

C1 Systems of Qualitas Corpus Used as Benchmark

Table 122 presents the list of the 74 systems from the Qualitas Corpus we use as benchmark for Benchmark-Based Thresholds derivation (Section 5.2.3), and for *code smells* detection evaluation (Section 7.1). We report the systems along with some additional information:

- **System:** the name of the system plus the version;
- **Domain:** an indication of the purpose of the system. according to [125];
- **Releasedate:** the release date of the *System*.

Table 122: 74 Selected Systems from the Qualitas Corpus

<i>System</i>	LOC	NOPK	NOCS	NOM	Domain	Releasedate
<i>aoi-2.8.1</i>	136,533	22	799	6,880	3D/graphics/media	1/3/2010
<i>argouml-0.34</i>	284,934	125	2,361	18,015	diagram generator/data visualization	12/15/2011
<i>axion-1.0-M2</i>	28,583	13	223	2,989	database	7/11/2003
<i>castor-1.3.1</i>	213,479	149	1,542	11,967	middleware	1/3/2010
<i>cobertura-1.9.4.1</i>	58,364	19	107	3,309	testing	3/3/2010
<i>colt-1.2.0</i>	75,688	24	525	4,143	SDK	9/10/2004
<i>columba-1.0</i>	109,035	183	1,188	6,818	tool	9/18/2005
<i>displaytag-1.2</i>	20,892	18	128	1,064	diagram generator/data visualization	12/27/2008
<i>drawswf-1.2.9</i>	38,451	33	297	2,742	3D/graphics/media	6/8/2004
<i>drJava-stable-20100913-r5387</i>	130,132	29	2,250	10,364	IDE	9/13/2010
<i>emma-2.0.5312</i>	34,404	26	262	1,805	testing	6/12/2005
<i>exoportal-v1.0.2</i>	102,803	382	1,855	11,709	diagram generator/data visualization	5/16/2006
<i>findbugs-1.3.9</i>	146,551	54	1,631	10,153	testing	8/21/2009
<i>fitJava-1.1</i>	2,453	2	60	254	testing	4/7/2004
<i>fitlibraryforfitness-20100806</i>	25,691	108	795	4,165	testing	8/6/2010
<i>freecol-0.10.3</i>	163,595	36	1,244	8,322	games	9/27/2011
<i>freecs-1.3.20100406</i>	25,747	12	131	1,404	tool	4/6/2010
<i>freemind-0.9.0</i>	65,687	43	849	5,788	diagram generator/data visualization	2/19/2011
<i>galleon-2.3.0</i>	120,720	35	764	4,305	3D/graphics/media	4/15/2006
<i>ganttproject-2.0.9</i>	58,718	54	959	5,518	tool	3/31/2009
<i>heritrix-1.14.4</i>	94,240	45	649	5,366	tool	5/10/2010
<i>hsqldb-2.0.0</i>	171,667	22	465	7,652	database	6/7/2010

