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Development of a dynamic software component for the visualization of modular clinical decision-making processes

Type	bachelor-/master thesis
Workingtitle	Development of a dynamic software component for the visualization of modular clinical decision-making processes

Due to the increasing complexity of clinical decision-making processes, there is far-reaching potential in computer-assisted support for clinical decision-makers. Over the past three years, the ICCAS has developed an IT platform (https://kait.health) to sustainably improve therapy selection for patients with multiple myeloma.

The aim of the advertised thesis is the guided conception and implementation of an independent software component that generates an interactive and explorable visualization based on a predefined and dynamic JSON input.

The core of the work consists of the fundamental examination of principles and concepts of optimal information communication as well as the transfer of these concepts into concrete visual representations. This requires close cooperation with the existing technical platform in order to be able to optimally integrate the component to be developed. Established web technologies (e.g. D3.JS) should be used for this purpose.

Requirements

- bachelor's degree in engineering or computer science
- interest in the theoretical and practical examination of data visualization and web-based platform development
- previous experience in the field of data visualization as well as development in TypeScript or JavaScript, general web technologies and visualization frameworks such as D3.JS

Contact

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