DOC1 Course Assignment

Contents

The VIA Tabloid Application - VIATAB

The main focus of the course assignment is on building a VIA tabloid application that adds sensational stories, read, update and deletes stories, from the different departments here in Horsens following DevOps practices.

In order to make the design and technology decisions in the course more concrete, it is expected that you will implement an example application called the VIA Tabloid application. This application will be implemented incrementally throughout the course.

The VIA-Tabloid application is a web application that displays captions of sensational stories from the different departments (at least 3) in VIA. The department where the respective stories/ideas is displayed could be placed on the page using different components or on different tabs.

The application should have at least three components:

1. Frontend (React, TypeScript)
2. Backend (Java Spring Boot or C# .NET)
3. Database (Postgres or MySQL, MongoDB)

A working frontend is required for this app, and should implement the features for your tabloid app; add story item, delete item, etc. It does not need to be especially pretty but there needs to be a frontend that connects with a backend, server, etc. You can use React or any frontend framework you like, but again it must have a real connection to your backend. We will not be particular on how the frontend looks, rather the use of DevOps throughout the assignment.

Part 1 – Docker Introduction (Session 5 → Session 6)

Like all programming problems, learning a new technology is not an exercise in reading but rather an exercise in thinking and coding. This Part 1 is designed to give you an opportunity to try hands-on experience in some fundamental skills involved in Docker containerization.

WHAT YOU NEED TO DO:

You will practice creating Docker images and containers

1. Get React frontend working in a Docker Container
2. Get Spring boot backend working in a Docker Container
3. Get PostgreSQL working in a Docker Container