

1. STATIC ANALYSIS

The section shows the evaluation of static analysis metrics of the FeedZai project Pulse from 05/20/2013 to 06/17/2013.

	Java	Scala	Javascript
Lines of code	156,541 (+14463)	14,364 (0)	69,989 (+3124)
Number of lines	291,090 (+29963)	23,421 (0)	96,739 (+5475)
Number of classes	2,375 (+237)	513 (0)	N/A
Number of packages	382 (+61)	33 (0)	N/A
Number of methods	14,971 (+1469)	1,082 (0)	6,707 (+376)
Number of files	2,348 (+235)	113 (0)	524 (+64)
Number of statements	62,291 (+4518)	16,079 (0)	34,700 (+985)
Number of public API methods	9,349 (+919)	2,536 (0)	N/A
Comments	20.4% (+0.6)	20.3% (0)	14.8% (+0.6)
Number of comment lines	40,241 (+5265)	3,656 (0)	12,191 (+1138)
Number of empty comments	N/A	N/A	N/A
Number of documented API	71.8% (+2.5)	11.4% (0)	N/A
Number of undocumented API	2,634 (+48)	2,247 (0)	N/A
Duplications	7.9% (-1.0)	0% (0)	6.5% (-0.2)
Duplicated lines	23,058 (-232)	0 (0)	6,310 (+191)
Duplicated blocks	3,983 (-10)	0 (0)	733 (+5)
Duplicated files	246 (+6)	0 (0)	63 (+2)
Complexity			
Complexity by method	2.7 (0)	3.7 (0)	3.1 (0)
Complexity by class	16.8 (-0.6)	7.9 (0)	N/A
Complexity by file	17 (-0.6)	35.9 (0)	39.2 (-3.6)
Technical debt	1,103,020\$ (-119337.5)	39,588\$ (+0.5)	337,104\$ (+2860.5)

2. TEST ANALYSIS

The section shows the evaluation of dynamic analysis metrics of the FeedZai project Pulse from 05/20/2013 to 06/17/2013.

Test coverage	<i>Java</i>	<i>Scala</i>	<i>Javascript</i>
	40.0% (+34.3)	56.4% (0)	8.9% (+2.9)
Line coverage	42.9% (+34.6)	86.4% (0)	8.1% (+2.5)
Branch coverage	36.2% (+33.2)	45.6% (0)	15.2% (+5.6)
Functional coverage	0% (0)	N/A	N/A
Line coverage	0% (0)	N/A	N/A
Branch coverage	0% (0)	N/A	N/A
Overall coverage	32.8% (+32.8)	N/A	N/A
Line coverage	36.7% (+36.7)	N/A	N/A
Branch coverage	25% (+25)	N/A	N/A
Test success	100% (+0.1)	N/A	100% (0)
Number of tests	6,700 (+1125)	N/A	1,123 (+641)
Number of test failures	0 (0)	N/A	0 (0)
Number of test errors	2 (-3)	N/A	0 (0)
Number of skipped tests	29 (+8)	N/A	4 (+4)
Execution duration of tests	47:46 min	N/A	0:4 min

3. PERFORMANCE

The section shows the evaluation of performance metrics of the FeedZai project Pulse from 05/20/2013 to 06/17/2013.

