Spring boot security.

Spring boot with exception handling

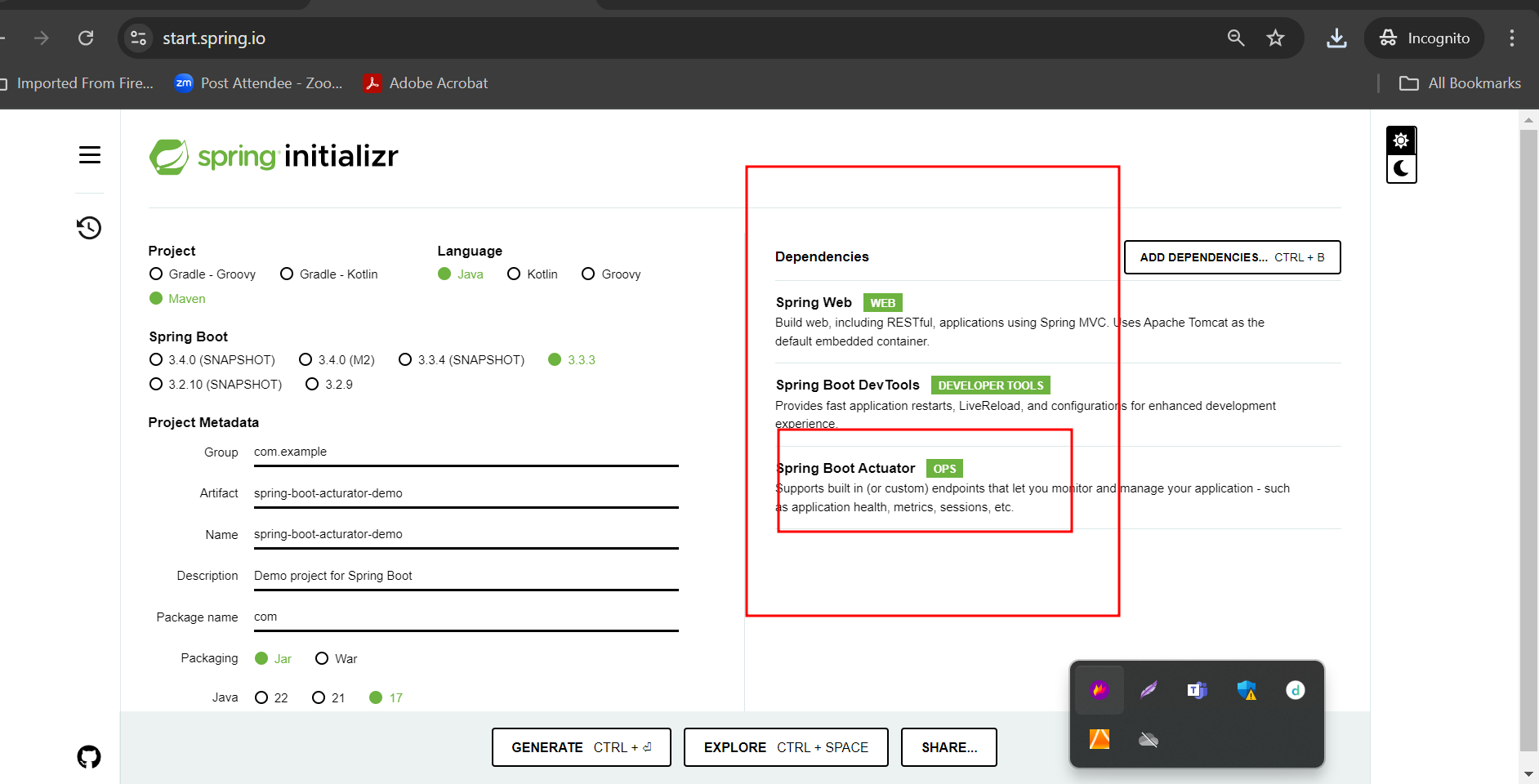
In project we can create more than one rest controller. So if want to handle exception then in each controller method we need to write try – catch block with generic or specific exception

If we want to global exception for all method part of one controller then we can write separate method with @ExceptionHandler annotation. This method is responsible to handle all type of exception in that controller.

