Introduction

This lesson gives an overview of why you should take this course.

WE'LL COVER THE FOLLOWING

Why this course?

Microservices are one of the most important software architecture trends. This course provides a detailed guide to microservices concepts. It lays the foundation for the reader to learn microservices technologies.

Basic principles

To become familiar with microservices, an introduction into microservices-based architectures and their benefits, disadvantages, and variations is essential. However, **this course** explains the basic principles only to the extent required for understanding the **practical implementations**.

Concepts

Microservices require **solutions for different challenges**. Among those are concepts for **integration** (*frontend integration, synchronous and asynchronous microservices*) and for **operation** (*monitoring, log analysis, tracing*). Microservices platforms such as *PaaS* or *Kubernetes* represent exhaustive solutions for the operation of microservices.

Recipes

This course uses **recipes as a metaphor for the technologies**, which can be used to implement the different concepts. Each approach shares a number of features with a recipe.

- Each recipe is described in *practical* terms, including an example technical implementation. The most important aspect of the examples is their *simplicity*. Each example can be easily followed, extended, and modified.
- The course provides the reader a *plethora of recipes*. The readers have to *select* a specific recipe from this collection for their projects, akin to a cook who has to select a recipe for her or his menu. The course shows different options. In practice, nearly every project has to be dealt with differently. The recipes build the basis for this.
- *Variations* exist for each recipe. After all, a recipe can be cooked in many different ways. This is also true for the technologies described in this course. Sometimes the variations are very simple, so that they can be immediately implemented as *experiments* in an executable example.

Source code

Sample code is provided in this course. If the reader wants to really understand the technologies they should understand how the concepts are actually implemented.

In the next lesson, we'll discuss the structure of this course, whether it is the right fit for you, and we'll acknowledge some people who helped make this course happen!