<i>itext-5.0.3</i>	117,757	24	497	5,768	diagram generator/data visualization	7/22/2010
<i>jag-6.1</i>	24,112	15	255	1,450	tool	5/25/2006
<i>jasml-0.10</i>	6,694	4	48	245	tool	5/23/2006
<i>jasperreports-3.7.3</i>	260,912	66	1,571	17,113	diagram generator/data visualization	7/20/2010
<i>Javacc-5.0</i>	19,045	7	102	808	parsers/generators/make	10/20/2009
<i>jedit-4.3.2</i>	138,536	28	1,037	6,560	tool	5/9/2010
<i>jena-2.6.3</i>	117,117	48	1,196	9,900	middleware	6/1/2010
<i>jext-5.0</i>	34,855	37	485	2,169	diagram generator/data visualization	7/7/2004
<i>jFin_DateMath-R1.0.1</i>	7,842	11	58	541	SDK	2/19/2010
<i>jfreechart-1.0.13</i>	247,421	69	960	11,810	tool	4/20/2009
<i>jgraph-5.13.0.0</i>	53,577	32	399	2,996	tool	9/28/2009
<i>jgraphpad-5.10.0.2</i>	33,431	22	426	1,879	tool	11/9/2006
<i>jgrapht-0.8.1</i>	28,493	19	299	1,475	tool	7/4/2009
<i>jgroups-2.10.0</i>	126,255	21	1,093	8,798	tool	7/12/2010
<i>jhotdraw-7.5.1</i>	104,357	64	968	7,232	3D/graphics/media	8/1/2010
<i>jmeter-2.5.1</i>	113,375	110	909	8,059	testing	9/29/2011
<i>jmoney-0.4.4</i>	9,457	4	190	713	tool	9/29/2003
<i>jparse-0.96</i>	16,524	3	65	780	parsers/generators/make	7/17/2004
<i>jpf-1.0.2</i>	18,172	10	121	1,271	SDK	5/19/2007
<i>jruby-1.5.2</i>	199,533	77	2,023	17,693	programming language	8/20/2010
<i>jspwiki-2.8.4</i>	69,144	40	405	2,714	middleware	5/8/2010
<i>jsXe-04_beta</i>	14,480	7	100	703	tool	4/25/2006
<i>jung-2.0.1</i>	53,617	40	786	3,884	diagram generator/data visualization	1/25/2010
<i>junit-4.10</i>	9,065	28	204	1,031	testing	9/29/2011
<i>log4j-1.2.16</i>	34,617	22	296	2,118	testing	3/30/2010

<i>lucene-3.5.0</i>	214,819	133	1,908	12,486	tool	11/20/2011
<i>marauoa-3.8.1</i>	26,472	30	208	1,593	games	7/25/2010
<i>megamek-0.35.18</i>	315,953	37	2,096	13,676	games	8/31/2010
<i>mvnforum-1.2.2-ga</i>	92,696	29	338	5,983	tool	8/17/2010
<i>nekohtml-1.9.14</i>	10,835	4	56	502	parsers/generators/make	2/2/2010
<i>openjms-0.7.7-beta-1</i>	68,929	48	515	3,790	middleware	3/14/2007
<i>oscache-2.4.1</i>	11,929	13	66	629	middleware	7/7/2007
<i>picocontainer-2.10.2</i>	12,103	15	208	1,302	middleware	2/25/2010
<i>pmd-4.2.5</i>	71,486	88	862	5,959	testing	2/8/2009
<i>poi-3.6</i>	299,402	133	2,330	19,618	tool	12/15/2009
<i>pooka-3.0-080505</i>	68,127	28	813	4,551	tool	5/5/2008
<i>proguard-4.5.1</i>	82,661	33	604	5,154	tool	7/8/2010
<i>quartz-1.8.3</i>	52,319	44	280	2,923	middleware	6/22/2010
<i>quickserver-1.4.7</i>	18,243	16	132	1,278	middleware	3/1/2006
<i>quilt-0.6-a-5</i>	8,425	14	66	641	testing	10/20/2003
<i>roller-4.0.1</i>	78,591	80	567	5,715	tool	1/13/2009
<i>squirrel_sql-3.1.2</i>	8,378	3	153	689	database	6/15/2010
<i>sunflow-0.07.2</i>	24,319	21	191	1,447	3D/graphics/media	2/8/2007
<i>tomcat-7.0.2</i>	283,829	106	1,538	15,627	middleware	8/11/2010
<i>trove-2.1.0</i>	8,432	3	91	585	SDK	8/14/2009
<i>velocity-1.6.4</i>	55,590	33	388	2,957	diagram generator/data visualization	5/10/2010
<i>wct-1.5.2</i>	69,698	85	606	5,527	tool	8/22/2011
<i>webmail-0.7.10</i>	14,175	16	118	1,092	tool	10/7/2002
<i>weka-3.7.5</i>	390,008	75	2,045	17,321	tool	10/28/2011
<i>xalan-2.7.1</i>	312,068	42	1,171	10,384	parsers/generators/make	11/27/2007

<i>xerces-2.10.0</i>	188,289	40	789	9,246	parsers/generators/make	6/18/2010
<i>xmojo-5.0.0</i>	31,037	9	110	1,199	middleware	7/17/2003