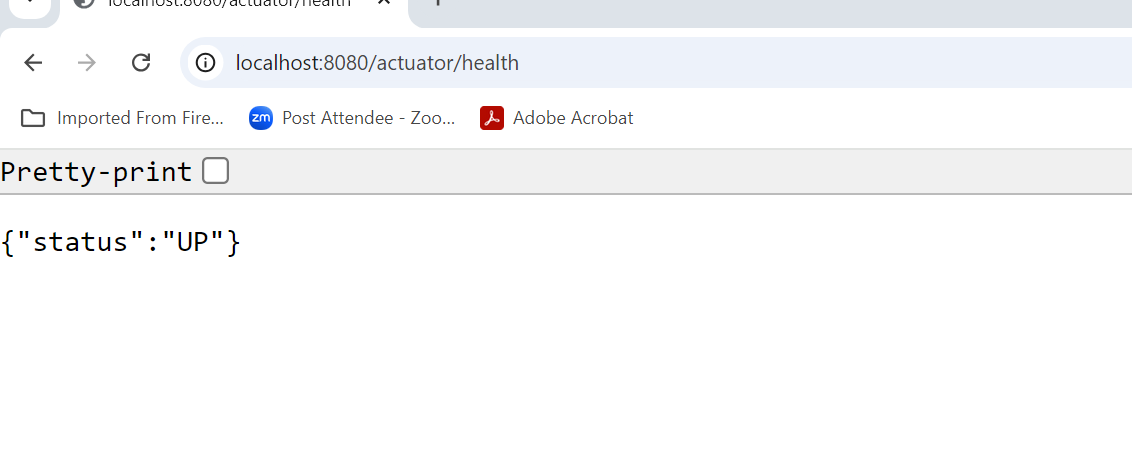
But we need to global exception handler class then we need to create separate class with @ControllerAdvice annotation and inside this we can write more than one method with annotation @ExceptionHandler to handle generic or specific exception.

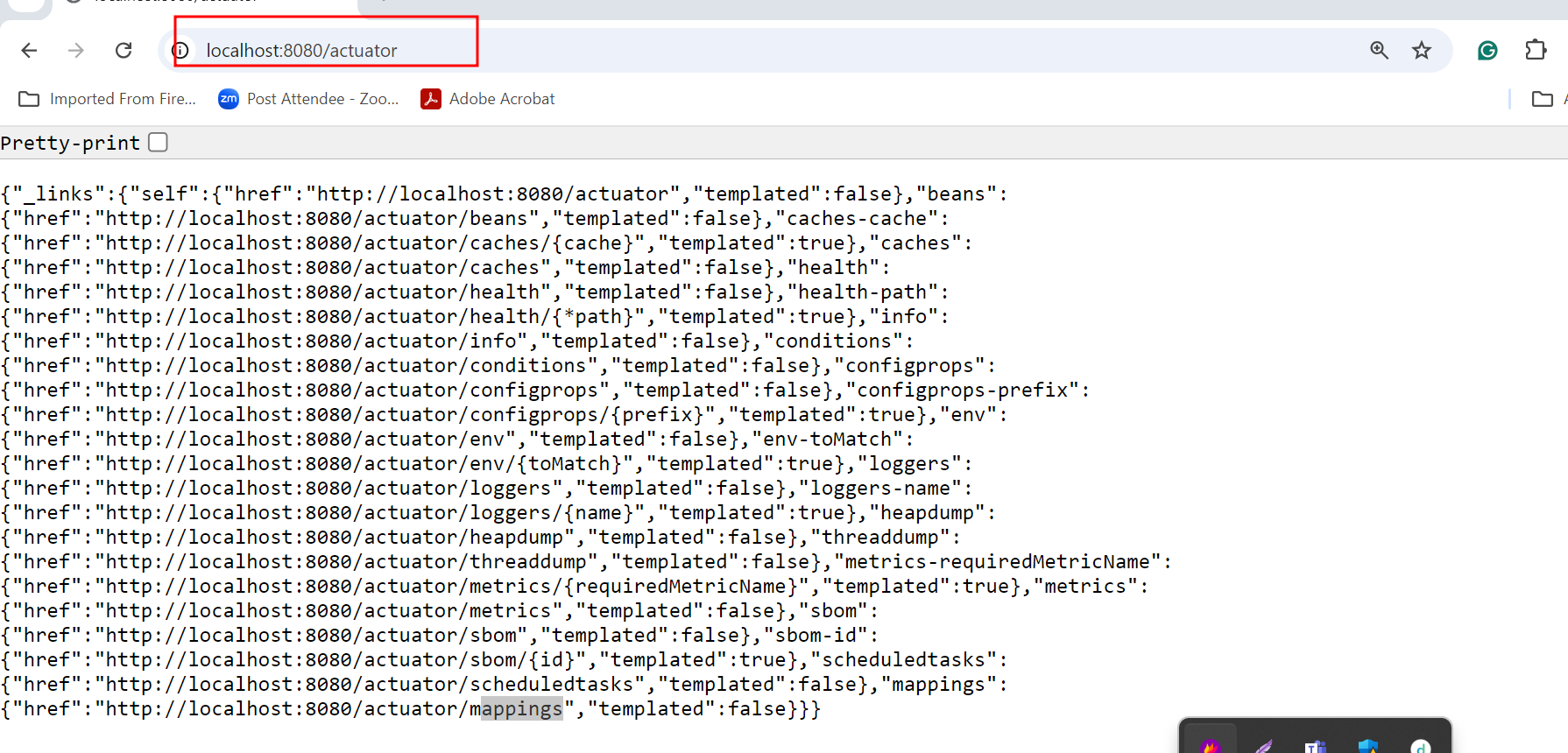
**Creating new project with web starter and devtool**

