This document describes how to use tool, JMC.

JMC consists of three parts.

* JMCRegister, which extract method information from Java source files in a given target directory. The extracted information is stored into SQLite database.
* JMCSearcher, which takes a half-written method as its input, and find methods that are matched with the input method.
* JMCFinder, which takes a minimum size of clones to be detected, and find method-level clones from the SQLite database.

The followings are command line examples of JMCRegister, JMCSearcher, and JMCFinder.

Java –Xmx4g –jar JMCRegister.jar –src directory –thd 2 –db dbname –v

* -src: specifies a root directory including target source files,
* -thd: specifies the number of threads,
* -db: specifies a file name of SQlite database,
* -v: verbose output

Java Xmx4g –jar JMCSearcher –target filename –caret linenumber –db dbname

* -target: specifies a file name include a half-written method
* -caret: specifies a line number of half-written method (any line in the method is OK)
* -db: specifies a database that was created by JMCRegister

Java Xmx4g –jar JMCFinder -clones filename -threshold number -db dbname

* -clones: specifies a file where detection results were stored. If this option is not provided, detected clones are stored into the database specified by “-db” option.
* -threshold: specifies a minimum size (the number of tokens) of clones to be detected.
* -db: specifies a database that was created by JMCRegister.

The format of file where clones are stored is tab-separated-values. Every line means a cloned method. Following are the detailed format.

CloneGroupID, Path, StartLine, EndLine

Followings are a simple example.

1, FileA, 10, 20

1, FileA, 30, 40

1, FileB, 100, 110

2, FileC, 200, 220

2, FileD, 300, 320

The above example includes two clone groups. The first group are located in FileA and FileB, and the second group are located in FileC and FileD.