DM874 – Microservices and DevOps

Microservice-based Messaging Application Individual report

Grange, Valdemar sagra16@student.sdu.dk Sunday 12 January, 2020

1 Individual contribution

I have setup all the static services like Postgres, Redis, Kafka, Zookeeper, Prometheus, Helm, Grafana, Loki including deployment configurations. I have designed the architecture of the project and have made many of the core design decisions. I have written the frontend, the webserver (websockets), and the router services.

2 Division of labor

Initially I explained the architecture and the tasks, people could choose the tasks they wanted. I took it upon myself to embark on going above the scope of the course, so I took responsibility by handling all the Kafka, Zookeeper and Redis parts. As two of our group members didn't contribute, the division of labor was changed underway as people stopped responding.

3 Communication

Communication has been good (from the contributing members), we started off meeting, but after everyone knew what was going on we used facebook messenger for small inquires. We also used Trello for task assignments.

4 What went well

We completed all the goals we set, which we see as a achievement since the scope of the project was a bit large since we aimed for complete correctness.

5 What didn't go well

We didn't account for 2/5 of our group abandoning us.

6 Main technical takeaway

The most technical takeaway, was the exploration of my own redis library I wrote for Scala, since I didn't find any that fit my particular need. (https://github.com/valdemargr/sdis).

7 Organizational takeaways

I have never managed people in a software project like this. I think the biggest lesson is that, much more communication is needed than you would initially suspect.