Regular Expressions

Symbol(s)	Meaning	Example	Example matches
*	Matches the preceding character, subexpression, or bracketed character, 0 or more times.	a*b*	aaaaaaaa, aaabbbbb, bbbbbb
+	Matches the preceding character, subexpression, or bracketed character, 1 or more times.	a+b+	aaaaaaaab, aaabbbbb, abbbbbb
[]	Matches any character within the brackets (i.e., "Pick any one of these things").	[A-Z]*	APPLE, CAPITALS, QWERTY
()	A grouped subexpression (these are evaluated first, in the "order of operations" of regular expressions).	(a*b)*	aaabaab, abaaab, ababaaaab
{m, n}	Matches the preceding character, subexpression, or bracketed character between *m* and *n* times (inclusive).	a{2,3}b{2,3}	aabbb, aaabbb, aabb
[^]	Matches any single character that is *not* in the brackets.	[^A-Z]*	apple, lowercase, qwerty
|	Matches any character, string of characters, or subexpression, separated by the I (note that this is a vertical bar, or *pipe*, not a capital i).	b(a|i|e)d	bad, bid, bed

Symbol(s)	Meaning	Example	Example matches
			qwerty
|	Matches any character, string of characters, or subexpression, separated by the I (note that this is a vertical bar, or *pipe*, not a capital i).	b(a|i|e)d	bad, bid, bed
.	Matches any single character (including symbols, numbers, a space, etc.).	b.d	bad, bzd, b$d, b d
^	Indicates that a character or subexpression occurs at the beginning of a string.	^a	apple, asdf, a
\	An escape character (this allows you to use special characters as their literal meanings).	\. \\| \\\\	. | \
$	Often used at the end of a regular expression, it means "match this up to the end of the string." Without it, every regular expression has a de facto ".*" at the end of it, accepting strings where only the first part of the string matches. This can be thought of as analogous to the ^ symbol.	[A-Z]*[a-z]*$	ABCabc, zzzyx, Bob
?!	"Does not contain." This odd pairing of symbols, immediately preceding a character (or regular expression), indicates that that character should not be found in that specific place in the larger string.	^((?![A-Z]).)*$	no-caps-here, $ymb0ls a4e f!ne