Fabian Gubler

Refactoring of a Software System for Industry 4.0

Bachelor Thesis

to achieve the university degree
Bachelor of Arts in Business Adminstration

submitted to
University of St. Gallen

Supervisor
Prof. Dr. Ronny Seiger

Institute of Computer Science

May 2022

Abstract

This is a placeholder for the abstract. It summarizes the whole thesis to give a very short overview. Usually, this the abstract is written when the whole thesis text is finished.

Contents

List of Figures

1 Introduction

2 Exploration of the Fourth Industrial Revolution

2.1 Terminology and Context

2.2 Defining Smart Factories

2.3 Economic Relevance

3 Theoretical Framework for Code Refactoring

3.1 Background

3.2 Formalisation of Design Patterns

3.3 The Business Case for Refactoring

3.4 Thesis Context

4 Methodological approach

4.1 Motivation and Procedure

4.2 Means of data collection

4.3 Methods of analysis

4.4 Limitations and justification

5 Main Findings

6 Discussion

7 Conclusion

Appendix