JavaScript Regular Expressions

SINGLE CHARACTERS

Use	To match any character
[_set_**]**	In that set
[^_set_**]**	Not in that set
[_a–z_**]**	In the _a-z_ range
[^_a–z_**]**	Not in the a-z range
.	Any except \n (new line)
\_char_	Escaped special character

CONTROL CHARACTERS

Use	To match	Unicode
\t	Horizontal tab	\u0009
\v	Vertical tab	\u000B
\b	Backspace	\u0008
\e	Escape	\u001B
\r	Carriage return	\u000D
\f	Form feed	\u000C
\n	New line	\u000A
\a	Bell (alarm)	\u0007

NON-ASCII CODES

Use	To match character with
\x _hex_	2-digit hex character code
\u _hex_	4-digit hex character code

CHARACTER CLASSES

Use	To match character
\w	Word character. [0-9_a-zA-Z]
\W	Non-word character
\d	Decimal digit
\D	Not a decimal digit
\s	White-space character [\t\n\r\f\v]
\S	Non-white-space char
\p{ctgry}	Unicode category or block
\P{ctgry}	Not in that Unicode category or block

QUANTIFIERS

Greedy	Lazy	Matches
*****	***?**	0 or more times
+	**+?**	1 or more times
?	**??**	0 or 1 time
{_n_**}**	**{*n*}?**	Exactly _n_ times
{_n,_**}**	**{*n,*}?**	At least _n_ times
{_n,m_**}**	**{*n,m*}?**	From _n_ to _m_ times

ANCHORS

Use	To specify position
^	At start of string or line
$	At end of string or line
\b	On word boundary
\B	Not on word boundary

GROUPS

Use	To define
(_exp_**)**	Indexed group
(?<_name_**>**_exp_**)**	Named group
(?:_exp_**)**	Non-capturing group
(?=_exp_**)**	Zero-width positive lookahead
(?!_exp_**)**	Zero-width negative lookahead
(?<=_exp_**)**	Zero-width positive lookbehind. _exp_ is fixed width
(?<!_exp_**)**	Zero-width negative lookbehind. _exp_ is fixed width

FLAGS / INLINE OPTIONS

Option	Effect on match
i	Case-insensitive
m	Multiline mode
g	Global
u	Unicode dependent
s	Dot . wildcard character matches new line

Updated: October 2020

Chandra Lingam, Cloud Wave LLC
https://github.com/ChandraLingam/JavaScriptRegex
Microsoft/MSDN .NET Regular Expressions (Template)
Mozilla JavaScript Regex Syntax Cheat sheet

BACKREFERENCES

Use	To match
\n	Indexed group
\k<_name>_	Named group

ALTERNATION

Use	To match
a **|** *b*	Either *a* or *b*

REPLACEMENT

Use	To substitute
$n	Substring matched by group number *n*
$<_name_**>**	Substring matched by group *name*

REGULAR EXPRESSION OPERATIONS

Class: RegExp, String

Pattern matching with Compiled objects

To initialize with	Use constructor
Pattern	RegExp(pattern)
+ flags	RegExp(pattern,flags)

Finding and replacing matched patterns

Use method	To
re.exec	Iterate all matches (/g)
re.test	Test for a match (boolean)
string.search	Index of first match
string.match	Retrieve all matching strings
string.matchAll	Iterate all matches
string.replace	Replace a matching string
string.split	Split text based on match

Getting info about regular expression patterns

Use compiled object API	To get
lastIndex	Index location where last match ended. Valid when global flag is set
source	Pattern for compiled object

Processing a match

Use method	To
[n]	Retrieve value of a group by number
groups	Retrieve all subgroups as name-value pairs
index	Find starting index position of a match
length	Find the number of indexed groups

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