Mohd Khairul Syafiq bin Muhammad Zakaria-011172

GitHub repository- https://github.com/thesyfq10/sqm/

Metric tool- Metrics plugin for eclipse 1.3.6

Metric	Total	Mean	Std. Dev.	Maxim	Resource causing Maximum	Method
Number of Overridden Methods (avg/max per	0	0	0	0	/sqmm/src/g53sqm/jibble/WebServerException.java	
Number of Attributes (avg/max per type)	5	0.625	1.111	3	/sqmm/src/g53sqm/jibble/WebServer.java	
Number of Children (avg/max per type)	0	0	0	0	/sqmm/src/g53sqm/jibble/WebServerException.java	
Number of Classes (avg/max per packageFrage	8	8	0	8	/sqmm/src/g53sqm/jibble	
▶ Method Lines of Code (avg/max per method)	302	21.571	40.3	159	/sqmm/src/g53sqm/jibble/RequestThread.java	run
Number of Methods (avg/max per type)	8	1	0.707	2	/sqmm/src/g53sqm/jibble/RequestThread.java	
Nested Block Depth (avg/max per method)		2.143	1.552	6	/sqmm/src/g53sqm/jibble/RequestThread.java	run
Depth of Inheritance Tree (avg/max per type)		1.25	0.661	3	/sqmm/src/g53sqm/jibble/WebServerException.java	
Number of Packages	1					
Afferent Coupling (avg/max per packageFragn		0	0	0	/sqmm/src/g53sqm/jibble	
Number of Interfaces (avg/max per packageFrage)	0	0	0	0	/sqmm/src/g53sqm/jibble	
McCabe Cyclomatic Complexity (avg/max per		4.429	6.433	26	/sqmm/src/g53sqm/jibble/RequestThread.java	run
▶ Total Lines of Code	463					
▶ Instability (avg/max per packageFragment)		1	0	1	/sqmm/src/g53sqm/jibble	
Number of Parameters (avg/max per method)		1.357	1.288	4	/sqmm/src/g53sqm/jibble/ServerSideScriptEngine.java	execute
 Lack of Cohesion of Methods (avg/max per type) 		0.042	0.11	0.333	/sqmm/src/g53sqm/jibble/WebServer.java	
▶ Efferent Coupling (avg/max per packageFragm		0	0	0	/sqmm/src/g53sqm/jibble	
Number of Static Methods (avg/max per type)	6	0.75	0.661	2	/sqmm/src/g53sqm/jibble/ServerSideIncludeEngine.j	
 Normalized Distance (avg/max per packageFra 		0	0	0	/sqmm/src/g53sqm/jibble	
▶ Abstractness (avg/max per packageFragment)		0	0	0	/sqmm/src/g53sqm/jibble	
▶ Specialization Index (avg/max per type)		0	0	0	/sqmm/src/g53sqm/jibble/WebServerException.java	
▶ Weighted methods per Class (avg/max per typ	62	7.75	7.854	27	/sqmm/src/g53sqm/jibble/RequestThread.java	
Number of Static Attributes (avg/max per type	7	0.875	2.315	7	/sqmm/src/g53sqm/jibble/WebServerConfig.java	

The main purpose of measuring metric for a program is to make comparison and to determine the quality of the process so that the quality can be improved. For cyclomatic complexity, it is connected to the number of coding errors in a source code to determine the complexity of a program. The metric use the program source code to measure the independent paths. The efficiency of a program is depending on the number of the program's cyclomatic complexity which is the lower the number the lower the risk for the code to be modified and the code will be more understandable. Average cyclomatic complexity metric for this code is 4.4 with a maximum of 26. The RequestThread.java provide the maximum number of the complexity metrics which is 26.

The average depth of inheritance tree is 2.1 with maximum of 6. The depth of inheritance tree represent the design complexity where deeper tree indicate treater design complexity. Number of children is 0 due to the small project. Total no of the class is 8 while no of operations overridden is 0 showing that there is no problem with the design.