# **Test-Generator for RxRefactor**

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### 1 Usage Hints

#### Important:

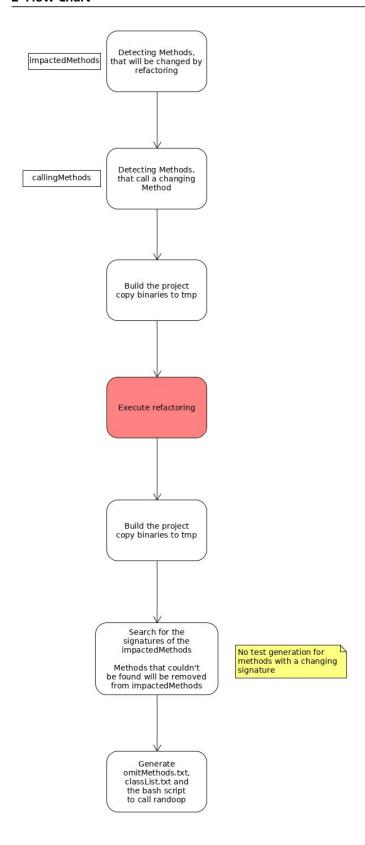
- Windows is not supported, due to some hard-coded file paths
- The tmp directory is used to save the project binaries, therefore a directory (/tmp/randoop-gen-<DATE>) is created
- Refactor and generate tests only for one project at a time, all other projects have to be closed

### Steps to perform manually:

- 1. Use the Refactoring Tool as usual
- 2. Copy all project libaries, JUnit, Hamcrest, ReactiveX, Reactive-Streams and Randoop as jar-files to the a libs directory inside the created "randoop-gen" directory
- 3. Execute the generated bash script in the "randoop-gen" directory

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## 2 Flow Chart



#### 3 Code location

Our code is located in the following three packages:

- · de.tudarmstadt.rxrefactoring.core.internal.execution.ipl
  - Main Part of our code: The JavaVisitor traverses Eclipse ASTs. The MethodScanner searches for impacted and calling methods. The Randoop Generator builds the project, copies the binaries and generates the bash script
- *de.tudarmstadt.rxrefactoring.core.internal.execution.ipl.collect* Collections we needed, basically a Pair Class.
- *de.tudarmstadt.rxrefactoring.core.internal.execution.ipl.filter*FilteredArrayList which is used in the JavaVisitor to collect the nodes, that match a given Filter.

Furthermore we added some code to *de.tudarmstadt.rxrefactoring.core.internal.execution.RefactorExecution*, to obtain the ASTs, before and after refactoring. Everything that has to be executed before refactoring is added to *doRefactorProject(...)*. Everything that has to be executed after the OK-Button has been clicked is added to *run()*.

All changes in RefactorExecution are marked with an inline comment beginning with "IPL".