Klassendiagramm - Gruppe Schmitt

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Nutzung von Singleton-Pattern

sender

KafkaProducer

-instance:KafkaProducer
-topicName:String
-preoducer:Producer<String, String>

+getInstance():KafkaProducer
-putProperties(properties:Properties):void
+sendMessage(data:String):void

DatabaseSender

-mongoClient:MongoClient
-mongoDatabase:mongoDatabase
-instance:DatabaseSender

+getDatabaseSender():DatabaseSender
+insertMessage(message:Message):void

consumer

DirectoryListener

-instance:DirectoryListener
-filePath:String

+getDirectoryListener(filePath:String):DirectoryListener
-checkDirectory(path:Path):void
+run():void

ActiveMQConsumer

-session:Session
-connection:Connection
-topicName:String
-instance:ActiveMQConsumer

+getActiveMqConsumer(topicName:String, port:int):ActiveMQConsumer
+run():void
-Mitgliedsname

KafkaConsumer

-instance:KafkaConsumer
-topicName:String
-consumerConfig:ConsumerConfig

-putProperties(properties:Properties, address:String):void
+getKafkaConsumer(address:String, topic:String):KafkaConsumer
+run():void

AppConsumer

-current_order_number:String

+main(args[]:String):void
+getCurrent_order_number():String
+setCurrent_order_number(curOrderNumber:String):void

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converter

XmlConverter

-instance:XmlConverter

+getInstance():XmlConverter
+loadXmlFromString(xml:String):Document
+getActiveMqMessage(xml:String):ActiveMQMessage

DateConverter

-instance:DateConverter

+getInstance():DateConverter
+getDateFromString(dateString:String):Date

JsonConverter

-instance:JsonConverter
-mapper:ObjectMapper

+getInstance():JsonConverter
+getKafkaMessage(jsonString:String):KafkaMessage
+getDirectoryMessage(jsonString:String):DirectoryMessage
+toJsonString(message:Message):String

data

Constants

+TESTING:boolean=true
+WINDOWS_MASCHINE:boolean
+KAFKA_PRODUCER_PORT:int
+PRODUCER_CONNECT_ZOOKEEPER:String="zk.connect"
+PRODUCER_SERIALIZER:String="serializer.class"
+PRODUCER_BROKER_LIST:String="metadata.broker.list"
+PRODUCER_KAFKA_TOPIC:String="messageData"
+KAFKA_CONSUMER_PORT:int
+KAFKA_TOPIC:String="prodData"
+BOOTSTRAP_SERVERS:String="bootstrap.servers"
+CONNECT_ZOOKEEPER:String="zookeeper.connect"
+GROUP_ID:String="group.id"
+CLIENT_ID:String="client.id"
+KEY_DESERIALIZE:String="key.deserializer"
+VALUE_DESERIALIZE:String="value.deserializer"
+PARTITION:String="partition.assignment.strategy"
+FILE_PATH:String
+AMQP_PORT:int
+AMQP_TOPIC:String="m_orders"
+MONGO_DB_ADDRESS:String
+MONGO_DB_PORT:int
+MONGO_DB_DATABASE:String="meteor"
+MONGO_DB_COLLECTION_AMQP:String="amqp_collection"
+MONGO_DB_COLLECTION_DIR:String="dir_collection"
+MONGO_DB_COLLECTION_KAFKA:String="kafka_collection"

+getServer():String

messages

DirectoryMessage

-em1:double
-em2:double
-a1:double
-a2:double
-b1:double
-b2:double
-overallStatus:String
-ts_start:long
-ts_stop:long

+toString():String

Message

-orderNumber:String

+setOrderNumber(orderNumber:String):void
+getOrderNumber():String

ActiveMQMessage

-customerNumber:int
-materialNumber:int
-orderNumber:String
-timeStamp:Date

+setCustomerNumber(customerNumber:int):void
+setMaterialNumber(materialNumber:int):void
+getOrderNumber():String
+setOrderNumber(orderNumber:String):void
+setTimeStamp(timeStamp:Date):void
+toString():String

KafkaMessage

-value:Object
-booleanValue:boolean
-intValue:int
-doubleValue:double
-status:String
-itemName:String
-timeStamp:long

+getValue():Object
+setValue(value:Object):void
+getItemName():String
+isBooleanValue():boolean
+toString():String

stateMachine

FiniteMachine

-State:enum
-Trigger:enum
-orderNumber:String
-stateMachine:StateMachine<State, Trigger>
-allFiniteMachines:Vector<FiniteMachine>

+createFiniteMachine(orderNumber:String):void
+receiveMessage(kafkaMessage:KafkaMessage):void
+toString():String
-triggerEvent(kafkaMessage:KafkaMessage):void
-configStateMachine():void
-removeFromAllVector(finiteMachine:FiniteMachine):void

<<Enumeration>> State

L1_ENTRY
L1_EXIT
L2_ENTRY
L2_EXIT
L3_ENTRY
L3_EXIT
L4_ENTRY
L4_EXIT
L5_ENTRY
L5_EXIT
MILLING
DRILING
MILLING_DONE
DRILLING_DONE

<<Enumeration>> Trigger

L1_CLOSED
L1_OPEN
L2_CLOSED
L2_OPEN
L3_CLOSED
L3_OPEN
L4_CLOSED
L4_OPEN
L5_CLOSED
L5_OPEN
MILLING_START
MILLING_STOP
DRILLING_START
DRILLING_STOP