

Automatic Quality Assessment of Source Code Comments: The JavadocMiner

Submitted by [rene](#) [1] on Tue, 2011-02-22 08:05

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Title	{ Automatic Quality Assessment of Source Code Comments: The JavadocMiner }
Publication Type	Conference Paper
Year of Publication	2010
Refereed Designation	Refereed
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Editors	Hopfe, C. J. [8], Y. Rezgui [9], E. Métais [10], A. D. Preece [11], and H. Li [12]
Conference Name	15th International Conference on Applications of Natural Language to Information Systems (NLDB 2010)
Tertiary Title	Lecture Notes in Computer Science (LNCS)
Volume	6177/2010
Pagination	68--79
Date Published	June 23--25
Publisher	Springer
Conference Location	Cardiff, UK
ISBN Number	978-3-642-13880-5
Abstract	<p>An important software engineering artefact used by developers and maintainers to assist in software comprehension and maintenance is source code documentation. It provides insights that help software engineers to effectively perform their tasks, and therefore ensuring the quality of the documentation is extremely important. Inline documentation is at the forefront of explaining a programmer's original intentions for a given implementation. Since this documentation is written in natural language, ensuring its quality needs to be performed manually. In this paper, we present an effective and automated approach for assessing the quality of inline documentation using a set of heuristics, targeting both quality of language and consistency between source code and its comments. We apply our tool to the different modules of two open source applications (ArgoUML and Eclipse), and correlate the results returned by the analysis with bug defects reported for the individual modules in order to determine connections between documentation and code quality.</p>
URL	http://www.springerlink.com/content/n67470n270mt61m1/fulltext.pdf [13]
DOI	10.1007/978-3-642-13881-2_7 [14]
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Acceptance Rate	30%

Attachment	Size
nldb2010-javadocminer.pdf [15]	351.25 KB



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