafka/kafka-logs also, zookeeper to C:/Kafka/zookeeper-data
3. Go to command prompt and get the Kafka directory path. Then enable zookeeper by typing:

C: \ Kafka> .\bin\windows\zookeeper-server-start.bat .\config\zookeeper.properties

Zookeeper starts on port 2181

1. Then start the Kafka Server in another Terminal

C: \ Kafka>. \bin\windows\ kafka-server-start.bat .\config\server.properties

Server/broker starts on port 9092

1. Now Create topic. For that open another terminal and type:

C: \ Kafka> .\bin\windows\kafka-topics.bat --create --topic my-events --bootstrap-server localhost:9092

You can check the already created Kafka topics:

C: \ Kafka>.\bin\windows\kafka-topics.bat --bootstrap-server=localhost:9092 –list

my-events, is the created Kafka topic

1. Next, create events to do that run Kafka producer (to produce events) and write events to Kafka topic

C: \ Kafka>.\bin\windows\kafka-console-producer.bat --topic my-events --bootstrap-server localhost:9092

>Hello world

>welcome to Kafka

Exit? CTRL + C

1. Now read the written events from Kafka topic

C: \ Kafka>.\bin\windows\kafka-console-consumer.bat --topic my-events --from-beginning --bootstrap-server localhost:9092

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**Set-up Spring boot Application in IntelliJ**

1. Create a Spring boot Application with following dependencies.

* Spring Web
* Spring for Apache Kafka

1. Kafka application. Properties

**spring.kafka.consumer.bootstrap-servers**=**localhost:9092**

if there are multiple servers how to configure

**spring. kafka.consumer.bootstrap-servers**=**localhost:9092,localhost:8081**

Include following properties in the application. Properties

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Created “Topic1” in Spring boot and build

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Consumes Kafka Template to implement sendMessage () function

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Rest Controller use *//http://localhost:8080/api/kafka/publish?message=hello world*

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Check the terminal and use kafka-console-consumer.bat to read Kafka topic and execute following command

C: \ Kafka>.\bin\windows\kafka-console-consumer.bat --topic topic1 --from-beginning --bootstrap-server localhost:9092

Output: Hello world

Consumer code:

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Hit url *//http://localhost:8080/api/kafka/publish?message=hello world*

You can see the outputs in IntelliJ Terminal

**Configure Kafka Producer and Consumer for JSON Serializer and De- Serializer**

* This specifies how to send and receive a Java object as a JSON byte array to/from Apache Kafka. Apache Kafka stores and transports byte array.
* Change the application. Properties file for JSON serializer and De-serializer. (Comment value code of serialization and De-serialize)

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Graphical user interface, text, application, email

Description automatically generated

Since you are getting Listener exception, create a json new Kafka topic as below

Timeline

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Then change the topic name in JasonProducer

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Send the postman request again.

Later got to command-prompt and change the topic name to topic1\_json and check whether json object published in Kafka topic.



Create JsonKafkaConsumer to convert **Json byte array to User object**

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