

# MASTER'S THESIS

## Compliance Checking of Security Guidelines Using Static Code Analysis

July 15, 2013

### Motivation

One of the major challenges in today's Software Engineering is to assure an appropriate level of security against the most commonly applied attacks on software systems. Different evaluations within the security domain figured out that there are a small number of attack classes, which have a large share of all in our days occurring attacks on software. Therefore the OWASP organization listed the Top 10 of security threads in order to give software engineers the chance to concentrate on the most important ones in their quality assurance processes.

### Task

To cope with this problem, architectures provide security guidelines to prevent the most commonly introduced security threads. This Master's Thesis should discuss possibilities to automatically check security guidelines of an underlying architecture within the corresponding source code or identify security threads within the source code as done in FindBugs.

The Master's Thesis is carried out in cooperation with Capgemini (Offenbach/Frankfurt).

### Prerequisites

- Good programming knowledge (implementation language: Java)
- Eclipse development knowledge (recommended, but not mandatory)

### Contact

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