# Complex Systems and DevOps: Deliverable 2

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## Course Details

Course Name: Complex Systems and DevOps Course Code: 62582

Semester: Fall 2024

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## Link to GitHub Project

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#### 1. Introduction

Project Scope and Objectives

## Problem Statement and Solution Overview

Methodology

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- 2. Domain Analysis

User Stories and Requirements

System Architecture Overview

**Technical Stack Selection** 

Security Requirements

3. Technical Foundation

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**Development Environment Setup** 

**Project Structure** 

## II. Implementation and DevOps Practices

4. Backend Development

**Quarkus Framework Implementation** 

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**Database Integration** 

**Business Logic Implementation** 

Security Implementation

JWT Authentication

**Backend Security Measures** 

**Testing Strategy** 

JUnit Implementation

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**OpenAPI Documentation** 

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Future Improvements

Lessons Learned