

# Software Architectures

## Assignment 1: DDD Onion Architectural Pattern

Assistants: Humberto Rodriguez Avila, Kennedy Kambona

Email: {rhumbert, kkambona}@vub.be

Office: {10F719, 10F732}

Deadline: January 14th, 2018, 23:59

### Description

For this first assignment, you need adapt a simplified version of a demo application<sup>1</sup> presented during the *Scala Days 2016* event. This small application solves the well-known problem of “*How to fry an egg*” using the *Cake pattern*<sup>2</sup>. This pattern allows Scala developers to inject and manage dependencies. The assignment is to adapt the demo application so that it uses the *Google Guice*<sup>3</sup> framework or one of its *wrappers*<sup>4</sup> for dependency injection instead of the *Cake pattern*.

**Deliverables** A short *report* (in English) explaining the new solution to the problem, and where you compare it to the original code. The report *file* should follow the naming schema `firstname_lastname_SA1.pdf`, and it should be handed in as a PDF file. For example: `Humberto.Rodriguez_SA1.pdf`.

Submit the *report* and *source code* of your solution as a single *ZIP* file on the Software Architectures course page<sup>5</sup> in PointCarré, by clicking on *Assignments* (*Opdrachten*) > *Assignment 1*.

**Grading** The assignment will be graded and can become subject of an additional defense.

### Notes

- Team work is not allowed.

---

<sup>1</sup>Source code (*DDDOnionCookExample.zip*) available on PointCarré.

<sup>2</sup><http://jonasboner.com/real-world-scala-dependency-injection-di/>

<sup>3</sup><https://github.com/google/guice>

<sup>4</sup><https://github.com/sptz45/sse-guic>

<sup>5</sup>Use the English variant “Software Architectures”, rather than the Dutch one “Software Architecten”.

- The solution to this assignment can be implemented in *Scala* or in *Java*. In case you choose Java, you have to translate the original solution to Java yourself.
- Copying – from other students, or from the internet – will be considered as plagiarism and be reported to the faculty.
- If you use any other resources besides those provided in the lectures and in this document, remember to cite them in your report.