

DevOps Report

Group F
(insert names)

May 2024

Contents

List of Figures

0.1 Introduction

Hey! Just a test string here Another string Yet another line Yet another line

0.2 Systems dependencies

The list below, is the technologies we are using in our application, group into categories of technology.

Project Start - choose framework

- Microsoft ASP.NET Core v2: For basis web framework to handle, request, authentication,
- .NET API framework: For handling RESTful API's
- Swagger: For .NET API visualization
- Microsoft EntityFrameworkCore version 8.x: For general handling dependency injection to a database connection.
- PostgreSQL v.8: Chosen database server for this project.
- Docker / Docker-compose / docker-swarm: For containerized applications
- Gravatar: For provide user profile images.
- Github / Github actions / Github secrets: For storing and deploying source code
- DigitalOcean: Production server for our application

Monitoring

- prometheus/prometheus-net/prometheus-net.AspNetCore: For provide metrics to Grafana.
- Grafana: For Data Visualization of data from prometheus and direct data from Postgress database.

Logging

- Serilog.AspNetCore v.8: For logging.
- Fluentd: For collecting logs from different sources.

Software quality - Testing

- Sonarqube: Static analyzer for code quality and securit issues
- CodeClimate: Another static analyzer also for code quality and securit issues
- Playwright: UI testing
- Cypress: End-2-end testing
- Xunit: For Basic Unit testing

Security

- Skipfish: for Vulnerabilities

Chapter 1

architectue overview