



TÉCNICO LISBOA

Tracer for Java

Programação Avançada
2013/2014

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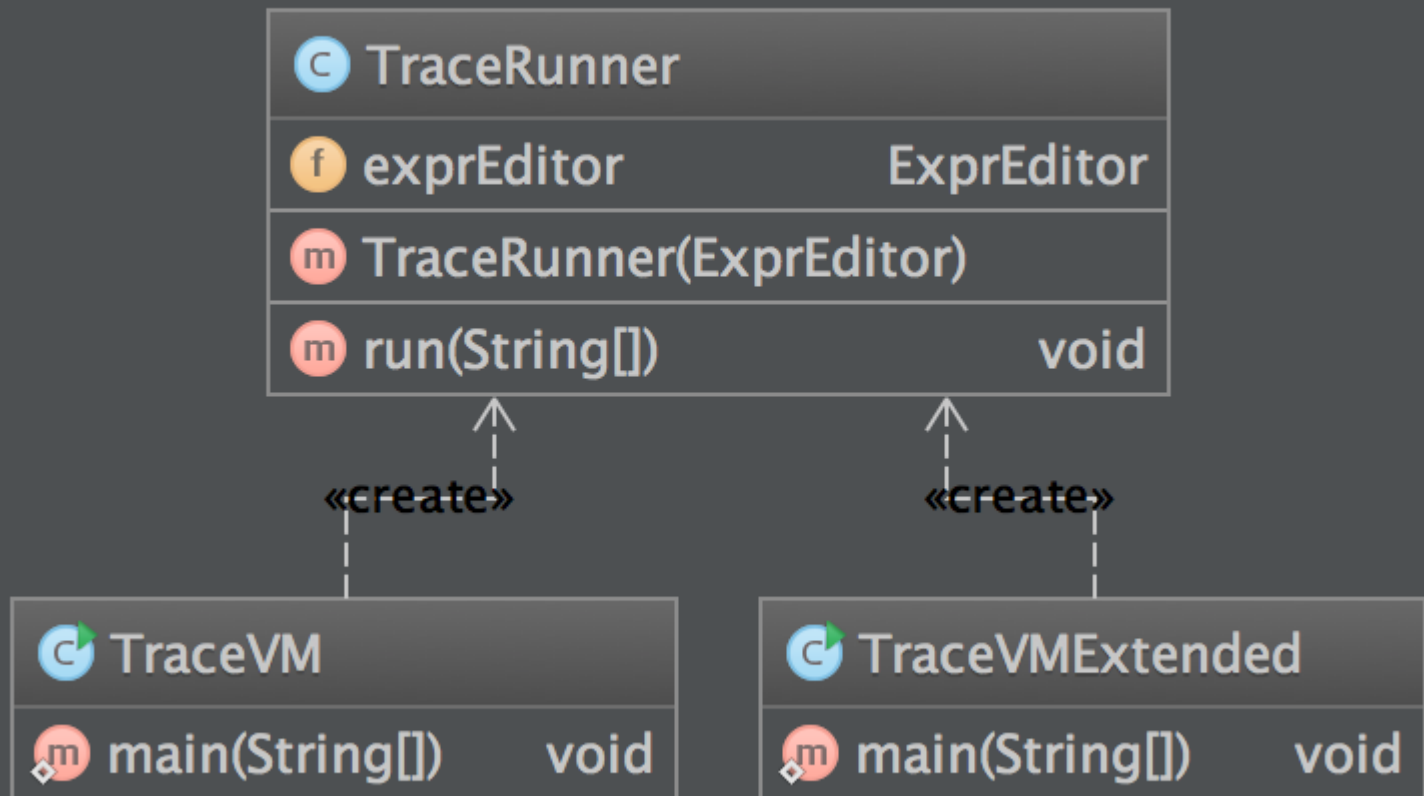
Basic features

