

Modern C++ Software Design (Advanced)

Dienstag, 11. Juni 2024 bis Freitag, 14. Juni 2024 | 08:30 Uhr bis 16:30 Uhr

Höchstleistungsrechenzentrum Stuttgart (HLRS) | 70569 Stuttgart, Nobelstr. 19

This advanced C++ training is a course on object-oriented (OO) software design with the C++ programming language. The focus of the training are the essential OO and C++ software development principles, concepts, idioms, and best practices, which enable programmers to create professional, high-quality code.

This advanced C++ training is a course on object-oriented (OO) software design with the C++ programming language. The focus of the training are the essential OO and C++ software development principles, concepts, idioms, and best practices, which enable programmers to create professional, high-quality code. Additionally, the course gives insight into kernel development with C++. The course will not address special areas and applications of C++, such as for instance Template Meta Programming (TMP), or the quirks and curiosities of the C++ language. It rather teaches guidelines to develop mature, robust, maintainable, and efficient C++ code.

After this course, participants will:

- have a detailed understanding of the essential OO design principles
- have gained knowledge about fundamental C++ programming concepts and idioms
- be able to properly design classes and class interfaces
- know about the importance of exception safe programming
- have gained insight into kernel development with C++
- avoid the usual pitfalls in the context of inheritance
- comprehend the advantages of non-intrusive design
- understand the virtue of clean code

Prerequisites

At least two to three years of experience with the language is needed. This includes a solid knowledge of the syntax of C++, experience with the standard library (`std::vector`, `std::list`, ...), hands-on experience with both template-based and inheritance-based designs and some experience with design patterns.

Veranstalter:
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Nobelstr. 19
70569 Stuttgart

<https://www.hlrs.de/training>

Weitere Informationen: <http://www.hlrs.de/training/2024/cpp2>