## **RegEx Notes**

## **Examples**

RegEx	Matches string		
hello	contains {hello}		
`gray\	grey`\		matches {gray, grey}
`gr(a\	e)y`\		contains {gray, grey}
gr[ae]y	contains {gray, grey}		
b[aeiou]bble	<pre>contains {babble, bebble, bibble, bobble, bubble}</pre>		
`[b-chm-pP]at\	ot`	<pre>contains {bat, cat, hat, mat, nat, oat, pat, Pat, ot}</pre>	
colou?r	contains {color, colour}		
`rege(x(es)?\	xps?)`	<pre>contains {regex, regexes, regexp, regexps}</pre>	
go*gle	<pre>contains {ggle, gogle, google, gooogle, gooogle}</pre>		
go+gle	<pre>contains {gogle, google, gooogle, gooogle}</pre>		
g(oog)+le	<pre>contains {google, googoogle, googoogoole}</pre>		

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RegEx	Matches string		
z{3}	contains {zzz}		
z{3,6}	contains {zzz, zzzz, zzzzz, zzzzz}		
z{3,}	contains {zzz, zzzz, zzzzz,}		
[Bb]rainf\*\*k	<pre>contains {Brainf**k, brainf**k}</pre>		
\d	contains {0,1,2,3,4,5,6,7,8,9}		
1\d{10}	contains an 11-digit string starting with a 1		
`[2-9]\	[12]\d\	3[0-6]`	contains an integer in the range 236 inclusive
Hello\nworld	contains Hello followed by a newline followed by world		
\d+(\.\d\d)?	contains a positive integer or a floating point number with exactly two characters after the decimal point.		
[^i*&2@]	contains any character other than an i, asterisk, ampersand, 2, or @		
// [^\r\n]*[\r\n]	contains a java or C# // comment		
^dog	begins with "dog"		
dog\$	ends with "dog"		
^dog\$	is exactly "dog"		

## **Components of Regexes**

Component	Matches string
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Component	Matches string
[abc]	a or b or c
[^abc]	any character except a, b or c
[a-zA-Z]	a-z or A-Z
\s	space
\S	anything that's not a space
\w	matches any word character (alphanumeric & underscore).
\W	not word
	matches any character except line breaks
?	makes the preceding quantifier lazy, causing it to match as few characters as possible.
\A	beginning of a string
\z	end of a string
\Z	depends on the engine
\b	word boundary
\B	not a word boundary

## **Quantifiers**

Text	RegEx
Zero or one	?
Zero or more	*? or *+
One or more	+ or +?
m times	{m}
At least m times	{m,}
At least m, at most n times	{m, n}

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