

Abstract

The purpose of this guided study was the implementation of an event-driven system for handling reports inherent in public disservices. The system proposes a platform where registered and validated users can make reports, monitor them, and rate the service received. Through the platform, employees will be able to administer the reports submitted by users.

The requirements analysis phase of this guided study was developed with a colleague, and following an appropriate division of labor the implementation was carried out on an individual basis.

The event-driven system is not the only focus of this guided study, further the processing of real-time data streams (stream processing) within the system was realized. Where reviews from users inherent to the service, are processed in a way to extract analytical data useful to the system operators.

Stream processing was implemented through the Apache Kafka platform, this platform has been under study since the early stages of the thesis. The other platform used in the implementation of the system was Google Firebase, with its services: real-time database, authentication, and storage.

In conclusion of the paper, the advantages and disadvantages of using Apache Kafka are compared. As endnotes, there are concluding opinions regarding this guided study, along with possible future implementations.