1. PL: programming languages

2. API: include method, package, class, interface

3. Platforms: refers to the combination of CPU ISA (e.g. x86, AMD64, IA-64, POWER, MIPS, ARMv9, Sparc), hardware architecture (PC, CHRP, PReP, Mac), kernel (Linux, NT) and base libraries (POSIX, Win32, Core Foundation)

4. Software Tools and Frameworks: include software framework, framework component and subsystem (wpf, linq), software system, library, development environment

5. Software Standards: include Software Technology, Data Format, protocols, software models, implementation standards, software architecture style

6. Organizations: include software companies, organizations

7. MISC: other types not belong to above

I give some examples of the upper 7 types of entity as follows:

1. PLs = ['java', 'javascript', 'c#', 'php', 'python','html', 'c++', 'css', 'c', 'objective-c', 'sql', 'html5', 'r', 'ruby', 'matlab']

2. APIs = ['printf()', 'system.out.println']

3. Platforms = ['android', 'ios', 'java-ee', 'java-se', 'windows', 'linux', 'ubuntu']

4. ToolFrams = ['jquery', 'swing', 'spring', 'hibernate', 'maven', 'tomcat', 'angularjs', 'node.js', 'asp.net', 'd3.js', 'backbone.js', '.net', 'wpf', 'linq', 'wordpress', 'codeigniter', 'laravel', 'curl', 'symfony', 'symfony2', 'sqlite', 'django', 'qt', 'play 2.0', ]

5. Stans = ['jar', 'json', 'http', 'xml', 'rest', 'jsp', 'servlet', 'jpa', 'jdbc', 'ajax', 'regex', 'eclipse', 'chrome', 'firefox', 'netbeans', 'oracle stored procedure']

6. Orgs = ['apache', 'google', 'facebook', 'apple', 'github', 'oracle', 'microsoft', 'amazon', 'ibm', 'zend']

7. MISC = []

Pay attention to Span of Tokens, for example:

Spring 3.4 -> Fram

Java Media Framework -> Fram

oracle stored procedure -> Stan