Regular Expressions Cheat Sheet

Metacharacters (must be escaped)

	Start of string
	End of string
( )	Grouping
< >	Word boundaries
.	Any character
+ ?	Quantifiers
	Character class
	Repetition
\	Escape
|	Alternation

Quantifiers

*	0 or more
+	1 or more
?	0 or 1
{3}	Exactly 3
{3,}	3 or more
{3,5}	3, 4 or 5

Anchors

$'\backslash A$	Start of string
$,\backslash Z$	End of string
\b	Word boundary
\B	Not word boundary
\<, \>	Word boundaries

POSIX Classes

[:upper:]	Upper case letters :lower:>:lower:
	Lower case letters :alpha:>:alpha:
	All letters :alnum:>:alnum:
	Letters and digits :digit:>:digit:
, [:xdigit:]	Decimal / Hex digits :punct:>:punct:
	Punctuation :blank:>:blank:
, [:space:]	Whitespace :cntrl:>:cntrl:
	Control characters :graph:>:graph:
, [:print:]	Printable :word:>:word:
	Word characters

Character Classes

\c	Control character
\s, \S	Whitespace / not whitespace
\d, \D	Digit / not digit
\w, \W	Word / not word
\x, \O	Hex / octal digit

Special Characters

\n	Newline
\r	Carriage return
\t	Tab
\v	Vertical tab
\f	Form feed
\xxx	Octal character
\xhh	Hex character

Pattern Modifiers

g	Global match
i	Case-insensitive
m	Multi-line
s	Dot matches newline
x	Allow whitespace/comments
e	Evaluate replacement
U	Ungreedy

Assertions

(?=...)	Lookahead
(?!...)	Negative lookahead
(?<=...)	Lookbehind
(?<!...)	Negative lookbehind
(?>...)	Atomic group
(?()|)	Conditional
(?...)	Comment

Replacement Tokens

$n	nth non-passive group
$1, $2	Match from group 1, 2
$	Before match
$'	After match
$+	Last match
$	
Entire match	

Sample Patterns

([A-Za-z0-9-]+): Letters, numbers and hyphens
(1,2̣/1,2̣/4̣): Date format
([$^{]}+(?=(jpg|gif|png))):Imageextensions$
($^{[}1-9]$|$^{[}1-4][0-9]$|$^{5}0$): Number 1-50
(?([A-Fa-f0-9])3(([A-Fa-f0-9])3)?): Hex color
((?=.*)̣(?=.*[a-z])(?=.*[A-Z]).8,15): Strong password
(+@[a-zA-Z$_{]}+?[a-z-zA-Z]2,6):Email$
((/?[$^{]+))):HTMLtags}$