Generic Notation for Regular Expressions

Many programming tools employ regular expressions, from utilities such as grep to programming languages like Perl. The following is a summary of the most common regular expression constructs.

Notation	Description
	Any character <i>x</i> , except:
x	()*+?[].^\ \$
$\backslash x$	Any character <i>x</i>
AB	A followed by B
A B	Choose one of A and B
(A)	A as a capturing group
A*	A zero or more times
<i>A</i> +	A one or more times
A?	A one or zero times
A*?	A zero or more times, reluctant version
A+?	A one or more times, reluctant version
A??	A one or zero times, reluctant version
$A\{n\}$	A exactly <i>n</i> times
$A\{n,\}$	A at least n times
$A\{n,m\}$	A at least n times, but no more than m times
[abc]	Chose one of the characters <i>a</i> , <i>b</i> , or <i>c</i> .
[^abc]	Chose one character except <i>a</i> , <i>b</i> , or <i>c</i> .
[<i>a</i> – <i>z</i>]	Chose one character from a to z inclusively.
\mathbf{w}	Word character. Same as: [a-zA-Z0-9_]
\W	Non-word character. Same as: [^a-zA-Z0-9_]
\d	Digit character. Same as: [0-9]
\D	Non-digit character. Same as: [^0-9]
\s	Space character. Same as: [\t\n\f\r]
\S	Non-space character. Same as: [^ \t\n\f\r]
\b	Word boundary
B	Non word boundary
	Any character (sometimes excludes the end of line)
^	Start of input (or start of line)
\$	End of input (or end of line)