Spring boot Actuator : it is a type of starter which provide set of end point which help to check your application health, matrix and some information.



<http://localhost:8080/actuator/health>





Messaging system :

Messaging system is to transfer the message from one application to another application. Generally to achieve this messaging system use MOM :Message Oriented Middlware. Message can be any type like byte format, stream format, json format, object format etc.

This messaging concept or MOM we use after web service.

Client (End User) Server application

Client send the

End user they call spring boot application or they can call front end technologies and front end technologies call backend technologies to get the data

If we want to share the data between two application. But in web application two application can communicate with each other but both application must be web application.

Here both the application doesn’t hold the data. Those application must be interact with file system or database system to store the data. Here data is persistence

But some time we want to share of any type of data, data is very huge and those data we don’t want to store permanently. Those application not mandatory web application they can be any type of application.

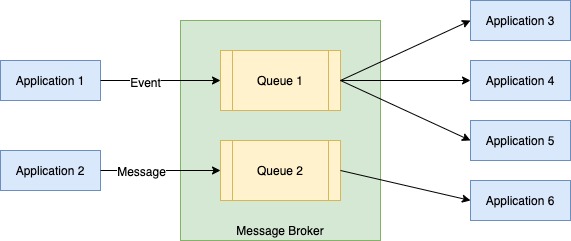
application MOM application

the application which send message to MOM is known as producer and application which receive from message from MOM is known as consumer. These application can be any type of application.

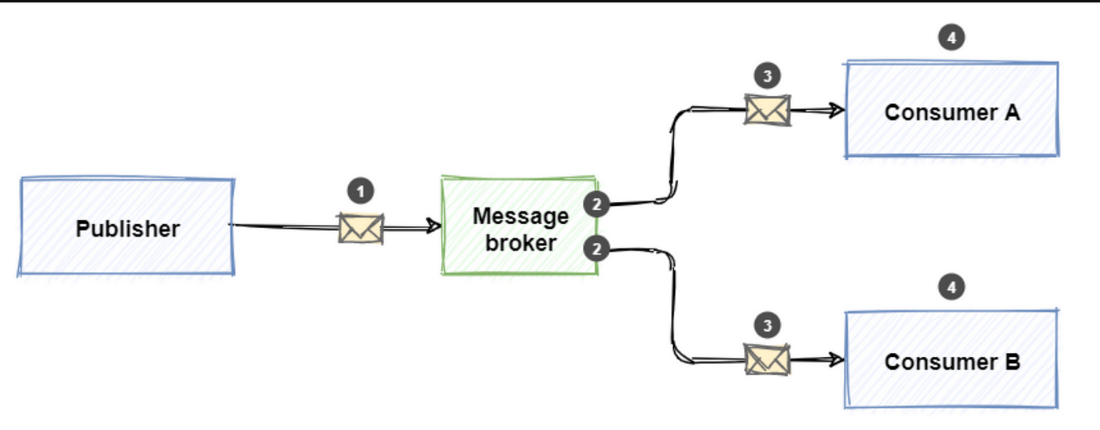
To achieve these messaging concept we use two type