	Average Throughput	Hot rate	Max rate	Min rate	Number of events
Servebase					
Servebase 00	1,837 (+1523)	1,869 (+1554)	4,478 (-107)	402 (+402)	253,573 (0)
Servebase 01	1,440 (+1144)	1,458 (+1161)	2,534 (+92)	410 (+410)	253,573 (0)
Servebase 02	1,255 (+971)	1,273 (+988)	2,267 (+248)	290 (+290)	253,573 (0)
Servebase 03	1,069 (+792)	1,078 (+800)	1,857 (+257)	295 (+295)	253,573 (0)
Servebase 04	942 (+673)	952 (+683)	1,642 (+264)	273 (+273)	253,573 (0)
Servebase 05	763 (+506)	767 (+510)	1,520 (+280)	152 (+152)	253,573 (0)
Paywatch					
PW - empty.rul	0 (0)	0 (0)	767,808 (+188028)	232,192 (-188028)	1,000,000 (0)
PW - inner_dic...	250,000 (0)	566,956 (+11283)	391,584 (+62254)	207,949 (-54981)	1,000,000 (0)
PW Spin 3 - in...	166,666 (+23809)	1,308,342 (+624619)	472,738 (-210985)	218,920 (-464803)	1,000,000 (0)
PW Spin 4 - in...	250,000 (-83333)	1,116,375 (+399756)	738,011 (+21392)	145,614 (-571005)	1,000,000 (0)
PW DSY 2 - inn...	500,000 (+166667)	710,443 (+6098)	710,443 (+6098)	710,443 (+6098)	1,000,000 (0)
PW DSY 3 - inn...	333,333 (+166667)	962,744 (-163648)	491,209 (-51405)	396,735 (+159221)	1,000,000 (0)
PW DSY 4 - inn...	333,333 (+83333)	1,036,018 (+530593)	329,810 (-98065)	322,198 (+107614)	1,000,000 (0)
PW DSB 2 - inn...	333,333 (0)	1,131,463 (+656017)	790,669 (+315223)	77,868 (-397578)	1,000,000 (0)
PW DSB 3 - inn...	333,333 (0)	486,651 (-65937)	486,651 (-65937)	486,651 (-65937)	1,000,000 (0)
PW DSB 4 - inn...	125,000 (-125000)	1,062,857 (+62037)	432,494 (-32839)	297,745 (+95592)	1,000,000 (0)
PW DSS 2 - inn...	333,333 (+190476)	721,163 (+99890)	721,163 (+99890)	721,163 (+99890)	1,000,000 (0)
PW DSS 3 - inn...	333,333 (0)	535,748 (-170150)	535,748 (-170150)	535,748 (-170150)	1,000,000 (0)
PW DSS 4 - inn...	142,857 (-190476)	521,661 (+8748)	521,661 (+8748)	521,661 (+8748)	1,000,000 (0)
SIBS					
SIBS (PQL,KPI,...	4,761 (-117)	9,921 (-47)	9,010 (-657)	1,416 (-64)	200,000 (0)
SIBS (PQL,KPI,BL)	6,250 (-646)	19,823 (+12147)	8,902 (+1226)	6,326 (-1350)	200,000 (0)
SIBS (PQL,KPI)	5,263 (-797)	17,674 (-2210)	9,109 (-903)	2,382 (-3717)	200,000 (0)
SIBS (PQL)	20,000 (0)	0 (0)	20,000 (0)	20,000 (0)	200,000 (0)
Banking					
Banking 1T	25,596 (+15279)	26,272 (+15834)	30,086 (+12887)	3,932 (+2044)	2,661,988 (0)
Banking 4T	25,352 (+15153)	25,961 (+15658)	28,913 (+12541)	2,892 (+53)	2,661,988 (0)
Banking 8T	25,352 (+15035)	25,963 (+15562)	28,935 (+12050)	3,303 (+423)	2,661,988 (0)
YFPA					
YFPA 1T	276,198 (+218657)	346,730 (+286239)	317,295 (+187748)	246,008 (+200481)	2,761,988 (0)
YFPA 4T	251,089 (+196933)	309,496 (+253051)	384,925 (+287471)	194,658 (+150591)	2,761,988 (0)
YFPA 8T	138,099 (+83943)	159,077 (+103116)	335,506 (+237863)	118,863 (+75759)	2,761,988 (0)

