

Project Report

DEVOPS, SOFTWARE EVOLUTION AND SOFTWARE MAINTENANCE

Andreas Kongstad

kong@itu.dk

Charlotte Schack Berg

csbe@itu.dk

Eythor Mikael Eythorsson

eyey@itu.dk

Christian Lüthcke

clyt@itu.dk

Frederik

fbah@itu.dk

Instructors:
Helge Pfeiffer & Mircea Lungu

May 10, 2022

Contents

1	System's Perspective	3
1.1	Overview	3
1.2	System Design	3
1.3	System Architecture	3
1.4	Subsystem Interactions	3
1.5	License Compatibility	3
2	Process' Perspective	3
2.1	CI/CD chains	3
2.2	GitHub	3
2.2.1	Organization of Repositories And Branching Strategy	3
2.3	Monitoring And Logs	3
2.4	Security	3
2.5	Scaling And Load balancing	3
3	Lessons Learned	3
3.1	Refactoring	3
3.2	Maintenance	3
3.3	DevOps adaptation	3

1 System's Perspective

1.1 Overview

1.2 System Design

1.3 System Architecture

1.4 Subsystem Interactions

1.5 License Compatibility

The project uses MIT license meaning everyone can use and modify.

2 Process' Perspective

2.1 CI/CD chains

2.2 GitHub

2.2.1 Organization of Repositories And Branching Strategy

Issues in GitHub are used to track what needs to be done, and how far a task is from completion. Upon creation, issues are given tags as well as being organized into Projects.

2.3 Monitoring And Logs

2.4 Security

2.5 Scaling And Load balancing

3 Lessons Learned

3.1 Refactoring

3.2 Maintenance

3.3 DevOps adaptation