

Programming Language History: Experiences based on the Evolution of C++

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Abstract

Programming languages evolve continuously. From the very first experimental versions users desire new features and techniques to make their life safer and easier. Most of those requests are about to raise the level of abstractions on which the programmers can define their programs. However, this generic belief has not been supported by scientific researches yet. In this paper we investigate the evolution of the C++ programming language. As the C++ language has a long history with well-defined steps of standardisation, introducing various new language features and occasionally deprecating dead-ends; it is a fortunate choice for such researches. We will present how the abstraction level solving typical problems has been raised version by version. We use complexity metrics to verify our hypothesis.

Keywords: C++ programming language, language evolution, language history

MSC: 68N15 Programming languages