

University of Southern California

Center for Systems and Software Engineering

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Revision Sheet

Date	Version	Revision Description	Author
10/02/08	1.0	Original Release	CSSE

1.0 Checklist for source statement counts

PHYSICAL AND LOGICAL SLOC COUNTING RULES

Measurement Unit	Order of Precedence	Physical SLOC	Logical SLOC	Comments
Executable lines	1	One per line	See table below	e Defined in 2.4
Non-executable lines				
Declaration (Data) lines	2	One per line	See table below	e Defined in 2.5
Comments				Defined in 2.6
On their own lines	3	Not included (NI)	NI	
Embedded	4	NI	NI	
Empty comments	5	NI	NI	
Blank lines	6	NI	NI	Defined in 2.7

Table 1 Physical and Logical SLOC Counting Counts

LOGICAL SLOC COUNTING RULES

No.	Structure	Order of Precedence	Logical SLOC Rules	Comments
R01	<tagname> { }</tagname>	1	Count once.	Each tag is counted once. It can be an
				HTML tag or a user defined class name.
R02	{ <keyword> : <value>;</value></keyword>	2	Count number of	The last statement need
1102	}		semicolon separated	
			statements.	semicolon.

Table 2 Logical SLOC Counting Rules

2. Definitions

- **2.1 SLOC** Source Lines of Code is a unit used to measure the size of software program. SLOC counts the program source code based on a certain set of rules. SLOC is a key input for estimating project effort and is also used to calculate productivity and other measurements.
- **2.2 Physical SLOC** one physical SLOC is corresponding to one line starting with the first character and ending by a carriage return or an end-of-file marker of the same line, and which excludes the blank and comment line.
- **2.3** Logical SLOC lines of code intended to measure "statements", which normally terminate by a semicolon (C/C++, Java, C#) or a carriage return (VB, Assembly), etc. Logical SLOC are not sensitive to format and style conventions, but they are language-dependent.
- **2.4 Executable Lines** These include the lines contained within the definition of a CSS class such as *p*, *td* etc or even user defined classes. Every executable line needs to end with a semicolon barring the last line before the container class is closed (using a curly brace)
- **2.5 Data Declaration Lines** All executable lines are contained within a class. Each class begins and ends with a curly brace. The following example shows how a class can be defined.

```
<tag-name> {
.....
}
```

Irrespective of how many executable lines are contained within the curly braces, the number of data declaration lines for the above example is 1. Therefore a data declaration line for CSS corresponds to those lines that define a class.

2.6 Comment line – A comment is defined as a string of zero or more characters that follow language-specific comment delimiter.

CSS comments start with "/*" and end with "*/". A whole comment line may span one or more lines and does not contain any compilable source code. An embedded comment can coexist with compilable source code on the same physical line.

- **2.6** Blank Lines These are lines that contain only:
 - White space characters
 - Line feed characters
 - Carriage return characters.