The definition of the requirements

Continuously generated logs have to be shown **in the browser as real time** and be stored in a database which can be any rdbms or nosql.

We assumed that we have 5 different servers reside on different cities (Istanbul,Tokyo, Moskow, Beijing,London) and all server logs are being collected in a central server.
Our use case is starting from here. You have to collect these logs from this central server and push it to a kafka message broker.Kafka cluster may consist of only one server. You have to complete 2 following tasks during the consuming of these messages ;

1. Show row count per city in a dashboard **as real-time**
2. Collect these rows in a persistence layer which can be rdbms or any nosql databases.

City Log Dashboard must be created in a real-time manner **not by reading data from database**.

At the end of the solution you have to create a docker image on docker hub so that we can download it to control your solution whether it works properly.Please create docker-compose.yml file, test if it works properly in your development environment and than send to us.

Let us know detailed information on how we can pull from docker hub and run your solution in an appropriate way.

The Pieces that should be in your solution

1. **Log structure**
   a. **Timestamp**
   b. **Log level** (info,warning,fatal etc)
   c. **Log server city name** (Istanbul,Tokyo, Moskow,Beijing,London)
   d. **Log detail** can contain any text which is not important .

   You have to write a log creator which must create rows as predefined log structure.Logs must be generated continuously in log files which are limited to max 2 mb. After the log file is exceeds to 2 mb then a new log file must be created.

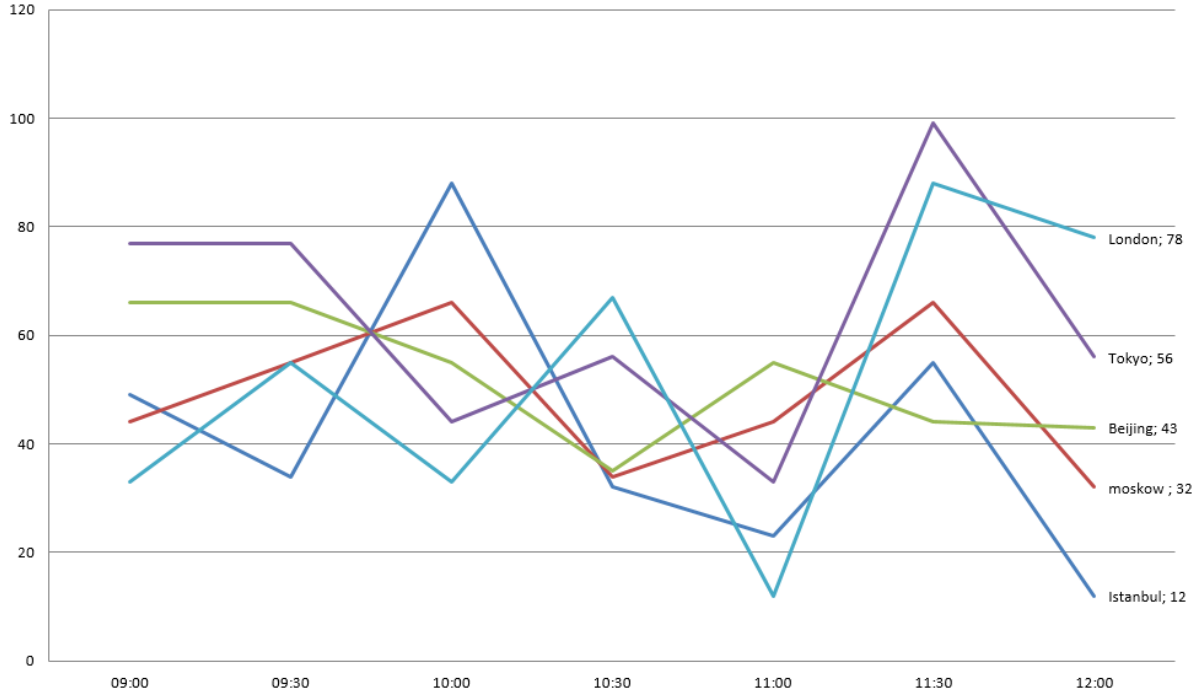
   The sample logs:

2019-03-21 09:59:17.992	INFO	Istanbul	Hello-from-Istanbul
2019-03-21 09:59:17.996	WARN	Tokyo	Hello-from-Tokyo
2019-03-21 09:59:18.057	FATAL	Moskow	Hello-from-Moskow
2019-03-21 09:59:18.992	DEBUG	Beijing	Hello-from-Beijing
2019-03-21 09:59:20.073	ERROR	London	Hello-from-London

2. **Log listener and kafka producer** listens the log files and when new log rows created in the log file , listener takes the line or lines and pushes these lines to kafka which runs on a single node (to use Kafka is mandatory).

3. **Kafka Consumer** takes and parses the lines that are coming from log files and then saves the structured lines to any rdbms or nosql databases to search easily when needed . At the same time these logs must be presented **in the browser as a real time event** like the following picture;

This dashboard shows us how many logs are coming from which cities.



4. Every frameworks and database which you are using can be downloaded from hub.docker.com by using docker-compose commands or you can dockerize your solution as a docker image/container on docker hub.Please explain your solution in details and let us know how we can control the results of your solution and reach the data in the database.
After sending your solution to us we will invite you to our office to talk about details of your solution.

5. You can use any programming language or any framework as you wish to solve this problem.But Java and related solutions will be considered as primarily

If you have any questions please do not hesitate to contact us.

Send us your solution as much as you did.

Thank you and good luck

Your solution must implement the following design