Objective:

Your job is to develop something simple using Kubernetes, Docker and ELK stack.

Description:

Overall, you need to demonstrate that

a. python program writing to log
b. filebeat transferring log to ElasticSearch
c. Kibana dashboard displaying those logs

In order to accomplish above task, you may want to spin up simple micro instances and have python program logging output continuously. At the same time these logs are being captured in ElasticSearch and being displayed via Kibana dashboard.

Pre-requisites:

In order for the exact setup, you may need to install docker, kubectl locally on your machine.

Submission:

A well-written steps with configuration of the entire setup.

Demonstration:

One needs to demonstrate the setup via meeting.

Account:

Please feel free to create an account using AWS console. As this exercise requires very simple instructions we will not provide any account credentials etc…

References:

https://www.elastic.co/guide/en/beats/filebeat/current/load-kibana-dashboards.html

https://www.elastic.co/guide/en/elasticsearch/reference/current/configuring-filebeat.html

https://www.scaleway.com/en/docs/setup-elastic-stack-on-scaleway/

https://linuxacademy.com/blog/certifications/system-log-aggregation-with-the-elastic-stack/

https://technology.amis.nl/2019/11/10/using-elastic-stack-filebeat-and-logstash-for-log-aggregation/