

Design of a Reflective REST-based Query API

Summary

The JValue open data service collects various open data from governmental data sources and makes them available to users using one simple query API. With a large variety of data sources made accessible through an API, users need to be able to retrieve meta-data, including type information, about the open data being offered. The API should be homogeneous and easy-to-use in how it provides both base and meta-data. This thesis designs and implements such an API and evaluates its quality along a series of defined quality attributes.

Work Results

- Research question
 - How and why to design a reflective REST-based query API?
- Literature review
 - API design, REST
 - Metalevel architectures, MOPs
- Research approach
 - Definition of required capabilities and quality attributes
 - Design and implementation of API as part of the JValue open data service
 - Comparative evaluation of design with null solution resp. solutions found in the literature
- Research results
 - Design and implementation of API as part of the JValue open data service
 - Conclusion on quality of design

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