- Constructor Call
- Method Call

Extensions

- Field Access
- Exception Handler
- Cast
- InstanceOf
- NewArray

Implemented features



VM Architecture

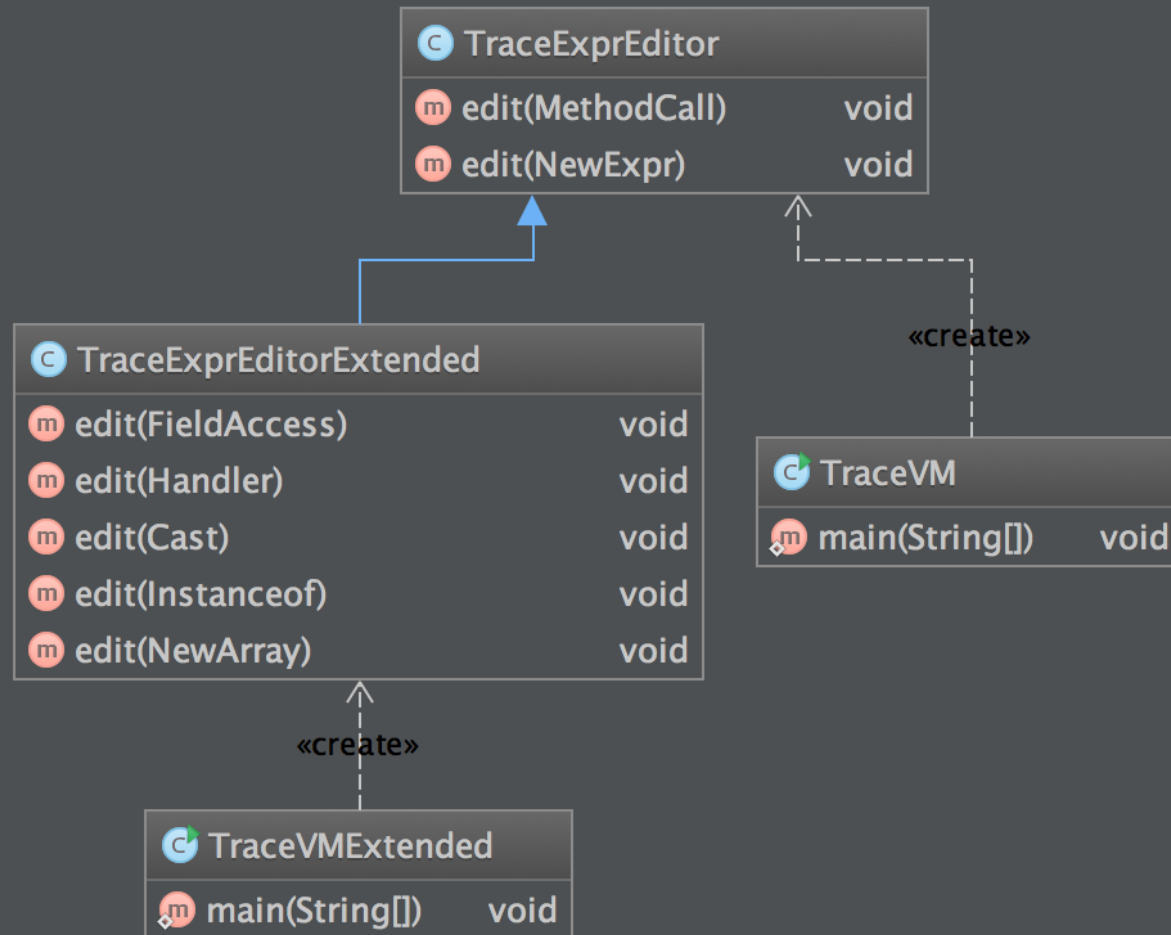
c	TraceTranslator	
f	exprEditor	ExprEditor
m	TraceTranslator(ExprEditor)	
m	start(ClassPool)	void
m	onLoad(ClassPool, String)	void