1. P To P communication Point to Point communication
2. Pub and Sub communication Publisher and Subscriber

In P2P communication we use queue as container to hold the message. In P2P communication only one consumer can receive the message. 1 to 1.



In Pub/Sub communication we use topic as container to hold the message. Many consumer can receive same message at same time if they are connect to MOM. 1 to many communication.



To implement messaging service

MQ : Message Queue : Product

ActiveMQ

RabitMQ

SonicMQ

Apache Kafka

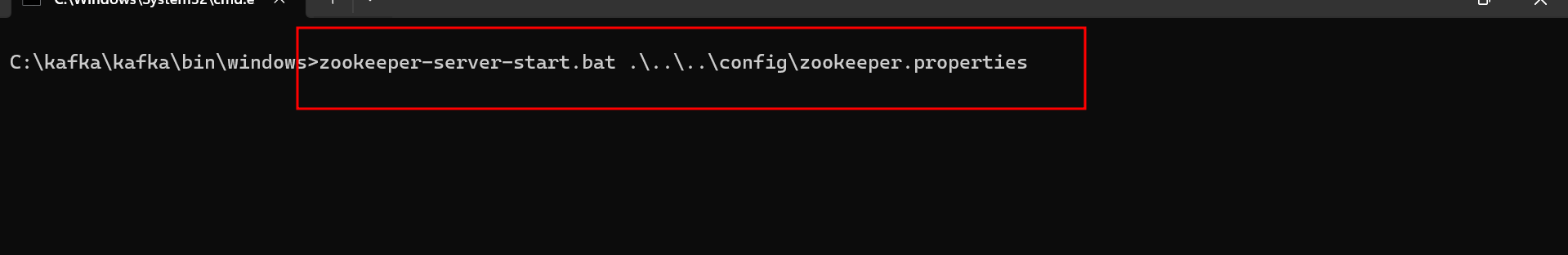
Apache Kafka : Apache Kafka is an open source software platform develop by Apache organization. Apache Kafka internal logic written using Java and Scala language. Apache Kafka mainly use to distribute message using pub and sub. In Apache Kafka data is very huge, Zero fault tolerance. Apache Kafka internally use stream concept to share huge data between one application to another application. Apache Kafka share the data using asynchronous concept.



