Refactoring-Aware Code Review: A Brief "Case History"

Q2 2019

1 SELECTION OF CODE REVIEW REPOSITORY

Code review tool	Repository selected	Project selected
Gerrit [1]	Eclipse [2]	tracecompass/org.eclipse.tracecompass

[1] Changes are classified in open, merged, or abandoned.

[2] `https://git.eclipse.org/r`

2 *RefactoringMiner* EXECUTION

Project selected	#Commits	#Refactorings
tracecompass/org.eclipse.tracecompass	7,225	12,717

3 SELECTION OF INSTANCES

Group	Description
A	commit message with refactoring information
B	commit message with no refactoring information

Table 3.1: Groups definition

Group	URL	#Refactorings[3]	#Patch Sets
A	`https://git.eclipse.org/r/#/c/99698/`	3	19
	`https://git.eclipse.org/r/#/c/122968/`	32	5
	`https://git.eclipse.org/r/#/c/122045/`	72	9
B	`https://git.eclipse.org/r/#/c/140712/`	1	2
	`https://git.eclipse.org/r/#/c/104124/`	27	47
	`https://git.eclipse.org/r/#/c/126405/`	23	51
	`https://git.eclipse.org/r/#/c/134350/`	48	19
	`https://git.eclipse.org/r/#/c/123949/`	56	2

[3] Number of refactorings detected by *RefactoringMiner*. Thus, we selected only *Merged* changes from Gerrit.

Table 3.2: Instances selected

URL	#Refactorings	Refactoring Type
https://git.eclipse.org/r/#/c/99698/	2	Rename Attribute
	1	Extract Variable
https://git.eclipse.org/r/#/c/122968/	31	Move Class
	1	Extract Variable
https://git.eclipse.org/r/#/c/122045/	72	Move Class
https://git.eclipse.org/r/#/c/140712/	1	Extract and Move Method
https://git.eclipse.org/r/#/c/104124/	9	Rename Variable
	2	Rename Method
	1	Extract Method
	1	Inline Variable
	2	Rename Parameter
	1	Rename Attribute
	1	Extract Class
	6	Move Attribute
	3	Extract and Move Method
	1	Move Method
https://git.eclipse.org/r/#/c/126405/	2	Extract Variable
	5	Rename Variable
	1	Extract Method
	1	Rename Parameter
	3	Extract Subclass
	6	Push Down Method
	5	Push Down Attribute
https://git.eclipse.org/r/#/c/134350/	34	Extract Method
	4	Rename Variable
	5	Rename Parameter
	5	Extract and Move Method
https://git.eclipse.org/r/#/c/123949/	2	Rename Class
	3	Extract Method
	30	Rename Variable
	1	Merge Variable
	3	Rename Method
	17	Rename Attribute

Table 3.3: Refactorings detected by *RefactoringMiner* per instance