	Average CPU	Max CPU	Min CPU	Number of threads
Servebase				
Servebase 00	28% (+12)	48% (-3)	10% (+1)	0 (0)
Servebase 01	26% (+10)	57% (+6)	9% (0)	0 (0)
Servebase 02	24% (+8)	63% (+11)	9% (0)	0 (0)
Servebase 03	22% (+7)	52% (-4)	8% (-1)	0 (0)
Servebase 04	21% (+5)	60% (+8)	8% (-1)	0 (0)
Servebase 05	19% (+3)	54% (+8)	8% (0)	0 (0)
Paywatch				
PW - empty.rul	20% (+20)	20% (+20)	20% (+20)	0 (0)
PW - inner_dic...	18% (-4)	27% (-4)	9% (-4)	0 (0)
PW Spin 3 - in...	83% (+18)	83% (-1)	83% (+36)	3 (0)
PW Spin 4 - in...	42% (-10)	42% (-26)	42% (+6)	4 (0)
PW DSY 2 - inn...	45% (+4)	53% (+6)	37% (+2)	2 (0)
PW DSY 3 - inn...	51% (-32)	51% (-32)	51% (-32)	3 (0)
PW DSY 4 - inn...	74% (+17)	74% (+12)	74% (+22)	4 (0)
PW DSB 2 - inn...	33% (-10)	33% (-20)	33% (0)	2 (0)
PW DSB 3 - inn...	47% (+7)	56% (+10)	38% (+4)	3 (0)
PW DSB 4 - inn...	37% (-2)	37% (-2)	37% (-2)	4 (0)
PW DSS 2 - inn...	43% (-15)	48% (-33)	39% (+4)	2 (0)
PW DSS 3 - inn...	60% (+4)	70% (+5)	51% (+3)	3 (0)
PW DSS 4 - inn...	75% (+15)	90% (+28)	61% (+3)	4 (0)
SIBS				
SIBS (PQL,KPI,...	26% (-1)	30% (-1)	23% (-1)	1 (0)
SIBS (PQL,KPI,BL)	48% (+12)	48% (+4)	48% (+20)	1 (0)
SIBS (PQL,KPI)	72% (+26)	72% (+26)	72% (+26)	1 (0)
SIBS (PQL)	0% (0)	0% (0)	0% (0)	1 (0)
Banking				
Banking 1T	17% (+3)	48% (-16)	9% (0)	1 (0)
Banking 4T	16% (+3)	55% (+2)	8% (0)	4 (0)
Banking 8T	16% (+3)	58% (-5)	8% (-2)	8 (0)
YFPA				
YFPA 1T	18% (+5)	45% (-9)	9% (0)	1 (0)
YFPA 4T	20% (+6)	38% (-20)	17% (+6)	4 (0)
YFPA 8T	22% (+8)	45% (0)	19% (+6)	8 (0)

	Average Memory	Max memory	Min memory
Servebase			
Servebase 00	7,011 (-1067)	8,581 (-1875)	5,739 (-160)
Servebase 01	7,481 (-1736)	8,896 (-2609)	6,237 (-743)
Servebase 02	8,064 (-105)	9,387 (-2773)	6,818 (+1979)
Servebase 03	8,739 (+981)	10,321 (+331)	7,420 (+1894)
Servebase 04	9,447 (+718)	11,035 (+76)	8,133 (+1700)
Servebase 05	8,068 (-1611)	11,476 (-501)	6,206 (-1223)
Paywatch			
PW - empty.rul	7,312 (+7312)	7,312 (+7312)	7,312 (+7312)
PW - inner_dic...	6,324 (+59)	6,848 (+226)	5,800 (-109)
PW Spin 3 - in...	4,284 (-1489)	4,284 (-2361)	4,284 (-617)
PW Spin 4 - in...	8,547 (+331)	8,547 (-274)	8,547 (+935)
PW DSY 2 - inn...	6,245 (-379)	6,919 (-374)	5,571 (-384)
PW DSY 3 - inn...	9,052 (+4352)	9,052 (+4352)	9,052 (+4352)
PW DSY 4 - inn...	5,664 (-3090)	5,664 (-3514)	5,664 (-2667)
PW DSB 2 - inn...	9,875 (+3084)	9,875 (+2516)	9,875 (+3651)
PW DSB 3 - inn...	6,248 (-2505)	6,852 (-2387)	5,645 (-2622)
PW DSB 4 - inn...	5,763 (-1731)	5,763 (-1731)	5,763 (-1731)
PW DSS 2 - inn...	8,027 (+2588)	8,651 (+2572)	7,403 (+2603)
PW DSS 3 - inn...	6,737 (-1757)	7,347 (-1803)	6,127 (-1711)
PW DSS 4 - inn...	5,670 (-613)	6,281 (-712)	5,059 (-514)
SIBS			
SIBS (PQL,KPI,...	5,028 (+1088)	5,035 (+996)	5,022 (+1181)
SIBS (PQL,KPI,BL)	4,198 (-635)	4,198 (-1830)	4,198 (+559)
SIBS (PQL,KPI)	3,909 (-2261)	3,909 (-2261)	3,909 (-2261)
SIBS (PQL)	0 (0)	0 (0)	0 (0)
Banking			
Banking 1T	1,895 (-470)	3,658 (-786)	354 (-46)
Banking 4T	2,452 (-324)	4,354 (-421)	660 (-91)
Banking 8T	2,774 (-267)	4,808 (-295)	960 (-117)
YFPA			
YFPA 1T	2,514 (-770)	4,364 (-902)	1,204 (-145)
YFPA 4T	3,448 (-32)	4,897 (-415)	1,629 (-27)
YFPA 8T	3,177 (-550)	4,995 (-640)	1,538 (-266)

