KPI Dashboard for OST

Web application for tracking Key Performance Indicators (KPIs)

Students

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Introduction: Many companies today use Key Performance Indicators (KPIs) to monitor trends and to control their decision-making processes.
The OST has also implemented KPIs to get a comprehensive overview of various aspects of their organisation. Currently, these KPIs are manually tracked in a large Excel sheet. However, as the datasets grow, this approach becomes increasingly challenging to manage.

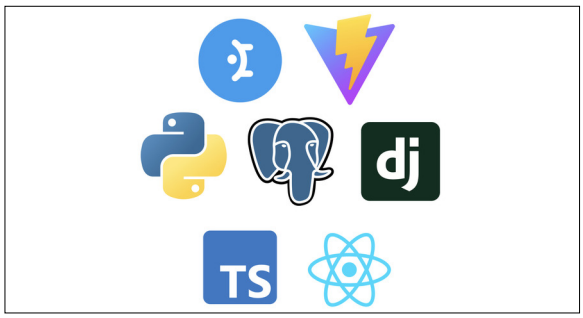
Objective: The goal of this semester thesis was to develop a prototype for a web application that could eventually replace the current solution.
The application must support the creation and adjustment of KPIs and their formulas, include a user permission system to restrict access to certain data, and provide a method for entering new data. Additionally, it should allow for filtering and visualising data sets in graphs to facilitate informed decision-making.

Conclusion: The prototype developed in this project supports all previously mentioned functionalities and introduces several new features.
Users can add supplementary information to data entries, providing context for anomalies such as sudden spikes or drops in graphs. A date filter has also been added, allowing users to select specific time periods when necessary.

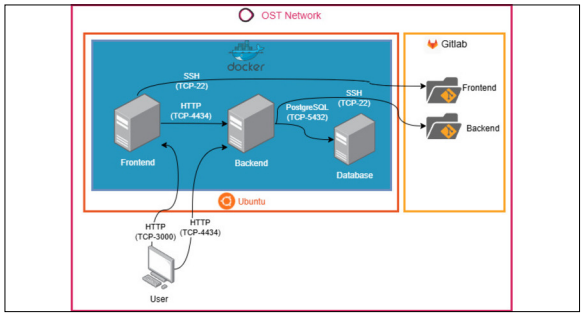
Currently, the application supports importing large datasets directly from CSV files. In the future, the application could be further improved by retrieving data automatically from surrounding systems, reducing maintenance efforts and minimising errors caused by manual user input.

In conclusion, this project has successfully delivered a prototype that improves confidentiality, accessibility, and user experience.

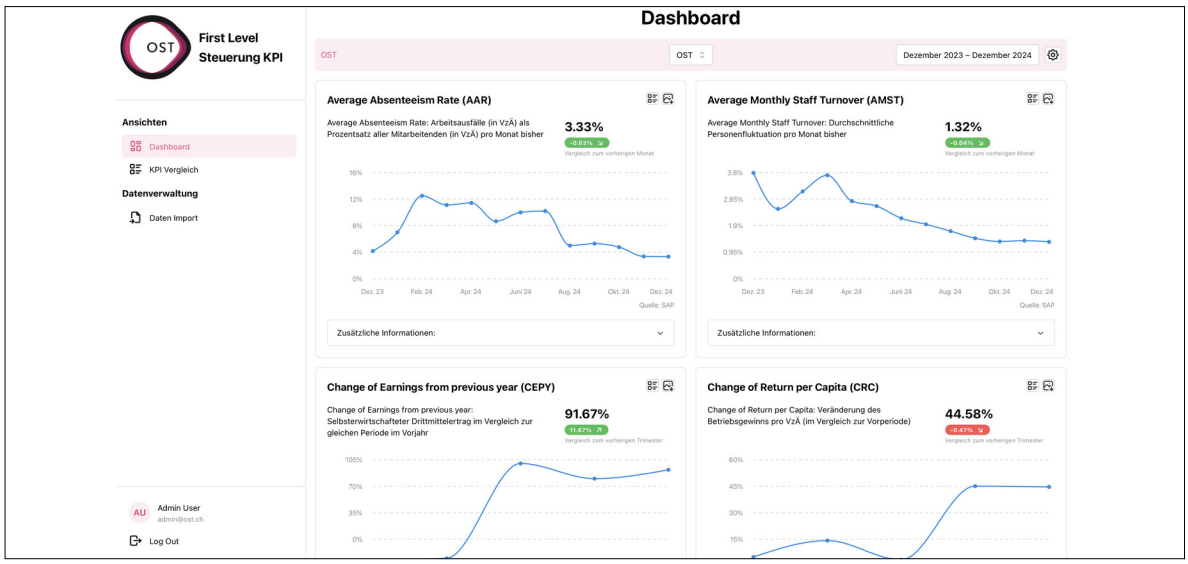
Core Technologies
Vite, TypeScript, React, Mantine, Python, Django, PostgreSQL



Deployment View
Own presentment



Web-Application Dashboard
Own presentment



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Subject Area
Internet Technologies and Applications, Software