

Lecture 5: Software architecture patterns 1

Purpose and motivation

The purpose of this lecture is to discuss the patterns, how patterns are described and what characterizes patterns. We will start by introducing the concept of patterns and how they can be used to design software components with specific properties.

Furthermore we will continue the work with the exercises and containerization.

Before Class

- Read the literature
- Review the exercises from last lecture and prepare to ask any questions you may have

Reading

Read the following before class:

- Architectural patterns revisited - A pattern language[1]
- Past, present, and future trends in software patterns[2, pp. 221-235]

(Find the material at the [library](#), on itslearning, or in online databases.

In class

Lecture

1. Containerization (from last lecture)
2. Patterns

Exercises

1. Containerization exercise

References

- [1] Paris Avgeriou and Uwe Zdun. “Architectural Patterns Revisited - A Pattern Language”. In: *EuroPLOP’ 2005, Tenth European Conference on Pattern Languages of Programs, Irsee, Germany, July 6-10, 2005*. Ed. by Andy Longshaw and Uwe Zdun. UVK - Universitaetsverlag Konstanz, 2005, pp. 431–470.
- [2] F. Buschmann, K. Henney, and D. C. Schmidt. “Past, Present, and Future Trends in Software Patterns”. English. In: *IEEE software* 24.4 (2007), pp. 31–37.