



Assignment of bachelor's thesis

Title: DevOps concepts - CI/CD, implementation of authorization & authentication, presented on a BI-DBS portal frontend

Student: Volha Chukava

Supervisor: Ing. Oldřich Malec

Study program: Informatics

Branch / specialization: Web and Software Engineering, specialization Web Engineering

Department: Department of Software Engineering

Validity: until the end of summer semester 2023/2024

Instructions

The BI-DBS portal undergoes an evolutionary transfer to a microservice architecture with a Vue.js frontend. Therefore, the frontend needs new automated deployment, testing, and a clear permissions structure.

Fulfill the requirements:

- Describe the current and planned state of the BI-DBS portal.
- Analyze and describe DevOps principles, focus on CI/CD.
- Configure and describe an automated deployment for the BI-DBS portal.
- Analyze roles and permissions of the BI-DBS portal.
- Implement and describe the authorization and authentication services and provide suitable regression tests for a CI pipeline.