Software Engineering Seminar (WiSe 2015/16)

Using Domain-Specific Language for Service Level Specification

Description

In order to define non-functional requirements, interested parties usually sign service level agreement. The main problem is that there is no universal standard for defining SLAs. Another problem is the fact that these SLAs are not human readable, so they are hard to maintain. The next challenge arises when the fulfillment of SLA has to be monitored. Currently, large body of instrumentation and monitoring tools exists, and the main problem with them is the fact that they usually rely on some proprietary or programming-language-specific instrumentation languages. Decoupling the instrumentation description from its realization in a concrete application context, by a concrete instrumentation tool allows to design measurement-based performance evaluation approaches in a generic and portable way. The goal of this seminar paper is to provide an overview of existing standards for SLA and monitoring specification. As a practical part of this topic, it is expected that the student designs and implements language that could be used to specify SLA and its monitoring using Kieker framework.

References


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