Traps and Pitfalls in C++11/14 Migration

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Abstract

The C++ programming language has recently experienced major changes. The new C++11 standard introduced a large number of new language features, like automatic type deduction, lambda functions, variadic templates, a variety of smart pointers, etc. The minor revision of C++14 has refined and many times – as with constexpr or lambdas – significantly extended these elements. These changes were supposed to make C++ more flexible and safe. Although, the new features solved many long existing issues in C++ design, we experienced that a number of these programming elements are misused by the programmers.

In this lecture we overview some of the most common programming mistakes connected with C++11/14 migration and make suggestions how to fix these problems.

References


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