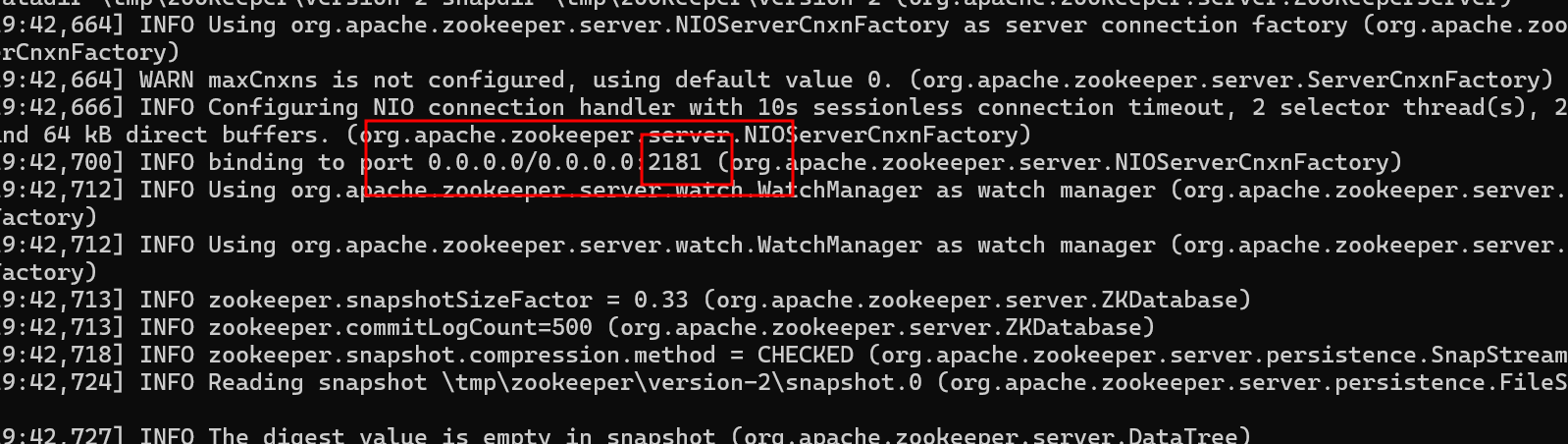
First we need Apache Kafka Software

First we need start zookeeper

zookeeper-server-start.bat .\..\..\config\zookeeper.properties

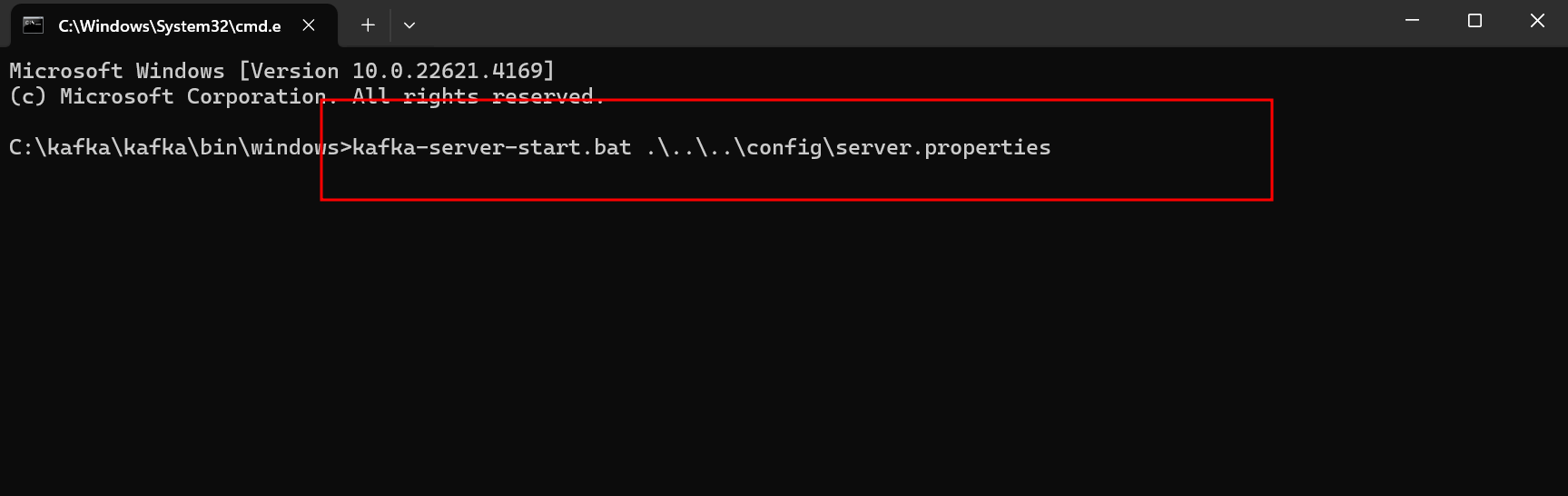


By default zookeeper port number is 2181



Now we need to start Apache Kafka Server

**kafka-server-start.bat .\..\..\config\server.properties**



Apache Kafka default port number is 9092