4. CODING RULES VIOLATIONS

The section shows the evaluation of coding rules violations of the FeedZai project Pulse from 05/20/2013 to 06/17/2013.

	<i>Java</i>	<i>Scala</i>	<i>Javascript</i>
Rules compliance	52.6% (+1.8)	100% (0)	86.9% (+0.6)
Number of violations	29,357 (+1609)	0 (0)	3,113 (-7)
Blocker violations	0 (-1)	0 (0)	0 (-1)
Critical violations	300 (-12)	0 (0)	0 (0)
Major violations	22,363 (+1388)	0 (0)	3,013 (-3)
Minor violations	5,625 (+191)	0 (0)	100 (-3)
Info violations	1,069 (+43)	0 (0)	0 (0)

4.1 DETAILED VIOLATION INFORMATION

5. OTHER ANALYSIS

The section shows the status of continuous integration tool (Jenkins) from 05/20/2013 to 06/17/2013.

	<i>Java</i>	<i>Scala</i>	<i>Javascript</i>
Build stability	No recent builds failed.	No recent builds failed.	No recent builds failed.
Opened tasks	347	N/A	N/A
Findbugs warnings	507	N/A	N/A
Checkstyle warnings	18,998	N/A	N/A
PMD warnings	1,810	N/A	N/A
Static analysis warnings	21,662	N/A	N/A

The section shows the number of issues from 05/20/2013 to 06/17/2013.

	<i>Total bugs</i>	<i>New bugs</i>	<i>Number of blockers</i>	<i>Number of critical</i>	<i>Number of majors</i>	<i>Number of minors</i>	<i>Number of trivials</i>
Number of bugs	227	227	2	1	143	67	14

The section shows the number of commits to develop branch from 05/20/2013 to 06/17/2013.

	Git commits
luis.pureza	485
Nuno Seco	558
Diogo Guerra	1,922
pedro.bizarro	1
Joao Silva	549
Luís Pureza	1
Nuno Monteiro	2
António Alegria	54
Joao Amsellem	404
svnreader	13
pedro.barata	118
Rui Vilao	686
Olga Filipova	1,461
Miguel Silva	915
deag	298
miguel.silva	47
Marcelo Mendes	50
joao.silva	21
nuno.monteiro	2
nuno.seco	1
joao.rodrigues	23
Paulo Marques	5
Diogo Ferreira	463
Luis Cardoso	2,897
Andrey Klimachev	831
Joao Nuno	81
David Alves	7
SVN Reader	13
Pedro Gandola	12
rafael.marmelo	400
olga.filipova	405
dalves	7
Luís Picciochi Oliveira	1
Joao Penetra	6
miguel.bento	17
olga	7
Pedro Bizarro	1
unknown	5
joao.martins	1
Joao Rodrigues	31
Miguel Duarte	2
Joao Nuno Silva	231
Daniel Cardoso	385
rui.vilao	551
diogo.guerra@feedzai.com	1
pedro.gandola	9
Pedro Barata	117
Ricardo Ferreira	1,075
Rafael Marmelo	781

marcelo.mendes	43
Miguel Bento	4
ricardo.ferreira	420
Total	17,110

