Practical Course / Fachpraktikum

Information Visualization

**Goals**
In this practical course, students will learn about technologies for developing interactive information visualizations as well as practical aspects for programming them. The course will cover topics such as data wrangling (cleaning data, finding and mending gaps in the data), idea creating using sketching, transforming and filtering the data to visualize, mapping to appropriate visual structures, as well as creating interactive information visualizations. Students will apply these steps during several small exercises creating interactive information visualizations. Last, students will apply their learned knowledge by developing an independent interactive information visualization of a dataset chosen on their own.

**Content**
- Developing interactive information visualizations with JavaScript, D3.js, and svelte.js
- Data wrangling with Python, Pandas, and Jupyter Notebook
- Providing data with SQLite and Flask
- Implementing small exercises with open government datasets
- Implementing an independent programing project

**Prerequisites**
- JavaScript Programming Skills
- Lecture: Information Visualization and Visual Analytics

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