

Writing Good Requirements: Ambiguous Terms to Avoid

Successful requirements management begins with writing good requirements.

Karl Wiegers, a well-respected requirements management consultant, in his book *Software Requirements* provides this list of words to avoid and ways to improve them. You may want to print this list out and post it within your office. Visual reminders work wonders.

Ambiguous Terms	Ways to Improve Them
acceptable, adequate	Define what constitutes acceptability and how the system can judge this.
as much as practicable	Don't leave it up to the developers to determine what's practicable. Make it a TBD and set a date to find out.
at least, at a minimum, not more than, not to exceed	Specify the minimum and maximum acceptable values.
between	Define whether the end points are included in the range.
depends on	Describe the nature of the dependency. Does another system provide input to this system, must other software be installed before your software can run, or does your system rely on another one to perform some calculations or services?
efficient	Define how efficiently the system uses resources, how quickly it performs specific operations, or how easy it is for people to use.
flexible	Describe the ways in which the system must change in response to changing conditions or business needs.
improved, better, faster, superior	Quantify how much better or faster constitutes adequate improvement in a specific functional area.
including, including but not limited to, and so on, such as, etc.	The list of items should include all possibilities. Otherwise, it can't be used for design or testing.
maximize, minimize, optimize	State the maximum and minimum acceptable values of some parameter.
normally, ideally	Also describe the system's behavior under abnormal or non-ideal conditions.
optionally	Clarify whether this means a system choice, a user choice, or a developer choice.
reasonable, when necessary, where appropriate	Explain how to make this judgment.
robust	Define how the system is to handle exceptions and respond to unexpected operating conditions.

Ambiguous Terms Cont.	Ways to Improve Them
seamless, transparent, graceful	Translate the user's expectations into specific observable product characteristics.
several	State how many, or provide the minimum and maximum bounds of a range.
shouldn't	Try to state requirements as positives, describing what the system will do.
state-of-the-art	Define what this means.
sufficient	Specify how much of something constitutes sufficiency.
support, enable	Define exactly what functions the system will perform that constitute supporting some capability.
user-friendly, simple, easy	Describe system characteristics that will achieve the customer's usage needs and usability expectations.

Source: *Software Requirements* by Karl Wieggers, 2nd Edition, Microsoft Press, 2003



This popular book represents several dozen practical techniques for improving your requirements development and management processes. Topics include the customer-developer partnership, defining vision and scope, use cases, business rules, the role of the requirements analyst, the software requirements specification, requirements prioritization, change management, and more.

 [Click here to buy Karl Wieggers' book on Amazon.com.](#)

By requesting a [free trial of Contour](#), you could win a complimentary copy of *Software Requirements*, or other requirements management best practices, courtesy of Jama Software.



Build Great Products

This guide was provided by Jama Software with permission from Karl E. Wiegers. It repurposes the list of ambiguous terms from his book, *Software Requirements*, Microsoft Press, 2nd Edition, 2003.

Jama Software's goal is to help companies build great products by enabling them to take a more collaborative, team-based approach to requirements management. Founded by a team of experienced software professionals, Jama has created a simple yet powerful Web-based application called Contour that cuts product planning cycles in half, reduces errors and ensures high quality products.

Used by thousands worldwide to build complex software products and systems, Contour customers include Intel, Merck, Wells Fargo, Fluid, SMART Technologies, Bycast, Stratos Global and many others.

For more information about Jama and to request your free trial of Contour, visit us online.

[503.922.1058](tel:503.922.1058) | success@jamasoftware.com | www.jamasoftware.com