Tools for Repaying Technical Debt

As discussed in Chapter 8, software tools play a critical role in the process of repaying technical debt. In this appendix, we provide a nonexhaustive list of commonly available tools—along with their categories, supported languages, license, and Web site link—that can help in the process of repaying technical debt.

Tool Name	Category							Supported Languages	License	Web site/Author
	Compre-hension	Critique	Code Clone Detector	Metric	TD Quanti-fication and Visual-ization	Refac-toring (Candidate Identifi-cation)	Refac-toring (Execu-tion)			
ArgoUML		Y						UML	Free	http://argouml.tigris.org/
Axivion Bauhaus Suite	Y	Y	Y	Y				C/C++, Java, C#, and many others	Com-mercial (free license available for aca-demic users)	http://www.axivion.com/products.html
Clone Doctor			Y					C++, Java, C#, and many others	Com-mercial	http://www.semdesigns.com/Products/Clone/
Coverity		Y						C/C++, Java, C#	Com-mercial	http://www.coverity.com/
CppDe-pend	Y	Y		Y				C++	Com-mercial	http://www.cppdepend.com/
Eclipse							Y	Java	Free	https://www.eclipse.org/
FxCop		Y						C#	Free	http://msdn.microsoft.com/en-us/library/bb429476(v=vs.80).aspx

Tool								Languages	License	URL
Imagix 4D	Y			Y				C/C++, Java	Commercial	http://www.imagix.com/index.html
Infusion		Y		Y				C/C++, Java	Commercial	http://www.intooitus.com/products/infusion
iPlasma		Y		Y				C/C++, Java	Free	http://loose.upt.ro/reengineering/research/iplasma
JArchitect	Y	Y		Y				Java	Commercial	http://www.jarchitect.com/
Jdeodorant		Y						Java	Free	http://www.jdeodorant.com/
Jdepend				Y				Java	Free	http://clarkware.com/software/JDepend.html
McCabe IQ	Y	Y		Y		Y		C/C++, C#, Java, and many more	Commercial	http://www.mccabe.com/iq.htm
MOOSE tool suite	Y	Y	Y	Y				C/C++, Java, and other languages	Free	http://www.moosetechnology.org/
NDepend	Y	Y		Y				C#	Commercial	http://www.ndepend.com/Default.aspx

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Tool Name	Category							Supported Languages	License	Web site/Author
	Compre-hension	Critique	Code Clone Detector	Metric	TD Quanti-fication and Visual-ization	Refac-toring (Candidate Identifi-cation)	Refac-toring (Execu-tion)			
PC-lint		Y						C/C++	Com-mercial	http://www.gimpel.com/html/pcl.htm
PMD		Y						Java, Java-Script	Free	http://pmd.sourceforge.net/
PMD-CPD			Y					C++, Java, C#, and many others	Free	http://pmd.sourceforge.net/
ReSha-rper		Y					Y	C#	Com-mercial	http://www.jetbrains.com/resharper/
RSM Metrics				Y				C/C++, Java, C#, and many others	Com-mercial	http://msquaredtechnologies.com/
Scout						Y		C#	Not released publicly	Tushar Sharma

Tool	C1	C2	C3	C4	C5	C6	C7	C8	Language	License	URL
SDMetrics				Y					UML	Commercial	http://www.sdmetrics.com/
Simian			Y						C++, Java, C#, and many others	Commercial	http://www.harukizaemon.com/simian/
Sissy		Y							C++, Java, and Delphi	Free	http://www.softpedia.com/get/Programming/Other-Programming-Files/SISSy.shtml
Sonargraph	Y	Y	Y	Y	Y					Commercial	http://www.hello2morrow.com/products/sonargraph
SonarQube				Y	Y				C++, Java, C#, and many others	Free	http://www.sonarqube.org/
Sotoarc	Y	Y						Y	C/C++, Java, C#, and many others	Commercial	http://www.hello2morrow.com/products/sotoarc
Sotograph	Y	Y		Y					C++, Java, C#	Commercial	https://www.hello2morrow.com/products/sotograph

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| Tool Name | Category | | | | | | | Supported Languages | License | Web site/Author |
	Comprehension	Critique	Code Clone Detector	Metric	TD Quantification and Visualization	Refactoring (Candidate Identification)	Refactoring (Execution)			
Source-Monitor				Y				C++, Java, C#, and many others	Free	http://www.camp woodsw.com/ sourcemonitor.html
STAN4j		Y		Y				Java	Commercial	http://stan4j.com/
Structure101	Y	Y						Java, C#	Commercial	http://structure101 .com/
Understand	Y			Y				C++, Java, C#, and many others	Commercial	http://www. scitools.com/
Visual Studio (Architecture Explorer)	Y			Y			Y	.NET	Commercial	http://www. visualstudio.com/