```

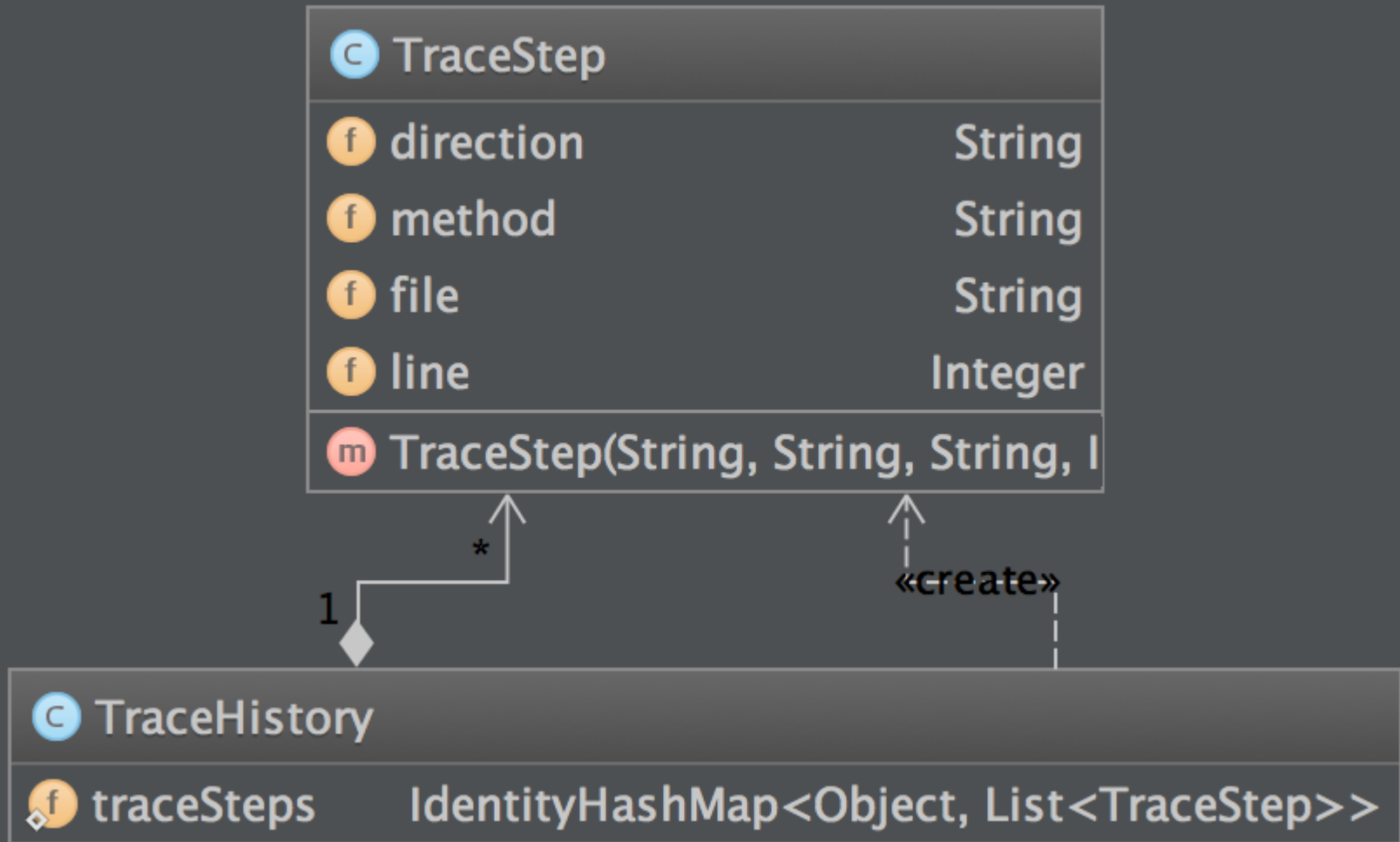
public void onLoad(ClassPool pool, String classname) throws ... {
    CtClass clazz = pool.get(classname);
    clazz.instrument(exprEditor);
}

```

Javassist Translator



Expression Editors



Tracing Storage

- Memory overflow

Limitations

Questions?