Precise Software Documents
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Abstract

For many software development organizations, documentation is a postscript. With eyes firmly fixed on deadlines, guided only by vague wish lists, the developer’s focus is on producing a usable system; documentation plays a secondary role and may be delegated to technical writers who are not developers.

The documents that are produced have little formal structure; they are vague, incomplete and inaccurate. Many developers find such documents close to useless; they prefer searching through source code. The lack of precise, accurate documentation causes many errors and increases development costs.

This talk presents examples of precise software documentation for a variety of products. It explains how such documents are produced and how to use them to improve software quality.

The documents illustrated include requirements documents, program function documentation, and component interface documents. The examples are taken from aircraft navigation systems, safety systems, telecommunications systems, and production-line support software.