1. Method Call Directive
2. Not Null Directive

(@param, @exception, @throws) xxxxx (be/not be) null 优先级比较低

1. Return Value Directive

Result; returns, @return, returned

1. Method Call Visibility Directive

should not be called from; only usedin; is internal to; should not call

1. Exception Raising Directive

@exception; @throws; throw an IllegalArgumentException; raise exceptions

1. Null Allowed Directive

null means; If this parameter is null

1. String Format Directive

conform to RFC 2965.; Must be either "monitor" or "control".

1. Number Range Directive

between 0 and 65535, inclusive; greater than or equal to

1. Method Parameter Type Directive

be of a type; @param obj must be a Number or a Date.

1. Method Parameter Correlation Directive

be accompanied by;

1. Post-Call Directive special method-call sequence

The returned parameter object must be initialized

1. Miscellaneous Method Call Directives
2. Subclassing Directive
3. Method Overriding Directive

override; override, extend, re-implement, overwrite and implement

1. Extensible Class Identification Directive

ThreadLocal must be subclassed, and this method overridden.

1. Method Implementation Directive

This method must not modify the parent’s layout.

1. Method Extension Directive

Subclasses may override but must call super.doFillIntoGrid.

1. Non-local Consistency Subclassing Directive

be overridden together with; override the hashCode method whenever this method is overridden

1. Call Contract Subclassing Directive 与method call容易混淆

Subclasses must call this method at the end of their constructor(s)

1. Miscellaneous Subclassing

Directives Documentation Directive; Directive on the required constructor of a class

1. State Directives
2. Method Call Sequence Directive

The getKeyStore method must be invoked before this method may be called.

1. Non Call-based State Directive

The current thread must own this object’s monitor

1. Alternative Directive 判错的有些不易区分，混淆程度较高

@deprecated; instead; replace

1. Synchronization Directive

Synchronized; thread-safe

1. Miscellaneous Directive

Directive for implementors of Java compilers; Directives related to elements external to the API

* 论文第21页有关键词匹配的regex
* 训练集中某些句子会出现在多个类，造成测试集出错（A valid reduction polynomial is either a trinomial (X^m + X^k + 1 with m > k >= 1) or a pentanomial (X^m + X^k3 + X^k2 + X^k1 + 1 with m > k3 > k2 > k1 >= 1), so ks should have length 1 or 3）
* 先合并成一个类进行训练
* 各种类型使用规则匹配在fasttext之前
* 实验：1. 验证规则匹配准确性和fasttext准确性 2. 两者合在一起的准确性
* 应用：1. 找出代码中蕴含的directive 2. Directive中总结简单的代码表达模式，验证代码准确性
* 优化fasttext模型，半监督学习方式。先用准确数据训练一个模型，然后取没有标注的数据迭代式的分类并作为新的训练集。将得分高于某个阈值才作为训练集
* 刘名威论文中的标注数据可再详细标注作为训练集，找人标注其中的directive，functional和other也可作为分类