

FHIR server prototype implementation with modern Java technologies

Kind:	Bachelor thesis
Working title:	Implementation of a FHIR server prototype with modern Java technologies

FHIR (Fast Healthcare Interoperability Resources) is a standard for exchange of electronic health care data. FHIR servers play a fundamental role for developing FHIR-capable applications, serving as a foundation for prototyping and customization. Currently available technologies, HAPI FHIR being the most prominent one, provides a working implementation of the FHIR specification. However, it also has some disadvantages, for example memory consumption or data querying and processing.

Our goal is to write a FHIR server prototype with modern Java technologies. In particular, we are interested in exploring the usage of GraalVM to produce high-performance native executables with low memory footprint and fast startup. The prototype shall be verified and demonstrated using the RescEU project and its requirements for prehospital electronic data processing.

Requirements

- Bachelor studies in Informatics, Bioinformatics, medical engineering or similar
- Working knowledge of Java
- Familiarity with Quarkus, Spring, Jakarta EE, and similar
- Familiarity with command-line tools

contact

University of Leipzig
Innovation Center Computer Assisted Surgery (iCCAS)
Héctor Condori Alagón
E-Mail: Hector.CondoriAlagon@medizin.uni-leipzig.de.
Web: www.iccas.de