MAPO: Mining API Usages from Open Source Repositories

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Learning API Usages is Challenging

```
org.apache.bcel.generic.ClassGen
public void addMethod(Method m)
```

koders

ClassGen addMethod   [Search]

Languages: [Java   ▼]
Licenses: [All Licenses ▼]

Results 1-25 of about 42 results found for 'ClassGen addMethod'

1 2

Translator_BCEL.java

```
        }
    private void generateStubMethod{
        ClassGen classGen,
        ConstantPoolGen constPool,
        Method method,
```

Language: Java
License: LGPL
(C) 2002-2003 Fabrice Legond-Aubry, Renaud Pawlak,
LOC: 1330
ObjectWeb Forge : Java Aspect Components (project search) : .../objectweb/jac/instrumentation/bytecode/Translator_BCEL.java

WrappeeTranslator_BCEL.java

```
        return null;
    }
    private void generateStubMethod(ClassGen classGen,
                                ConstantPoolGen constPool,
                                Method method, String gSNewName,
```
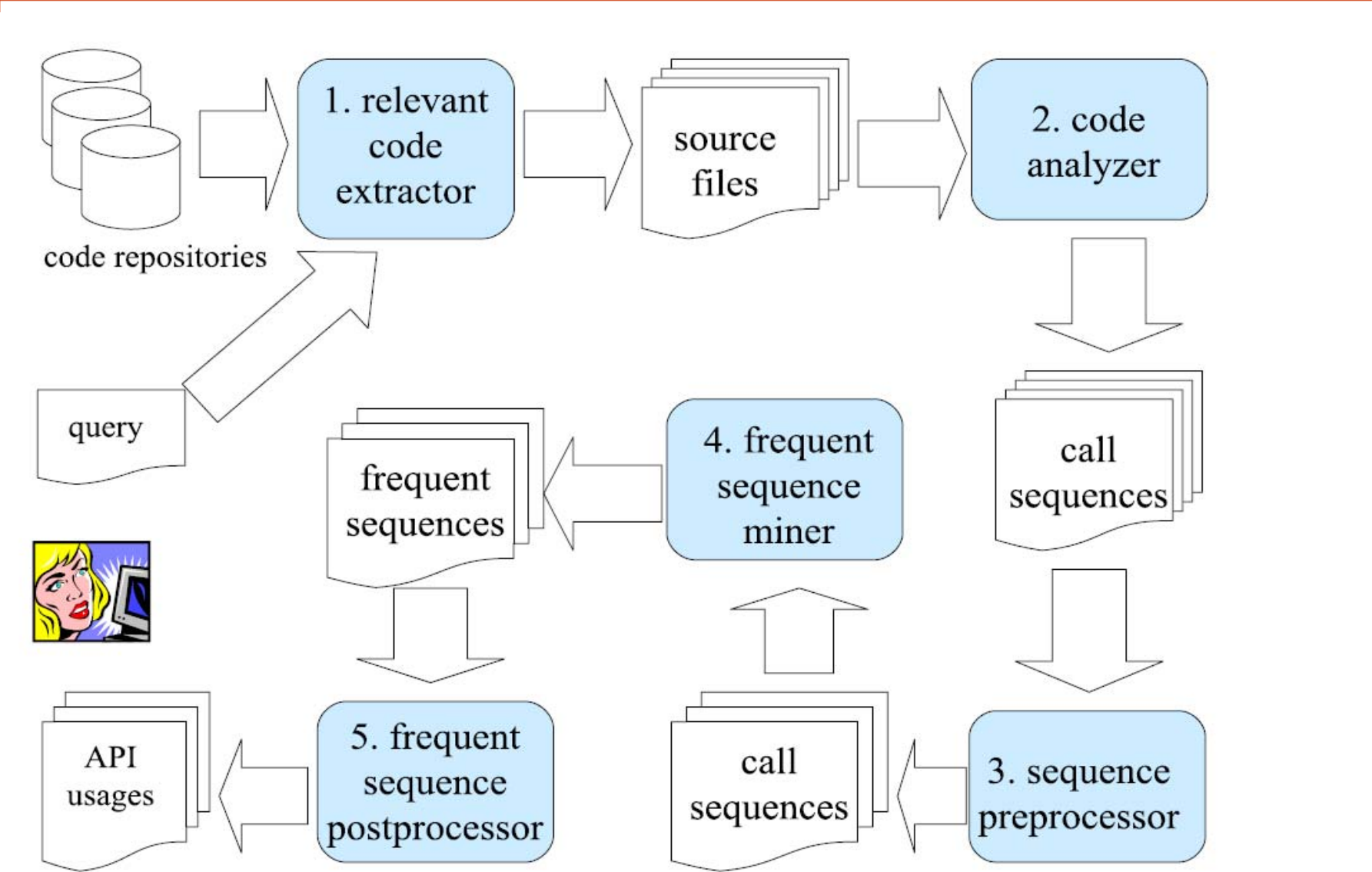
Language: Java
License: LGPL
(C) 2002-2003 Fabrice Legond-Aubry, Renaud Pawlak,
LOC: 1029
ObjectWeb Forge : Java Aspect Components (project search) : .../objectweb/jac/core/translators/WrappeeTranslator_BCEL.java

Tool Architecture

Preliminary Results

A tool that integrates various components

- Relevant code extractor
  - manually download returns from code search engine (koders.com)
- Code analyzer
  - implemented a lightweight tool for Java programs
- Sequence preprocessor
  - employed various heuristics
- Frequent sequence miner
  - reused BIDE [Wang&Han ICDE 2004]
- Frequent sequence postprocessor
  - employed various heuristics

```
InstructionList.<init>
InstructionFactory.createL
oad
InstructionList.append
InstructionFactory.createR
eturn
InstructionList.append
MethodGen.setMaxStack
MethodGen.setMaxLocals
MethodGen.getMethod
ClassGen.addMethod
InstructionList.dispose
```

query	#files	#seqs	#seqs-pre	#freqseq	#freqseq-post
BCEL	36	1087	186	429	8
Javassist	50	828	141	90	23