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Systems and software engineering — Developing information for users in an agile environment

Ingénierie du logiciel et des systèmes — Développement d'informations pour les utilisateurs dans un environnement agile

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the rules given in the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 7, *Software and systems engineering*, in cooperation with the Systems and Software Engineering Committee of the IEEE Computer Society, under the Partner Standards Development Organization cooperation agreement between ISO and IEEE.

This second edition cancels and replaces the first edition (ISO/IEC/IEEE 26515:2011) which has been technically revised.

The main changes compared to the previous edition are as follows:

— alignment with the widespread use of agile methods to include systems as well as software;

— replacement of the paper-based term “documentation” with the general term “information for users” where appropriate;

— inclusion of agile information development across multiple teams and projects, especially projects in continuous maintenance situations such as DevOps;

— editorial changes;

— new definitions.

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Introduction

Software with an application user interface should generally be intuitive for most users or follow common user interface conventions to limit the need for exhaustive or detailed information for users. However, users should be provided with accurate information about how to use the software's functions if questions arise. This information should explain the major features or use cases deliberately created for all types of users. The information should be easily accessible and clearly written to enable quick learning and user proficiency, while reducing help desk support. Hence, well-designed information not only assists the users and helps to reduce the cost of training and support, but also enhances the reputation of the product, its producer, and its suppliers.

Projects that use agile development methods focus on providing rapid and frequent deliveries of high-value software. These methods often involve detailed planning only for the short term and the implementation of processes in parallel, rather than planning for an entire project in distinct phases.

Although agile development methods often advocate less life cycle documentation, the users of a software product still expect and require quality information to be provided with these software products. Although the end results of the process for developing information for users are the same, the methods may be very different in an agile environment.

Agile development methods follow usually short, iterative development cycles based on customer requirements and feedback. In order to fulfil contractual requirements and provide valuable information for users, deliverables for each iteration include information related to the feature set developed during that iteration. The quantity and quality of the information deliverables depend in part on the completeness and maturity of the software features and design after each iteration, specified through user stories, tasks, and personas.

Information developers and other personnel involved in developing information for users should understand the agile development processes and methods used by their organization. This will enable them to tie in seamlessly and provide relevant and useful information for users.

Because of the nature of agile development methods, the traditional means of developing information (both print and onscreen) for end users are not entirely applicable.

This document was developed to assist users of

— ISO/IEC/IEEE 15288, *Systems and software engineering — System life cycle processes*,

— ISO/IEC/IEEE 12207, *Systems and software engineering — Software life cycle processes*,

— ISO/IEC 26514:2008, S*ystems and software engineering — Requirements for designers and developers of user documentation* (also available as IEEE Std 26514-2010, IEEE Standard for Adoption of ISO/IEC 26514:2008, *Systems and Software Engineering — Requirements for Designers and Developers of User documentation*), and

— Other documents in the ISO/IEC/IEEE 265NN family of International Standards.

This document provides requirements and guidance to information developers and related roles on how to adapt the processes described in the ISO/IEC/IEEE 265NN family of International Standards to develop quality information for users.

This document is independent of the agile development methods and tools that are used to produce the software. This document gives an overview of agile methodologies although it neither encourages nor discourages the use of any particular agile methodology. Therefore, this document uses generic agile terminology as much as possible.

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